

milling metal

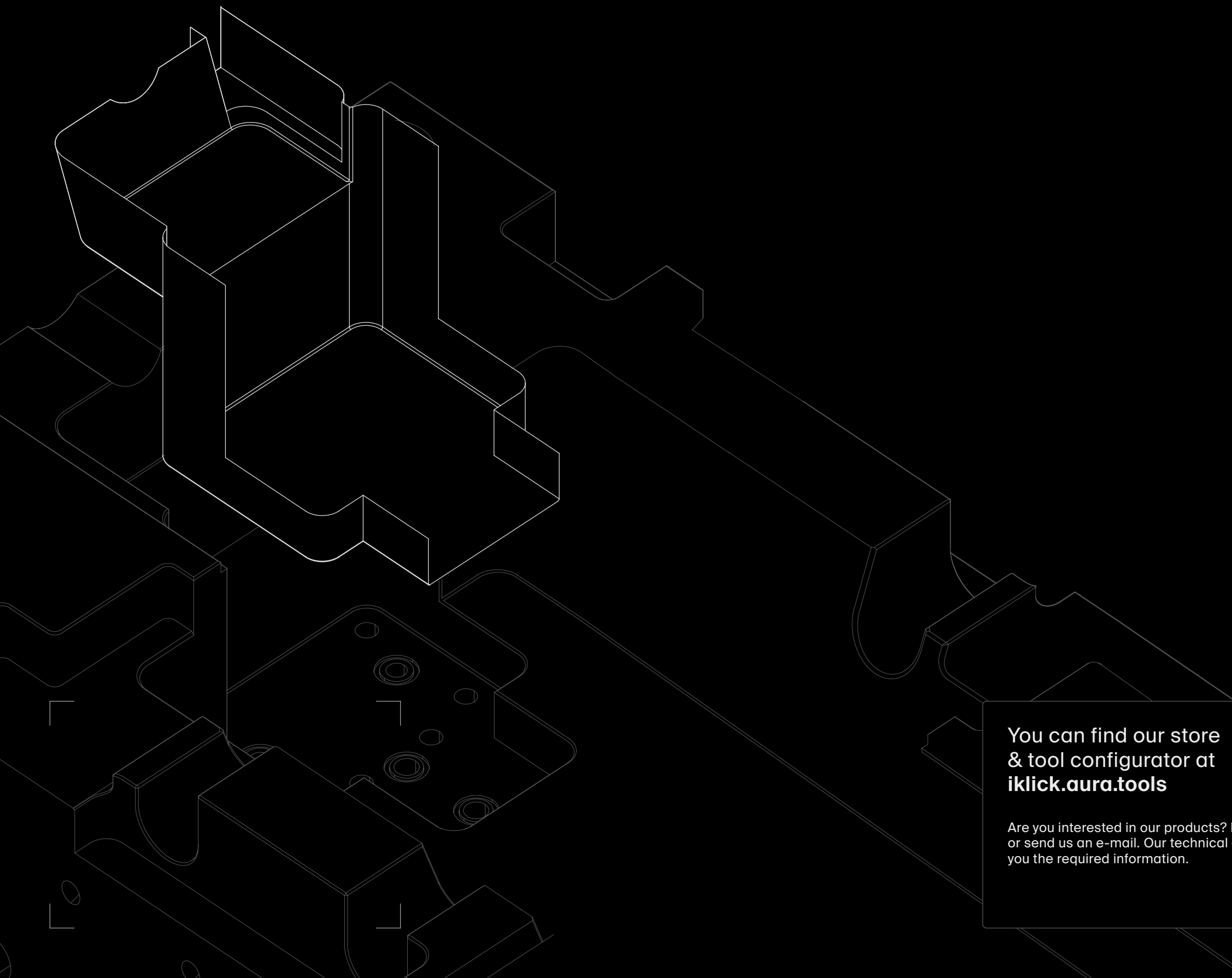
AURA®

Tool & Mold Making
Cutting Tools

Comprehensive solutions for
your milling applications

Headquarters / Support

+49 6465 911194 0
kontakt@aura-tools.de



You can find our store
& tool configurator at
iklick.aura.tools

Are you interested in our products? Please give us a call
or send us an e-mail. Our technical department will send
you the required information.

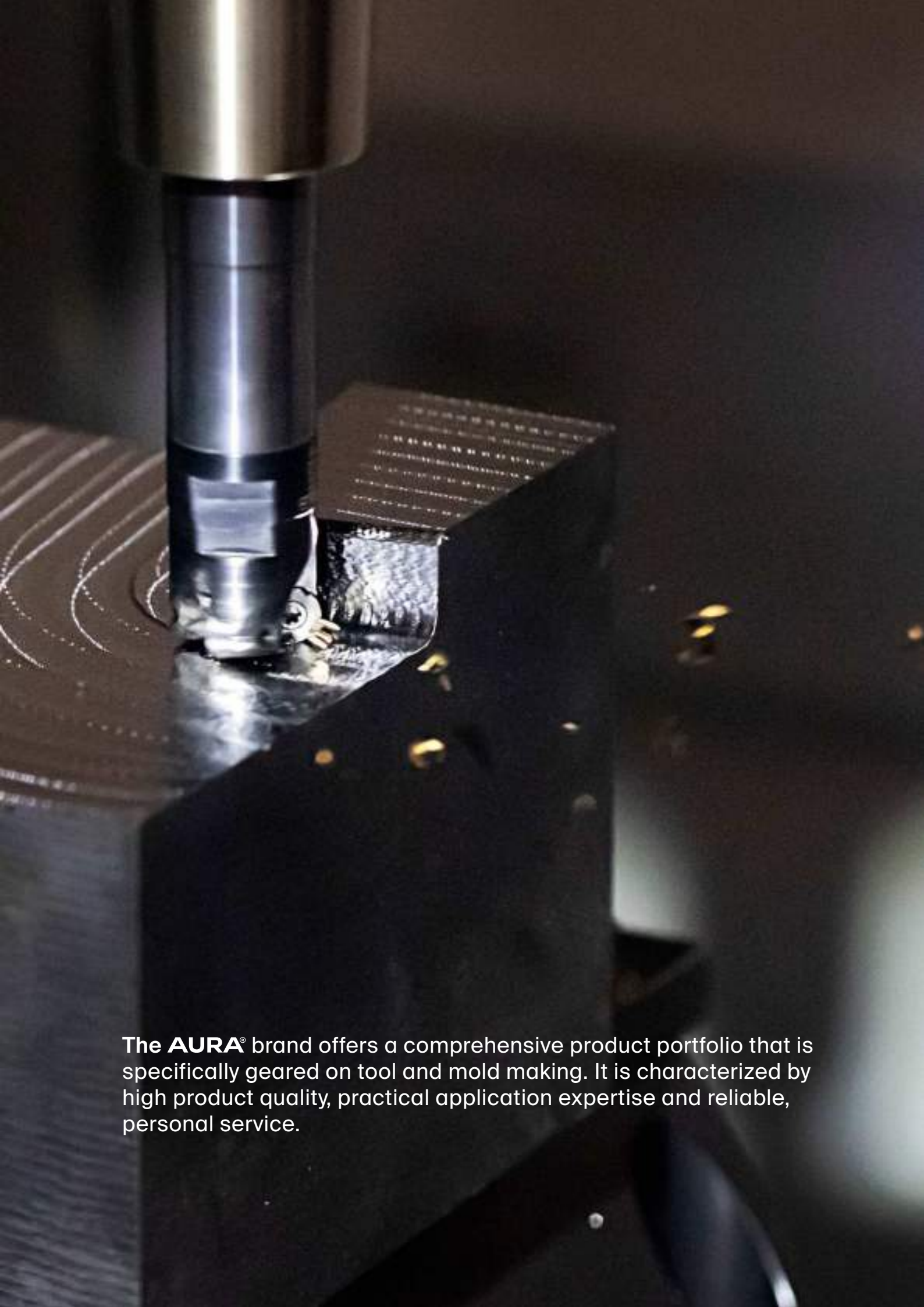


2	
Company & Services	About us 8 iKlick 10
12	
Solid carbide tools	Ballnose 16 Bullnose 60 Endmill 96 High-Feed 132 Rib mill 140 Form 164 Special solutions 172
182	
Modular tools	Standards 186 Application specialists 214 High-Feed 224
234	
Extensions	Conical extensions 238 Cylindrical extensions 240

Do you need individual tool dimensions or special solutions?
No problem!

You can also receive all tools from our standard portfolio as modified tools in the dimensions you require.

The **AURA®** brand offers a comprehensive product portfolio that is specifically geared on tool and mold making. It is characterized by high product quality, practical application expertise and reliable, personal service.







Aura Tools GmbH is a German tool supplier, specialized in the development and sales of cutting tools for tool, mould and die making as well as milling services.

We supply various industries and sectors worldwide with AURA® brand cutting tools. Together with strong partners, we offer more than just tools – we ensure that everything is optimally coordinated.

Our aim as a supplier is to provide you with the necessary tools for machining with our products, services and technical advice so that you can concentrate on your core competencies: the machining of metal.

How do we achieve this? We listen to you and analyze your challenges and relevant influencing factors neutrally in order to offer the most efficient and economical tool for your production.



Application Technology Centre

As an external service provider, we analyze problems in connection with milling strategies and identify potential production difficulties. We look at the conditions on site and, taking into account the factors relevant to you, develop well-founded solutions that increase your efficiency and quality and eliminate application problems.

- strategy development
- training on your own components or a partial section
- optimization project
- component analysis
- tool use

When developing our products and services, we pursue an integrative approach that takes a comprehensive view on 3D milling. We analyze the various aspects and dimensions of this process in order to gain a deep knowledge of the specific requirements and challenges of our users.

This enables us to develop tailor-made solutions that not only increase efficiency but also optimize the profitability of processes. Our aim is not only to offer to our users high-quality products, but also to drive value that sustainably improves their production processes.

Honesty and transparency

Honesty is our most valuable asset and the fundamental prerequisite for all our actions. That is why we communicate clearly and openly, address problems and make it clarify how we can support you profitably with our services.

Simplicity

Our aim is to make complex interrelationships simple to understand and easy to use. You shouldn't have to deal with all the other stuff, you should be able to concentrate fully on your work and production.

To this end, we simplify the processes – from tool configuration and CAM import of all tool parameters through to technical application support for efficient tool use. If required, we can also offer this support in person and at your site.

Application expertise

Fast and customized technical support when you need it. Thanks to our technical sales team, we are able to respond quickly, personally and purposefully to your problems on site.

In constant exchange with our office dutyf and thanks to the connection to our application technology center, we can simulate and analyze flexible problems in your milling processes and develop sustainable solutions.

Service

High service quality throughout the entire supply chain – from the first contact to the production result for the customer. One of our most important goals is to offer you a personal and demand-oriented service that responds to your specific requirements.



Easy tool configuration from the tool to the extension to the shrink fit chuck.

Easy tool configuration, inspection and ordering process

With iKlick, you can easily find the tool you need and combine it with the right extension or tool holder, check it and order it.

The iKlick store also offers you extensive additional functions, such as budget management, an overview of completed orders and much more.

- cutting data calculator
- offset calculator
- virtual shrinking
- tool measurement
- 3D preview



Complete CAM export of all technology data and cutting data to all common CAM systems.

With iKlick you can export tool sets including all technology data and exact cutting parameters for the material to be machined directly to various CAM systems. iKlick supports all common systems available on the market.

- Autodesk
- Hypermill
- Tebis
- Mastercam
- WorkNC
- NCG-CAM
- Siemens NX
- and much more



Request your own free access.

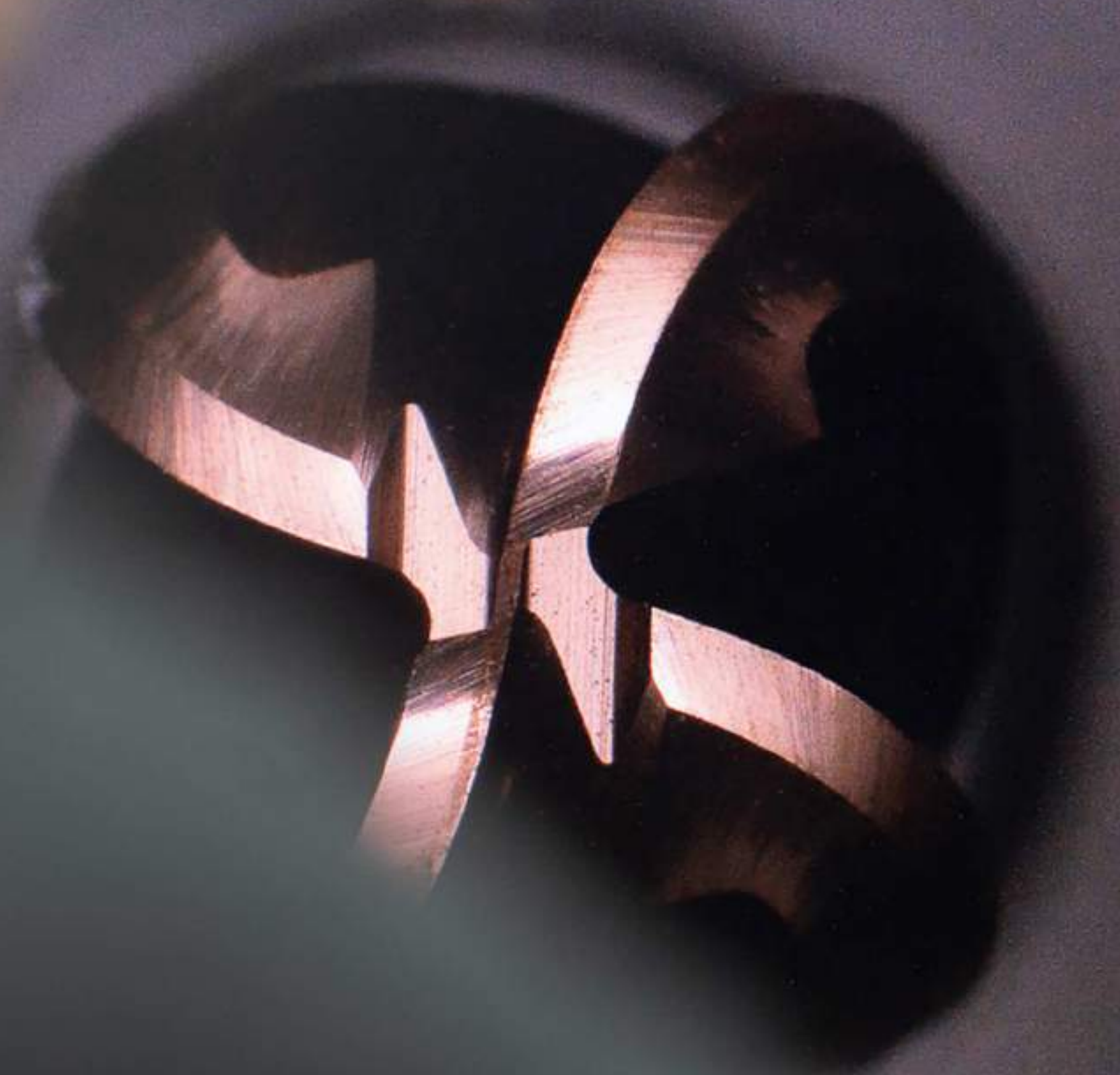
We would also be happy to present you our tool configurator in person.



Online at:
iklick.aura.tools



AURA[®]



Tool & Mold Making
Monolithic Tools

Monolithic tools

Solid carbide tools

16

Ballnose



metal working
non-ferrous metal
graphite machining

60

Bullnose



metal working
non-ferrous metal
graphite machining

96

Endmill



metal working
non-ferrous metal
graphite machining

132

High-Feed



metal working

140

Rib mill



metal working
non-ferrous metal

164

Form



metal working

172

Special solutuions

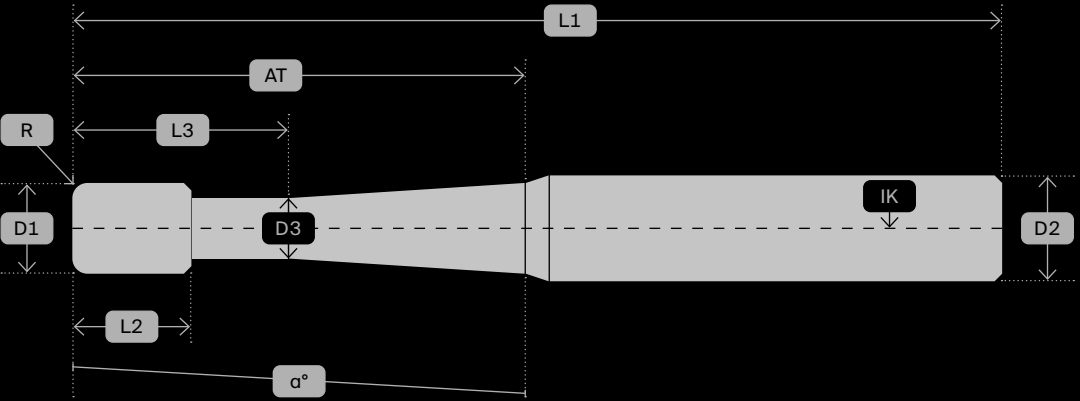


metal working

Monolithic tools

Symbols

Dimensional sketch



Technical designation

D1	Cutter diameter	R	Radius	HA	Cylindrical shank	F	Protecting chamfer
AT	Working depth	L3	Cylindrical free length	HB	Weldon	S	Sharp-edged
α°	Conic	D2	Shank diameter	HE	Whistle-Notch	CBN	CBN Substrate
L1	Total length	L2	Cutting length	☒	Dry machining	PCD	PKD Substrate
Z	Number of teeth	D3	Neck diameter	☒	Wet machining possible	CER	Cermet Substrate
IC	Internal coolant supply	SH	Shank type				

Applications

- Roughing
- Finishing
- Engraving
- Polishing
- Prefinishing

Generally

- HSC
- High-Speed-Cutting
- Regrindable ≥ D6
- Modification on request

Material qualification

- H
- Filled icon
- Main application
- H
- Unfilled icon
- Secondary application

Material class

- H
- Hardened steel
- S
- Superalloys
- P
- Steel
- N
- Non-ferrous
- K
- Cast iron
- Graph
- Graphite
- M
- Stainless steel



Monolithic tools

Ballnose



Hard machining

[vphk]	≥ 48 HRC	Roughing + Finishing	H	P	K	M	S	-	-	18
[mshkz]	≥ 48 HRC	Prefinishing + Finishing	H	P	K	M	S	-	-	22

Medium-hard machining

[shk] [shkz] [4shk] [4shkz]	≥ 44 HRC	Roughing + Finishing	H	P	K	M	S	-	-	24
[hk] [hkz]	≥ 44 HRC	Roughing + Finishing	H	P	K	M	S	-	-	30

Soft to medium-hard machining

[k] [kz] [4kz] [sk]	≤ 56 HRC	Roughing + Finishing	H	P	K	M	S	-	-	34
[mk]	≤ 56 HRC	Roughing + Finishing	H	P	K	M	S	-	-	40
[sfb]	≤ 52 HRC	Prefinishing + Finishing	H	P	K	M	S	-	-	46
[cfb]	≤ 1.000 N	Finishing	-	P	K	-	-	-	-	48

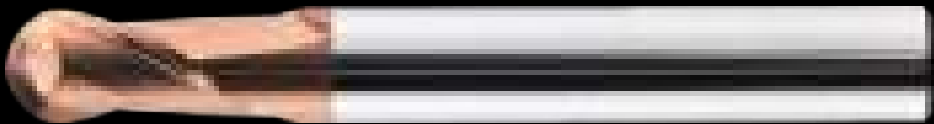
Aluminum and non-ferrous machining

[ck] [ckz]	Roughing + Finishing	-	-	-	-	S	N	-	50
[mkne]	Roughing + Finishing	-	-	-	-	S	N	-	54

Graphite machining

[2dk] [3dk] [dkk]	Roughing + Finishing	-	-	-	-	-	-	Graph	56
-------------------	----------------------	---	---	---	---	---	---	-------	----

[vphk]



Conical, cylindrical and reduced neck ballnose cutter with two flutes for roughing and finishing steels ≥ 48 HRC.

Areas of application

≥ 48 HRC

1.400N

GGGjV

CrNiTitanINC

HSC

Tool variations

Z2Conical

Z2Cylindrical

Z2Reduced Neck

HA

Video

64 HRC

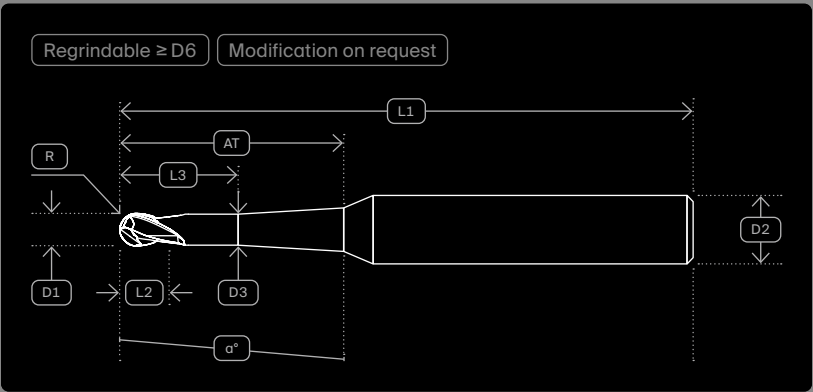
Roug.

[vphk]

D4

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		

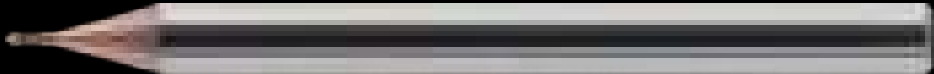


Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
32087	VPHK-010-050-003-051-000-04	1	0,5	3	0	1,5	3	0,96	2	-	51	4
34359	VPHK-010-050-003-060-000-06										60	6
32088	VPHK-010-050-005-051-000-04										51	4
34360	VPHK-010-050-005-060-000-06			5	0	1,5	5	0,96	2	-	60	6
32112	VPHK-010-050-007-051-009-04										51	4
34369	VPHK-010-050-007-060-009-06										60	6
32113	VPHK-010-050-007-051-014-04			7	0,9	1,5	2	0,96	2	-	51	4
34370	VPHK-010-050-007-060-014-06										60	6
32114	VPHK-010-050-010-051-009-04										51	4
34371	VPHK-010-050-010-060-009-06			10	0,9	1,5	2	0,96	2	-	60	6
32115	VPHK-010-050-010-051-014-04										51	4
34372	VPHK-010-050-010-060-014-06										60	6
32116	VPHK-010-050-015-060-009-04				0,9	1,5	2	0,96	2	-	60	4
34373	VPHK-010-050-015-070-009-06										70	6
32117	VPHK-010-050-015-060-014-04										60	4
34374	VPHK-010-050-015-070-014-06	1	0,5	15	1,4	1,5	2	0,96	2	-	70	6
32089	VPHK-015-075-004-051-000-04	1,5	0,75	4,5	0	2,25	4,5	1,42	2	-	51	4
34361	VPHK-015-075-004-060-000-06										60	6
32090	VPHK-015-075-007-051-000-04			7,5	0	2,25	7,5	1,42	2	-	51	4
34362	VPHK-015-075-007-060-000-06										60	6
32118	VPHK-015-075-010-051-009-04			10,5	0,9	2,25	3	1,42	2	-	51	4
34375	VPHK-015-075-010-060-009-06										60	6
32119	VPHK-015-075-010-051-014-04			15	1,4	2,25	3	1,42	2	-	51	4
34376	VPHK-015-075-010-060-014-06										60	6
32120	VPHK-015-075-015-051-009-04				0,9	2,25	3	1,42	2	-	51	4
34377	VPHK-015-075-015-060-009-06										60	6
32121	VPHK-015-075-015-051-014-04			22,5	1,4	2,25	3	1,42	2	-	51	4
34378	VPHK-015-075-015-060-014-06										60	6
32122	VPHK-015-075-022-060-009-04				0,9	2,25	3	1,42	2	-	60	4
34379	VPHK-015-075-022-070-009-06										70	6
32123	VPHK-015-075-022-060-014-04	1,5	0,75	22,5	1,4	2,25	3	1,42	2	-	60	4
34380	VPHK-015-075-022-070-014-06	2	1	6	0	3	6	1,92	2	-	51	4
32091	VPHK-020-100-006-051-000-04										60	6
34363	VPHK-020-100-006-060-000-06			10	0	3	10	1,92	2	-	51	4
32092	VPHK-020-100-010-051-000-04										60	6
34364	VPHK-020-100-010-060-000-06				0,9	3	4	1,92	2	-	51	4
32124	VPHK-020-100-014-051-009-04										60	6
34381	VPHK-020-100-014-060-009-06			14	1,4	3	4	1,92	2	-	51	4
32125	VPHK-020-100-014-051-014-04										60	6
34382	VPHK-020-100-014-060-014-06				0,9	3	4	1,92	2	-	60	4
32126	VPHK-020-100-020-060-009-04										70	6
34383	VPHK-020-100-020-070-009-06			20	1,4	3	4	1,92	2	-	70	6
32127	VPHK-020-100-020-060-014-04										60	4
34384	VPHK-020-100-020-070-014-06				0,9	3	4	1,92	2	-	70	4
32128	VPHK-020-100-030-070-009-04										75	6
34385	VPHK-020-100-030-075-009-06			30	1,4	3	4	1,92	2	-	70	4
32129	VPHK-020-100-030-070-014-04										75	6
34386	VPHK-020-100-030-075-014-06										75	6

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2							
32093	VPHK-030-150-009-051-000-04	3	1,5	9	0	4,5	9	2,88	2	-	51	4							
34365	VPHK-030-150-009-060-000-06										60	6							
32094	VPHK-030-150-015-051-000-04			15	0,9	4,5	6	2,88	2	-	51	4							
34366	VPHK-030-150-015-060-000-06										60	6							
32130	VPHK-030-150-015-060-009-06										60	6							
32131	VPHK-030-150-015-060-014-06			21	0,9	4,5	6	2,88	2	-	60	6							
32132	VPHK-030-150-021-070-009-06										70	6							
32133	VPHK-030-150-021-070-014-06			30	0,9	4,5	6	2,88	2	-	70	6							
32134	VPHK-030-150-030-070-009-06										70	6							
32135	VPHK-030-150-030-070-014-06										70	6							
32097	VPHK-040-200-006-060-000-04	4	2	6	0	6	6	4	2	-	60	4							
32095	VPHK-040-200-012-051-000-04			12	0	6	12	3,88	2	-	51	4							
34367	VPHK-040-200-012-060-000-06										60	6							
32096	VPHK-040-200-020-060-000-04			20	0	6	20	3,88	2	-	60	4							
34368	VPHK-040-200-020-060-000-06											6							
32136	VPHK-040-200-020-060-009-06											6							
32137	VPHK-040-200-020-060-014-06			28	0,9	6	8	3,88	2	-	60	6							
32138	VPHK-040-200-028-070-009-06										70	6							
32139	VPHK-040-200-028-070-014-06			40	0,9	6	8	3,88	2	-	70	6							
32140	VPHK-040-200-040-080-009-06										80	6							
32141	VPHK-040-200-040-080-014-06	80	6																
32098	VPHK-050-250-015-060-000-06	5	2,5	15	0	7,5	15	4,84	2	-	60	6							
32099	VPHK-050-250-025-070-000-06			25	0	7,5	25	4,84	2	-	70	6							
34186	VPHK-050-250-025-070-009-06										6								
32142	VPHK-050-250-025-070-009-08										8								
32143	VPHK-050-250-025-070-014-08			35	0,9	7,5	10	4,84	2	-	70	8							
32144	VPHK-050-250-035-075-009-08										75	8							
32145	VPHK-050-250-035-075-014-08			50	1,4	7,5	10	4,84	2	-	75	8							
32146	VPHK-050-250-050-090-009-08										90	8							
32147	VPHK-050-250-050-090-014-08			90	8														
32102	VPHK-060-300-009-070-000-06	6	3	9	0	9	9	6	2	-	70	6							
32100	VPHK-060-300-018-060-000-06			18	0	9	18	5,8	2	-	60	6							
32101	VPHK-060-300-030-070-000-06			30	0,9	9	12	5,8	2	-	70	6							
32148	VPHK-060-300-030-070-009-08										8								
32149	VPHK-060-300-030-070-014-08										8								
34126	VPHK-060-300-042-080-009-08			42	0,9	9	12	5,8	2	-	80	8							
32150	VPHK-060-300-042-090-009-10										90	10							
34127	VPHK-060-300-042-080-014-08										80	8							
32151	VPHK-060-300-042-090-014-10			42	1,4	9	12	5,8	2	-	90	10							
34128	VPHK-060-300-060-100-009-08										90	10							
32152	VPHK-060-300-060-120-009-10	100	8																
32153	VPHK-060-300-060-100-014-10	8	4	60	1,4	9	12	5,8	2	-	100	10							
32105	VPHK-080-400-012-080-000-08			12	0	12	12	8	2	-	80	8							
32103	VPHK-080-400-024-059-000-08										24	0	12	24	7,76	2	-	59	8
32104	VPHK-080-400-040-080-000-08										40	0	12	40	7,76	2	-	80	8
32108	VPHK-100-500-015-090-000-10	10	5	15	0	15	15	10	2	-	90	10							
32106	VPHK-100-500-030-075-000-10			30	0	15	30	9,68	2	-	75	10							
32107	VPHK-100-500-050-090-000-10										50	0	15	50	9,68	2	-	90	10

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
32111	VPHK-120-600-018-100-000-12	12	6	18	0	18	18	12	2	-	100	12
32109	VPHK-120-600-036-075-000-12			36	0	18	36	11,64	2	-	75	12
32110	VPHK-120-600-060-100-000-12			60	0	18	60	11,64	2	-	100	12

[mshkz]



Reduced neck micro ballnose cutter with two flutes for semi-finishing and finishing of steels ≥ 48 HRC.

Areas of application

≥ 48 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Micro

Tool variations

Z 2

Reduced Neck

HA

Video

52 HRC

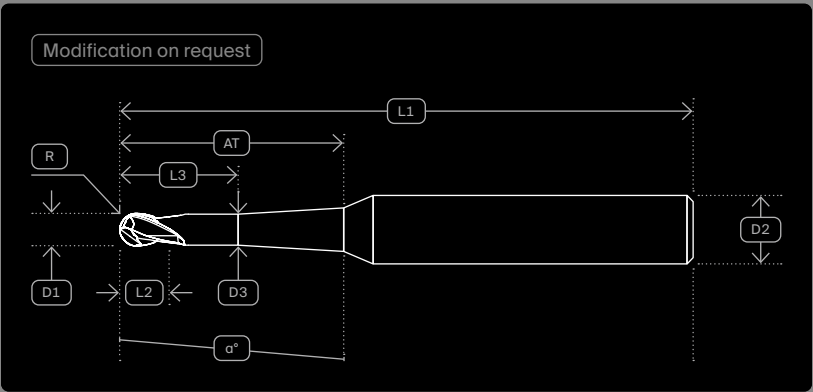
Finish.

[mshkz]

D0,3

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
23557	MSHKZ-002-010-0004-051-000-04	0,2	0,1	0,4	0	0,15	0,4	0,18	2	-	51	4
23558	MSHKZ-002-010-0006-051-000-04			0,6	0	0,15	0,6	0,18	2	-	51	4
30103	MSHKZ-002-010-0010-051-000-04			1	0	0,15	1	0,18	2	-	51	4
30104	MSHKZ-002-010-0014-051-000-04			1,4	0	0,15	1,4	0,18	2	-	51	4
23559	MSHKZ-003-015-0006-051-000-04	0,3	0,15	0,6	0	0,23	0,6	0,28	2	-	51	4
23560	MSHKZ-003-015-0009-051-000-04			0,9	0	0,23	0,9	0,28	2	-	51	4
30105	MSHKZ-003-015-0015-051-000-04			1,5	0	0,23	1,5	0,28	2	-	51	4
30106	MSHKZ-003-015-0021-051-000-04			2,1	0	0,23	2,1	0,28	2	-	51	4
23561	MSHKZ-004-020-0008-051-000-04	0,4	0,2	0,8	0	0,3	0,8	0,38	2	-	51	4
23562	MSHKZ-004-020-0012-051-000-04			1,2	0	0,3	1,2	0,38	2	-	51	4
30107	MSHKZ-004-020-0020-051-000-04			2	0	0,3	2	0,38	2	-	51	4
30108	MSHKZ-004-020-0028-051-000-04			2,8	0	0,3	2,8	0,38	2	-	51	4
23563	MSHKZ-005-025-0010-051-000-04	0,5	0,25	1	0	0,38	1	0,48	2	-	51	4
23564	MSHKZ-005-025-0015-051-000-04			1,5	0	0,38	1,5	0,48	2	-	51	4
26255	MSHKZ-005-025-0020-051-000-04			2	0	0,75	2	0,48	2	-	51	4
30109	MSHKZ-005-025-0025-051-000-04			2,5	0	0,38	2,5	0,48	2	-	51	4
30110	MSHKZ-005-025-0035-051-000-04	0,6	0,3	3,5	0	0,38	3,5	0,48	2	-	51	4
26637	MSHKZ-006-030-0012-051-000-04			1,2	0	0,45	1,2	0,56	2	-	51	4
23565	MSHKZ-006-030-0018-051-000-04			1,8	0	0,45	1,8	0,56	2	-	51	4
26268	MSHKZ-006-030-0024-051-000-04			2,4	0	0,45	2,4	0,56	2	-	51	4
23566	MSHKZ-006-030-0030-051-000-04	0,6	0,3	3	0	0,45	3	0,58	2	-	51	4
30111	MSHKZ-006-030-0042-051-000-04			4,2	0	0,45	4,2	0,56	2	-	51	4
30112	MSHKZ-008-040-0016-051-000-04			1,6	0	0,6	1,6	0,76	2	-	51	4
26266	MSHKZ-008-040-0020-051-000-04			2	0	0,6	2	0,76	2	-	51	4
23567	MSHKZ-008-040-0024-051-000-04	0,8	0,4	2,4	0	0,6	2,4	0,78	2	-	51	4
26574	MSHKZ-008-040-0032-051-000-04			3,2	0	0,6	3,2	0,78	2	-	51	4
23568	MSHKZ-008-040-0040-051-000-04			4	0	0,6	4	0,78	2	-	51	4
30113	MSHKZ-008-040-0056-051-000-04			5,6	0	0,6	5,6	0,76	2	-	51	4

SHK/Z

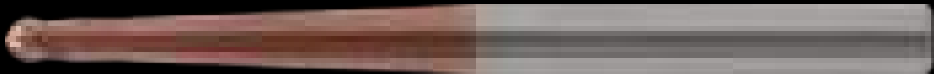
Series

[shk]

[shkz]

[4shk]

[4shkz]



Conical, cylindrical and reduced neck ballnose cutters with two or four flutes for roughing and finishing hardened and unhardened steels.

Areas of application

≥ 44 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Tool variations

Z2

Conical

Z2

Cylindrical

Z2

Reduced Neck

Z4

Conical

Z4

Cylindrical

Z4

Reduced Neck

HA

▶

Video

52 HRC

Finish.

[shkz]

D1

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

R

Radius

AT

Working depth

L3

Cylindrical free length

α°

Conic

D2

Shank diameter

L1

Total length

L2

Cutting length

Z

Number of teeth

D3

Neck diameter

IC

Internal coolant

Regrindable ≥ D6

Modification on request

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
19217	SHKZ-010-050-002-051-000-04	W37.3	1	0,5	2	0	0,75	2	0,96	2	-	51	4
19225	SHKZ-010-050-003-060-000-06	W37.3			3	0	0,75	3	0,96	2	-	60	6
21568	SHKZ-010-050-004-051-000-04	W37.3			4	0	0,75	4	0,96	2	-	51	4
19610	SHKZ-010-050-004-060-000-06	W37.3										60	6
19226	SHKZ-010-050-005-060-000-06	W37.3			5	0	0,75	5	0,96	2	-	60	6
22066	SHKZ-010-050-006-051-000-04	W37.3			6	0	0,75	6	0,97	2	-	51	4
19611	SHKZ-010-050-006-060-000-06	W37.3										60	6
19227	SHKZ-010-050-007-060-000-06	W37.3			7	0	0,75	7	0,97	2	-	60	6
19612	SHKZ-010-050-008-060-000-06	W37.3			8	0	0,75	8	0,96	2	-	60	6
19613	SHKZ-010-050-010-060-000-06	W37.3			10	0	0,75	10	0,97	2	-	60	6
19265	SHK-010-050-010-060-004-06	W37.4				0,4	0,75	3	0,97	2	-	60	6
19266	SHK-010-050-010-060-009-06	W37.4				0,9	0,75	3	0,97	2	-	60	6
19267	SHK-010-050-010-060-014-06	W37.4			10	1,4	0,75	3	0,97	2	-	60	6
19614	SHKZ-010-050-012-060-000-06	W37.3			12	0	0,75	12	0,97	2	-	60	6
19615	SHKZ-010-050-015-060-000-06	W37.3			15	0	0,75	15	0,97	2	-	60	6
19268	SHK-010-050-015-060-004-06	W37.4				0,4	0,75	3	0,97	2	-	60	6
19270	SHK-010-050-015-060-014-06	W37.4				1,4	0,75	3	0,97	2	-	60	6
19271	SHK-010-050-020-060-004-06	W37.4			20	0,4	0,75	3	0,97	2	-	60	6
19272	SHK-010-050-020-060-009-06	W37.4				0,9	0,75	3	0,97	2	-	60	6
19273	SHK-010-050-020-060-014-06	W37.4			25	1,4	0,75	3	0,97	2	-	60	6
19274	SHK-010-050-025-070-004-06	W37.4				0,4	0,75	3	0,97	2	-	70	6
19275	SHK-010-050-025-070-009-06	W37.4				0,9	0,75	3	0,97	2	-	70	6
19276	SHK-010-050-025-070-014-06	W37.4			30	1,4	0,75	3	0,97	2	-	70	6
19277	SHK-010-050-030-070-004-06	W37.4				0,4	0,75	3	0,97	2	-	70	6
19278	SHK-010-050-030-070-009-06	W37.4				0,9	0,75	3	0,97	2	-	70	6
19279	SHK-010-050-030-070-014-06	W37.4			35	1,4	0,75	3	0,97	2	-	75	6
19280	SHK-010-050-035-075-004-06	W37.4				0,4	0,75	3	0,97	2	-	75	6
19281	SHK-010-050-035-075-009-06	W37.4				0,9	0,75	3	0,97	2	-	75	6
19282	SHK-010-050-035-075-014-06	W37.4			1,5	0,75	40	0,9	2	1,45	2	-	80
18016	SHKZ-015-075-003-051-000-04	W37.3			3	0	1,15	3	1,47	2	-	51	4
19228	SHKZ-015-075-005-060-000-06	W37.3			5	0	1,15	5	1,43	2	-	60	6
18313	SHKZ-015-075-008-060-000-06	W37.3			8	0	1,15	8	1,43	2	-	60	6
19616	SHKZ-015-075-010-060-000-06	W37.3			10	0	1,15	10	1,43	2	-	60	6
19617	SHKZ-015-075-012-060-000-06	W37.3			12	0	1,15	12	1,43	2	-	60	6
19618	SHKZ-015-075-015-060-000-06	W37.3			15	0	1,15	15	1,47	2	-	60	6
23756	SHK-015-075-015-060-009-06	W37.4				0,9	2	4	1,45	2	-	60	6
27169	SHK-015-075-040-080-009-06	W37.4			40	0,9	2	4	1,45	2	-	80	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2		
18017	SHKZ-020-100-004-051-000-04	W37.3	2	1	4	0	2	4	1,93	2	-	51	4		
19620	SHKZ-020-100-005-060-000-06	W37.3			5	0	2	5	1,93	2	-	60	6		
19231	SHKZ-020-100-006-060-000-06	W37.3			6	0	2	6	1,93	2	-	60	6		
19232	SHKZ-020-100-010-060-000-06	W37.3			10	0	2	10	1,93	2	-	60	6		
19621	SHKZ-020-100-012-060-000-06	W37.3			12	0	2	12	1,9	2	-	60	6		
19233	SHKZ-020-100-014-060-000-06	W37.3			14	0	2	14	1,93	2	-	60	6		
19622	SHKZ-020-100-015-060-000-06	W37.3			15	0	2	15	1,93	2	-	60	6		
19283	SHK-020-100-015-060-004-06	W37.4				0,4	2	6	1,9	2	-	60	6		
19234	SHKZ-020-100-020-060-000-06	W37.3			20	0	2	20	1,9	2	-	60	6		
19286	SHK-020-100-020-060-004-06	W37.4				0,4	2	6	1,9	2	-	60	6		
19287	SHK-020-100-020-060-009-06	W37.4				0,9	2	6	1,9	2	-	60	6		
19288	SHK-020-100-020-060-014-06	W37.4			25	1,4	2	6	1,9	2	-	60	6		
19623	SHKZ-020-100-025-060-000-06	W37.3				0	2	25	1,9	2	-	60	6		
19289	SHK-020-100-025-070-004-06	W37.4				0,4	2	6	1,9	2	-	70	6		
19290	SHK-020-100-025-070-009-06	W37.4				0,9	2	6	1,9	2	-	70	6		
19291	SHK-020-100-025-070-014-06	W37.4			30	1,4	2	6	1,9	2	-	70	6		
19292	SHK-020-100-030-070-004-06	W37.4				0,4	2	6	1,9	2	-	70	6		
19293	SHK-020-100-030-070-009-06	W37.4				0,9	2	6	1,9	2	-	70	6		
19294	SHK-020-100-030-070-014-06	W37.4			35	1,4	2	6	1,9	2	-	75	6		
19295	SHK-020-100-035-075-004-06	W37.4				0,4	2	6	1,9	2	-	75	6		
19296	SHK-020-100-035-075-009-06	W37.4				0,9	2	6	1,9	2	-	75	6		
19297	SHK-020-100-035-075-014-06	W37.4			2,5	1,25	35	1,4	2	6	1,9	2	-	75	6
19221	SHKZ-025-125-005-051-000-04	W37.3					5	0	2,5	5	2,35	2	-	51	4
19235	SHKZ-025-125-008-060-000-06	W37.3					8	0	2,5	8	2,38	2	-	60	6
19236	SHKZ-025-125-013-060-000-06	W37.3					13	0	2,5	13	2,38	2	-	60	6
19238	SHKZ-025-125-025-060-000-06	W37.3					25	0	2,5	25	2,35	2	-	60	6
23287	SHK-025-125-025-070-009-06	W37.4						0,9	2,5	7	2,35	2	-	70	6
23286	SHK-025-125-025-070-015-06	W37.4						1,5	2,5	7	2,35	2	-	70	6
23285	SHK-025-125-035-075-009-06	W37.4					35	0,9	2,5	7	2,35	2	-	75	6
23284	SHK-025-125-035-075-015-06	W37.4						1,5	2,5	7	2,35	2	-	75	6

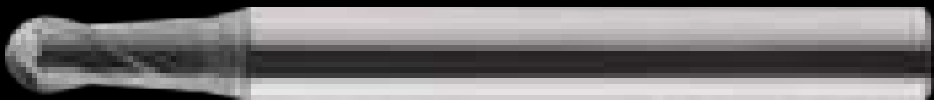
Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
19624	SHKZ-030-150-006-060-000-06	W37.3	3	1,5	40	1,4	3	7,5	2,85	2	-	60	6
24849	4SHKZ-030-150-006-051-000-04	W37.8											
19239	SHKZ-030-150-009-060-000-06	W37.3											
24847	4SHKZ-030-150-009-051-000-04	W37.8											
19625	SHKZ-030-150-010-060-000-06	W37.3											
24846	4SHKZ-030-150-010-051-000-04	W37.8											
19626	SHKZ-030-150-012-060-000-06	W37.3											
24845	4SHKZ-030-150-012-051-000-04	W37.8											
24844	4SHKZ-030-150-015-051-000-04	W37.8											
19240	SHKZ-030-150-015-060-000-06	W37.3											
19298	SHK-030-150-015-060-004-06	W37.4											
19299	SHK-030-150-015-060-009-06	W37.4											
25559	4SHK-030-150-015-051-014-04	W37.9											
17995	SHK-030-150-016-060-054-06	W37.4											
24851	4SHKZ-030-150-018-051-000-04	W37.8											
19627	SHKZ-030-150-018-060-000-06	W37.3											
19301	SHK-030-150-020-060-004-06	W37.4											
19302	SHK-030-150-020-060-009-06	W37.4											
19303	SHK-030-150-020-060-014-06	W37.4											
24850	4SHKZ-030-150-021-051-000-04	W37.8											
19241	SHKZ-030-150-021-060-000-06	W37.3											
19304	SHK-030-150-025-070-004-06	W37.4											
19305	SHK-030-150-025-070-009-06	W37.4											
19306	SHK-030-150-025-070-014-06	W37.4											
19628	SHKZ-030-150-027-070-000-06	W37.3											
19242	SHKZ-030-150-030-070-000-06	W37.3											
19307	SHK-030-150-030-070-004-06	W37.4											
19308	SHK-030-150-030-070-009-06	W37.4											
25556	4SHK-030-150-030-060-009-04	W37.9											
19309	SHK-030-150-030-070-014-06	W37.4											
25557	4SHK-030-150-030-070-014-06	W37.9											
19310	SHK-030-150-035-075-004-06	W37.4											
19311	SHK-030-150-035-075-009-06	W37.4											
19312	SHK-030-150-035-075-014-06	W37.4											
25560	4SHK-030-150-035-075-014-06	W37.9											
19313	SHK-030-150-040-080-004-06	W37.4											
19314	SHK-030-150-040-080-009-06	W37.4											
19315	SHK-030-150-040-080-014-06	W37.4											

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
24856	4SHKZ-040-200-008-051-000-04	W37.8	4	2	8	0	4	8	3,85	4	-	51	4
18019	SHKZ-040-200-008-051-000-04	W37.3							3,88	2	-	51	4
24855	4SHKZ-040-200-010-060-000-06	W37.8			10	0	4	10	3,85	4	-	60	6
19629	SHKZ-040-200-010-060-000-06	W37.3							3,88	2	-	60	6
24854	4SHKZ-040-200-012-060-000-06	W37.8			12	0	4	12	3,85	4	-	60	6
19243	SHKZ-040-200-012-060-000-06	W37.3							3,88	2	-	60	6
17996	SHK-040-200-015-060-037-06	W37.4			15	3,7	4	10	3,85	2	-	60	6
24852	4SHKZ-040-200-016-060-000-06	W37.8							3,85	4	-	60	6
17992	SHKZ-040-200-016-060-000-06	W37.3			16	0	4	16	3,88	2	-	60	6
24853	4SHKZ-040-200-020-060-000-06	W37.8							3,85	4	-	60	6
19245	SHKZ-040-200-020-060-000-06	W37.3			0	4	20	3,88	2	-	60	6	6
19316	SHK-040-200-020-060-004-06	W37.4											
19317	SHK-040-200-020-060-009-06	W37.4											
19318	SHK-040-200-020-060-014-06	W37.4											
25561	4SHK-040-200-024-070-024-06	W37.9			20	1,4	4	10	3,85	2	-	60	6
19319	SHK-040-200-025-070-004-06	W37.4											
19246	SHKZ-040-200-028-070-000-06	W37.3			24	2,4	4	10	3,88	4	-	70	6
24857	4SHKZ-040-200-028-070-000-06	W37.8											
19322	SHK-040-200-030-070-004-06	W37.4			25	0,4	4	10	3,85	2	-	70	6
19323	SHK-040-200-030-070-009-06	W37.4											
25563	4SHK-040-200-030-070-009-06	W37.9			28	0	4	28	3,85	2	-	70	6
25562	4SHK-040-200-030-070-014-06	W37.9											
19247	SHKZ-040-200-032-070-000-06	W37.3											
19325	SHK-040-200-035-075-004-06	W37.4											
19327	SHK-040-200-035-075-014-06	W37.4			30	0,9	4	10	3,85	4	-	70	6
19248	SHKZ-040-200-036-070-000-06	W37.3											
19328	SHK-040-200-040-080-004-06	W37.4			32	1,4	4	10	3,85	4	-	80	6
19329	SHK-040-200-040-080-009-06	W37.4											
25564	4SHK-040-200-040-080-009-06	W37.9			36	0	4	36	3,85	2	-	70	6
27184	SHK-040-200-040-080-014-06	W37.4											
25566	4SHK-040-200-040-080-014-06	W37.9											
19331	SHK-040-200-050-090-004-06	W37.4											
19332	SHK-040-200-050-090-009-06	W37.4			40	0,4	4	10	3,85	2	-	90	6
19333	SHK-040-200-050-090-014-08	W37.4											
19334	SHK-040-200-065-100-004-06	W37.4			50	1,4	4	10	3,85	2	-	100	8
19335	SHK-040-200-065-100-009-06	W37.4											
19336	SHK-040-200-065-100-014-08	W37.4											
24859	4SHKZ-050-250-015-060-000-06	W37.8											
19249	SHKZ-050-250-015-060-000-06	W37.3	5	2,5	65	1,4	4	10	3,85	2	-	100	8
24858	4SHKZ-050-250-020-060-000-06	W37.8											
19250	SHKZ-050-250-020-060-000-06	W37.3											
20407	SHK-050-250-024-070-012-06	W37.4											
19252	SHKZ-050-250-030-070-000-06	W37.3			15	0	5	15	4,83	2	-	60	6
19253	SHKZ-050-250-035-070-000-06	W37.3											
23097	SHK-050-250-040-075-015-08	W37.4			20	0	5	20	4,83	2	-	60	6
					24	1,2	5	10	4,85	2	-	70	6
					30	0	5	30	4,83	2	-	70	6
					35	0	5	35	4,8	2	-	70	6
					40	1,5	5	10	4,85	2	-	75	8

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2						
17993	SHKZ-060-300-009-060-000-06	W37.3	6	3	9	0	9	9	6	2	-	60	6						
19255	SHKZ-060-300-009-075-000-06	W37.3										75	6						
19256	SHKZ-060-300-009-100-000-06	W37.3										2	-	100	6				
24860	4SHKZ-060-300-009-060-000-06	W37.8												60	6				
24862	4SHKZ-060-300-009-075-000-06	W37.8			4	-	75	6											
24863	4SHKZ-060-300-020-060-000-06	W37.8					60	6											
21299	SHKZ-060-300-020-060-000-06	W37.3			20	0	9	20	5,83	2	-	60	6						
24864	4SHKZ-060-300-025-060-000-06	W37.8										60	6						
18311	SHKZ-060-300-025-060-000-06	W37.3			25	0	9	25	5,83	2	-	60	6						
19337	SHK-060-300-030-080-004-08	W37.4										30	0,4	9	15	5,8	2	-	80
19339	SHK-060-300-030-080-014-08	W37.4			80	8													
25570	4SHK-060-300-034-090-017-08	W37.9			34	1,7	8	16	5,8	4	-	90	8						
19340	SHK-060-300-035-080-004-08	W37.4										35	0,4	9	15	5,8	2	-	80
19341	SHK-060-300-035-080-009-08	W37.4			80	8													
19342	SHK-060-300-035-080-014-08	W37.4			1,4	9	15	5,8	2	-	80								8
19343	SHK-060-300-040-085-004-08	W37.4									85								8
19344	SHK-060-300-040-085-009-08	W37.4			0,9	9	15	5,8	2	-	85	8							
25569	4SHK-060-300-040-085-009-08	W37.9									85	8							
17997	SHK-060-300-040-085-014-08	W37.4			40	1,4	9	15	5,8	2	-	85	8						
25571	4SHK-060-300-040-085-014-08	W37.9										0,4	9	15	5,8	2	-	90	8
19345	SHK-060-300-050-090-004-08	W37.4																90	8
19346	SHK-060-300-050-090-009-08	W37.4										50	1,4	9	15	5,8	2	-	90
19347	SHK-060-300-050-090-014-10	W37.4			0,4	9	15	5,8	2	-	100								8
19348	SHK-060-300-065-100-004-08	W37.4									0,9	9	15	5,8	2	-	100	8	
19349	SHK-060-300-065-100-009-08	W37.4	1,4	9	25	5,8	2	-	120	10									
18298	SHK-060-300-065-120-014-10	W37.4	8	4	12	0	12	12	8	4	-	64	8						
17994	SHKZ-080-400-012-064-000-08	W37.3										2	-	100	8				
19258	SHKZ-080-400-012-100-000-08	W37.3												64	8				
24866	4SHKZ-080-400-012-064-000-08	W37.8										12	0	15	15	10	4	-	73
24865	4SHKZ-080-400-012-100-000-08	W37.8			100	8													
22286	SHKZ-080-400-035-064-000-08	W37.3			20	0	20	20	10	4	-	100	10						
18154	SHK-080-400-050-100-009-10	W37.4										2	-	100	10				
25572	4SHK-080-400-050-100-009-10	W37.9												4	-	100	10		
19666	SHK-080-400-060-100-009-10	W37.4	60	0,9								10	15	7,7	2	-	100	10	
18075	SHKZ-100-500-015-073-000-10	W37.3	10	5	15	0	20	20	10	4	-	73	10						
18076	SHKZ-100-500-015-100-000-10	W37.3										2	-	100	10				
24867	4SHKZ-100-500-015-073-000-10	W37.8												4	-	73	10		
24431	4SHKZ-100-500-020-100-000-10	W37.8										20	0	20	20	10	4	-	100
18077	SHKZ-120-600-020-074-000-12	W37.3	12	6	20	0	20	20	12	4	-	74	12						
24868	4SHKZ-120-600-020-074-000-12	W37.8										-	74	12	100	12			
24432	4SHKZ-120-600-020-100-000-12	W37.8															100	12	
21343	SHKZ-160-800-026-100-000-16	W37.3	16	8	26	0	26	0	16	2	-	100	16						

HK/Z Series

[hk] [hgz]



Conical, cylindrical and reduced neck ballnose cutters with two flutes for roughing and finishing hardened and unhardened steels.

Areas of application

≥ 44 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Tool variations

Z 2

Conical

Z 2

Cylindrical

Z 2

Reduced Neck

HA

Video

48 HRC

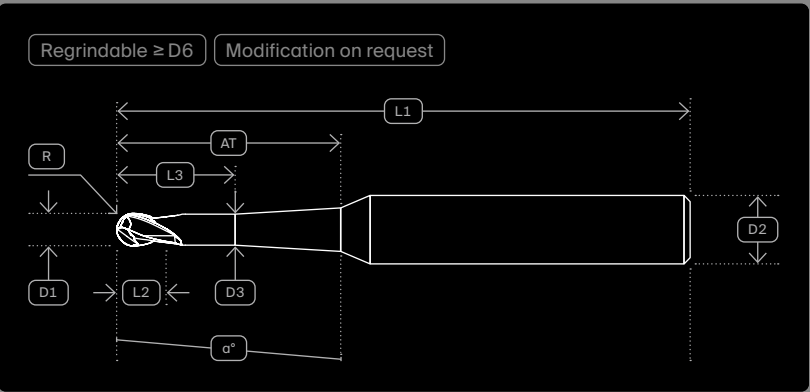
Finish.

[hgz]

D 2

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
11400	HKZ-005-025-001-060-000-06	W37			1,5	0	0,4	1,5	0,48	2	-	60	6
11399	HKZ-005-025-002-060-000-06	W37	0,5	0,25	2,5	0	0,4	2,5	0,48	2	-	60	6
09836	HKZ-006-030-003-060-000-06	W37	0,6	0,3	3	0	0,45	3	0,56	2	-	60	6
10527	HKZ-008-040-006-060-000-06	W37			6	0	0,6	6	0,78	2	-	60	6
10528	HKZ-008-040-010-060-000-06	W37	0,8	0,4	10	0	0,6	10	0,78	2	-	60	6
10072	HKZ-010-050-004-050-000-04	W37			4	0	0,75	4	0,96	2	-	50	4
11186	HKZ-010-050-005-060-000-06	W37			5	0	0,75	5	0,97	2	-	60	6
16313	HKZ-010-050-006-060-000-06	W37			6	0	0,75	6	0,97	2	-	60	6
16314	HKZ-010-050-008-060-000-06	W37			8	0	0,75	8	0,96	2	-	60	6
19213	HKZ-010-050-010-060-000-06	W37			10	0	0,75	10	0,96	2	-	60	6
07975	HK-010-050-013-058-103-06	W37.2			13,8	10,3	0,75	2,5	0,97	2	-	58	6
11313	HK-010-050-014-051-061-04	W37.2	1	0,5	14	6,1	0,75	3	0,97	2	-	51	4
07708	HKZ-015-075-006-060-000-06	W37			6	0	1,15	6	1,43	2	-	60	6
11171	HKZ-015-075-008-060-000-06	W37			8	0	1,15	8	1,47	2	-	60	6
11308	HK-015-075-015-051-047-04	W37.2			15	4,7	1,15	4	1,47	2	-	51	4
07976	HK-015-075-017-058-079-06	W37.2	1,5	0,75	17	7,9	1,15	4,3	1,47	2	-	58	6
09871	HKZ-018-090-006-060-000-06	W37			6	0	1,8	6	1,7	2	-	60	6
09872	HKZ-018-090-009-060-000-06	W37			9	0	1,8	9	1,7	2	-	60	6
09873	HKZ-018-090-012-060-000-06	W37			12	0	1,8	12	1,7	2	-	60	6
09874	HKZ-018-090-015-060-000-06	W37	1,8	0,9	15	0	1,8	15	1,7	2	-	60	6
07554	HKZ-020-100-006-060-000-06	W37			6	0	2	6	1,93	2	-	60	6
19214	HKZ-020-100-008-060-000-06	W37			8	0	2	8	1,93	2	-	60	6
19215	HKZ-020-100-010-060-000-06	W37			10	0	2	10	1,9	2	-	60	6
17544	HKZ-020-100-012-060-000-06	W37			12	0	2	12	1,9	2	-	60	6
19676	HKZ-020-100-015-060-000-06	W37			15	0	2	15	1,93	2	-	60	6
07974	HK-020-100-016-058-070-06	W37.2			16,3	7	2	5	1,9	2	-	58	6
19677	HKZ-020-100-020-060-000-06	W37	2	1	20	0	2	20	1,9	2	-	60	6
19678	HKZ-025-125-015-060-000-06	W37			15	0	2,5	15	2,35	2	-	60	6
07977	HK-025-125-016-058-062-06	W37.2			16,2	6,2	2,5	6,3	2,35	2	-	58	6
19679	HKZ-025-125-020-060-000-06	W37	2,5	1,25	20	0	2,5	20	2,35	2	-	60	6
11383	HKZ-030-150-015-060-000-06	W37			15	0	3	15	2,85	2	-	60	6
07978	HK-030-150-016-058-054-06	W37.2			16	5,4	3	7,5	2,88	2	-	58	6
10483	HKZ-030-150-020-060-000-06	W37			20	0	3	20	2,88	2	-	60	6
10484	HKZ-030-150-025-060-000-06	W37			25	0	3	25	2,85	2	-	60	6
12148	HKZ-030-150-030-070-000-06	W37	3	1,5	30	0	3	30	2,85	2	-	70	6
11384	HKZ-040-200-015-060-000-06	W37			15	0	4	15	3,88	2	-	60	6
07980	HK-040-200-015-058-037-06	W37.2			15,7	3,7	4	10	3,85	2	-	58	6
10485	HKZ-040-200-020-060-000-06	W37			20	0	4	20	3,85	2	-	60	6
10486	HKZ-040-200-025-060-000-06	W37			25	0	4	25	3,85	2	-	60	6
11385	HKZ-040-200-030-070-000-06	W37			30	0	4	30	3,85	2	-	70	6
11386	HKZ-040-200-035-070-000-06	W37	4	2	35	0	4	35	3,85	2	-	70	6
11387	HKZ-050-250-015-060-000-06	W37			15	0	5	15	4,83	2	-	60	6
07981	HK-050-250-015-058-019-06	W37.2			15,3	1,9	5	12,5	4,8	2	-	58	6
10918	HKZ-050-250-020-060-000-06	W37			20	0	5	20	4,8	2	-	60	6
10487	HKZ-050-250-025-060-000-06	W37			25	0	5	25	4,8	2	-	60	6
11388	HKZ-050-250-030-070-000-06	W37	5	2,5	30	0	5	30	4,83	2	-	70	6
07505	HKZ-060-300-009-060-000-06	W37	6	3	9	0	9	9	6	2	-	60	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
07507	HKZ-080-400-012-064-000-08	W37	8	4	12	0	12	12	8	2	-	64	8
10375	HKZ-080-400-012-100-000-08	W37										100	8
07508	HKZ-100-500-015-073-000-10	W37	10	5	15	0	15	15	10	2	-	73	10
10376	HKZ-100-500-015-100-000-10	W37										100	10
10059	HKZ-120-600-020-100-000-12	W37	12	6	20	0	20	20	12	2	-	100	12



K/Z

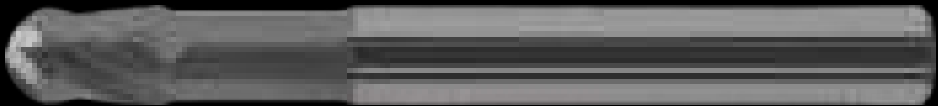
Series

[k]

[kz]

[4kz]

[sk]



Conical, cylindrical and reduced neck ballnose cutter with two or four flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Tool variations

Z 2

Conical

Z 2

Cylindrical

Z 2

Reduced Neck

Z 4

Reduced Neck

HA

⌀

⌀

▶

Video

30 HRC

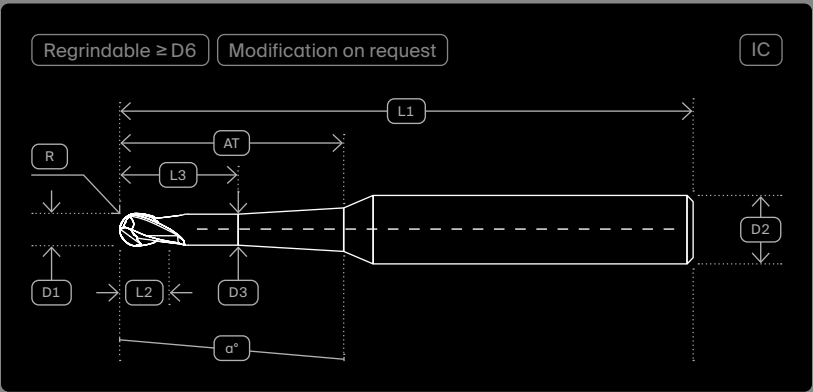
Finish.

[k]

D1,5

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
00485	KZ-010-050-025-060-000-06	W06	1	0,5	2,5	0	0,75	2,5	0,97	2	IC	60	6
06335	K-010-050-010-060-009-06	W03			10	0,9	0,75	4	0,97	2	IC	60	6
10724	K-010-050-015-060-004-06	W03			15	0,4	0,75	4	0,97	2	IC	60	6
06337	K-010-050-015-060-009-06	W03				0,9	0,75	4	0,97	2	IC	60	6
06336	K-010-050-020-060-009-06	W03			20	0,9	0,75	4	0,97	2	IC	60	6
04723	SK-010-050-020-060-040-06	W33				4	0,75	2,5	0,97	2	-	60	6
00305	K-010-050-030-075-015-06	W03				1,5	0,75	4	0,97	2	-	75	6
00528	K-010-050-039-075-037-06	W03			39	3,7	0,75	4	0,97	2	-	75	6
09743	K-010-050-040-080-036-06	W03			40	3,6	0,75	4	0,97	2	-	80	6
01411	KZ-013-065-040-060-000-06	W06	1,3	0,65	4	0	2	4	1,23	2	-	60	6
00027	K-013-065-018-060-015-06	W03			18	1,5	1	4	1,27	2	IC	60	6
00029	K-013-065-026-075-015-06	W03			26	1,5	1	4	1,27	2	-	75	6
00437	KZ-015-075-030-060-000-06	W06	1,5	0,75	3	0	1,15	3	1,43	2	IC	60	6
00991	K-015-075-015-060-004-06	W03			15	0,4	1,15	4	1,47	2	IC	60	6
00992	K-015-075-015-060-009-06	W03				0,9	1,15	4	1,43	2	IC	60	6
00367	K-015-075-020-060-004-06	W03			20	0,4	1,15	4	1,47	2	IC	60	6
00993	K-015-075-020-060-009-06	W03				0,9	1,15	4	1,47	2	IC	60	6
06100	K-015-075-025-060-030-06	W03			25	3	1,15	4	1,47	2	IC	60	6
00919	K-015-075-030-075-015-06	W03			30	1,5	1,15	4	1,47	2	-	75	6
00306	K-015-075-050-100-030-08	W03			50	3	1,15	4	1,47	2	-	100	8
01409	KZ-018-090-030-060-000-06	W06	1,8	0,9	3	0	1,8	3	1,7	2	-	60	6
00873	KZ-020-100-035-075-000-06	W06	2	1	3,5	0	2	3,5	1,9	2	-	75	6
00416	KZ-020-100-035-060-000-06	W06							1,93	2	-	60	6
20047	K-020-100-015-060-009-06	W03			15	0,9	2	6	1,93	2	-	60	6
03002	K-020-100-018-060-015-06	W03			18	1,5	2	6	1,9	2	-	60	6
00988	K-020-100-020-060-004-06	W03			20	0,4	2	6	1,9	2	-	60	6
00805	K-020-100-020-060-009-06	W03				0,9	2	6	1,9	2	-	60	6
04724	SK-020-100-020-060-040-06	W33				4	2	4	1,9	2	-	60	6
00989	K-020-100-025-070-004-06	W03			25	0,4	2	6	1,9	2	-	70	6
00990	K-020-100-025-070-009-06	W03				0,9	2	6	1,93	2	-	70	6
00043	K-020-100-025-075-015-06	W03				1,5	2	6	1,9	2	-	75	6
00045	K-020-100-032-075-015-06	W03			32	1,5	2	6	1,9	2	-	75	6
07238	K-020-100-035-075-009-06	W03			35	0,9	2	6	1,9	2	-	75	6
05148	K-020-100-045-085-009-06	W03			45	0,9	2	6	1,9	2	-	85	6
05147	K-020-100-045-085-014-06	W03				1,4	2	6	1,93	2	-	85	6
05149	K-020-100-060-100-009-06	W03			60	0,9	2	6	1,9	2	-	100	6
05150	K-020-100-060-100-014-06	W03				1,4	2	6	1,9	2	-	100	6
00047	KZ-025-125-040-060-000-06	W06	2,5	1,25	4	0	2,5	4	2,35	2	-	60	6
20048	K-025-125-025-075-009-06	W03			25	0,9	2,5	6	2,35	2	-	75	6
00033	K-025-125-025-075-015-06	W03				1,5	2,5	6	2,35	2	-	75	6
20049	K-025-125-035-075-009-06	W03			35	0,9	2,5	6	2,35	2	-	75	6
00035	K-025-125-035-075-015-06	W03				1,5	2,5	6	2,35	2	-	75	6
20050	K-025-125-040-075-009-06	W03			40	0,9	2,5	6	2,35	2	-	75	6
00037	K-025-125-040-075-015-06	W03				1,5	2,5	6	2,35	2	-	75	6

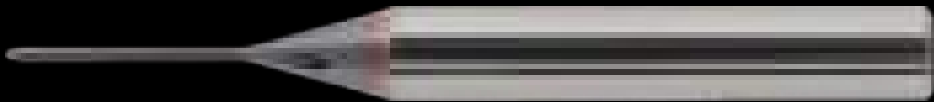
Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2												
00421	KZ-030-150-050-060-000-06	W06	3	1,5	5	0	3	5	2,88	2	-	60	6												
09750	4KZ-030-150-012-060-000-06	W10			12	0	4	12	2,7	4	-	60	6												
04725	SK-030-150-020-064-040-08	W33			20	4	3	6	3	2	-	64	8												
07777	K-030-150-023-060-020-06	W03			23	2	3	6	2,85	2	-	60	6												
00039	K-030-150-025-075-010-06	W03			25	1	3	6	2,85	2	-	75	6												
07239	K-030-150-030-075-009-06	W03			30	0,9	3	6	2,85	2	-	75	6												
00578	K-030-150-030-075-015-06	W03				1,5	3	6	2,85	2	-	75	6												
00055	K-030-150-040-080-009-06	W03				0,9	3	6	2,85	2	-	80	6												
00057	K-030-150-040-085-015-06	W03			1,5		3	6	2,85	2	-	85	6												
00452	K-030-150-040-075-022-06	W03			2,2		3	6	2,85	2	-	75	6												
00040	K-030-150-050-100-010-08	W03			50	1	3	6	2,85	2	-	100	8												
00227	K-030-150-050-100-015-08	W03				1,5	3	6	2,85	2	-	100	8												
11311	K-030-150-063-100-009-06	W03				63	0,9	3	6	2,85	2	-	100	6											
00382	K-030-150-063-100-014-06	W03			3			6	2,85	2	-	100	6												
02278	K-030-150-065-100-009-06	W03			65	0,9	3	6	2,85	2	-	100	6												
00422	KZ-040-200-070-060-000-06	W06	4	2	7	0	4	7	3,85	2	-	60	6												
00049	KZ-040-200-070-075-000-06	W06										75	6												
00474	4KZ-040-200-012-060-000-06	W10										60	6												
01090	4KZ-040-200-020-060-000-06	W10			20							0	5	20	3,7	4	-	60	6						
06338	K-040-200-020-070-010-06	W03										1	4	12	3,85	2	-	70	6						
10145	K-040-200-020-090-030-06	W03										3	4	12	3,85	2	-	90	6						
04726	SK-040-200-020-064-040-08	W33										20	4	4	6,5	4	2	-	64	8					
07778	K-040-200-024-070-024-06	W03			24	2,4	4	12	3,85	2	-	70	6												
06339	K-040-200-030-075-010-06	W03			30	1	4	12	3,85	2	-	75	6												
00442	K-040-200-030-075-015-06	W03				1,5	4	12	3,85	2	-	75	6												
00046	K-040-200-040-085-009-06	W03				0,9	4	12	3,85	2	-	85	6												
01543	K-040-200-040-100-014-06	W03			40	1,4	4	12	3,85	2	-	100	6												
00438	K-040-200-040-085-015-06	W03				45	2,5	4	12	3,85	2	-	85	6											
10147	K-040-200-040-090-015-06	W03											90	6											
00223	K-040-200-045-100-025-08	W03											100	8											
00073	K-040-200-050-100-015-08	W03			50	1,5	4	12	3,85	2	-	100	8												
00077	K-040-200-060-120-015-08	W03			60	1,5	4	12	3,85	2	-	120	8												
00682	K-040-200-065-100-009-06	W03			65	0,9	4	12	3,85	2	-	100	6												
00050	KZ-050-250-080-060-000-06	W06	5	2,5	8	0	5	8	4,8	2	-	60	6												
00051	KZ-050-250-080-075-000-06	W06										75	6												
04727	SK-050-250-022-064-040-08	W33										22	4	5	8	5	2	-	64	8					
00502	K-050-250-040-075-007-06	W03			40							0,7	5	10	4,8	2	-	75	6						
11291	K-050-250-040-100-007-06	W03																100	6						
07442	K-050-250-040-075-015-08	W03																1,5	5	15	4,8	2	-	75	8
03329	K-050-250-040-100-021-08	W03																2,1	5	15	4,8	2	-	100	8
10149	K-050-250-060-110-015-08	W03			60	1,5	5	15	4,8	2	-	110	8												
00550	K-050-250-060-120-015-08	W03										120	8												

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
00423	KZ-060-300-100-060-000-06	W06	6	3	10	0	10	10	6	2	-	60	6
00052	KZ-060-300-100-075-000-06	W06										75	6
00720	KZ-060-300-100-100-000-06	W06										100	6
04728	SK-060-300-019-064-030-08	W33			19	3	6	8	6	2	-	64	8
00475	4KZ-060-300-020-060-000-06	W10			20	0	10	20	5,83	4	-	60	6
10150	K-060-300-020-100-030-08	W03				3	9	12	5,8	2	-	100	8
00560	4KZ-060-300-030-080-000-06	W10			30	0	10	30	5,83	4	-	80	6
06544	K-060-300-030-100-063-12	W03				6,34	9	12	5,8	2	-	100	12
06117	K-060-300-040-085-009-08	W03				0,9	9	16	5,8	2	-	85	8
00439	K-060-300-040-085-015-08	W03			40	1,5	9	16	5,8	2	-	85	8
00626	KZ-060-300-440-080-000-06	W06			44	0	10	44	5,8	2	-	80	6
00224	K-060-300-045-100-025-10	W03			45	2,5	9	16	5,8	2	-	100	10
10093	K-060-300-050-090-004-08	W03			50	0,4	9	16	5,8	2	-	90	8
10094	K-060-300-050-090-009-08	W03										90	8
09747	K-060-300-060-100-010-08	W03										100	8
00858	K-060-300-064-100-009-08	W03			60	1	9	25	5,8	2	-	100	8
01657	K-060-300-065-120-010-08	W03			64	0,9	9	16	5,8	2	-	100	8
00700	K-060-300-065-120-015-10	W03			65	0,88	9	16	5,8	2	-	120	8
00460	KZ-080-400-120-059-000-08	W06				1,5	9	25	5,8	2	-	120	10
00053	KZ-080-400-120-080-000-08	W06	8	4	12	0	12	12	8	2	-	59	8
00054	KZ-080-400-120-100-000-08	W06										80	8
09393	KZ-080-400-120-120-000-08	W06										100	8
06387	KZ-080-400-120-150-000-08	W06										120	8
04729	SK-080-400-019-075-030-10	W33			12	0	12	12	8	2	-	150	8
10029	KZ-080-400-200-059-000-08	W06			19	3	7	10	8	2	-	75	10
06205	KZ-080-400-260-059-000-08	W06			20	0	12	20	7,7	2	-	59	8
00476	4KZ-080-400-026-075-000-08	W10			26	0	12	26	7,73	2	-	59	8
07121	K-080-400-030-100-009-12	W03										75	8
07278	KZ-080-400-400-080-000-08	W06										100	12
00561	4KZ-080-400-040-100-000-08	W10			40	0	12	40	7,73	4	-	80	8
10152	K-080-400-040-100-015-10	W03										100	8
10096	K-080-400-050-100-004-10	W03										100	10
10889	K-080-400-055-110-021-12	W03										110	12
00857	K-080-400-060-100-009-10	W03			60	0,9	10	15	7,7	2	-	100	10
00670	K-080-400-060-120-009-10	W03										120	10
10888	K-080-400-070-110-009-10	W03										110	10

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
00056	KZ-100-500-180-075-000-10	W06										75	10
00058	KZ-100-500-180-100-000-10	W06										100	10
07490	KZ-100-500-180-120-000-10	W06										120	10
00059	KZ-100-500-180-150-000-10	W06			18	0	18	18	10	2	-	150	10
00562	4KZ-100-500-028-075-000-10	W10			28	0	16	28	9,69	4	-	75	10
04883	KZ-100-500-310-075-000-10	W06			31	0	18	31	9,69	2	-	75	10
00477	4KZ-100-500-040-100-000-10	W10			16	0	16	40	9,2	4	-	100	10
10154	K-100-500-040-130-015-12	W03				1,5	12	17	9,65	2	-	130	12
10098	K-100-500-060-100-004-12	W03			60	0,4	12	25	9,65	2	-	100	12
09943	K-100-500-060-130-009-12	W03						20	9,65	2	-	130	12
10097	K-100-500-060-100-009-12	W03						25	9,65	2	-	100	12
10890	K-100-500-062-110-009-12	W03			62	0,9	20	30	9,65	2	-	110	12
01110	4KZ-100-500-080-120-000-10	W10			80	0	16	80	9,2	4	-	120	10
10891	K-100-500-090-150-019-16	W03	10	5	90	1,9	20	30	9,65	2	-	150	16
00680	KZ-120-600-200-084-000-12	W06										84	12
03783	KZ-120-600-200-100-000-12	W06										100	12
00060	KZ-120-600-200-120-000-12	W06										120	12
00061	KZ-120-600-200-150-000-12	W06										150	12
00478	4KZ-120-600-030-100-000-12	W10			30	0	16	30	11,65	4	-	100	12
04028	4KZ-120-600-030-120-000-12	W10										120	12
04884	KZ-120-600-430-084-000-12	W06										84	12
10020	K-120-600-080-160-015-16	W03										160	16
00062	KZ-160-800-260-100-000-16	W06	12	6	80	1,5	15	20	11,6	2	-	100	16
00063	KZ-160-800-260-150-000-16	W06										150	16
01005	4KZ-160-800-032-100-000-16	W10										100	16



[mk]



Reduced neck ballnose cutter D1 ≤ 3 mm with two flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Tool variations

Z 2

Reduced Neck

HA

⌀

⌀

Video

1.000 N

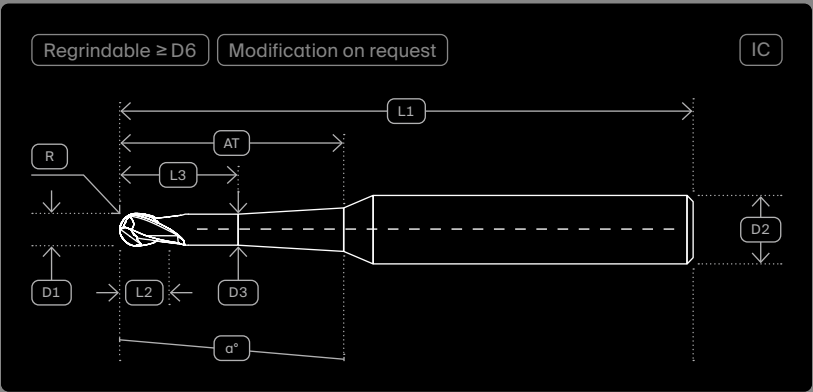
Finish.

[mk]

D1

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
00806	MK-003-015-002-060-000-06							0,28	2	IC	60	6
05797	MK-003-015-002-050-000-04			2	0	0,25	2	0,285	2	-	50	4
05798	MK-003-015-003-050-000-04			3	0	0,25	3	0,28	2	-	50	4
05799	MK-003-015-005-050-000-04									-	50	4
00808	MK-003-015-005-060-000-06	0,3	0,15	5	0	0,25	5	0,28	2	IC	60	6
05800	MK-004-020-002-050-000-04									-	50	4
00809	MK-004-020-002-060-000-06			2	0	0,3	2	0,38	2	IC	60	6
05801	MK-004-020-004-050-000-04									-	50	4
00810	MK-004-020-004-060-000-06			4	0	0,3	4	0,38	2	IC	60	6
00811	MK-004-020-006-060-000-06	0,4	0,2	6	0	0,3	6	0,38	2	IC	60	6
05279	MK-005-025-002-050-000-04									-	50	4
00812	MK-005-025-002-060-000-06			2	0	0,4	2	0,48	2	IC	60	6
11033	MK-005-025-003-050-000-04			3	0	0,4	3	0,48	2	-	50	4
05280	MK-005-025-005-050-000-04									-	50	4
00813	MK-005-025-005-060-000-06			5	0	0,4	5	0,48	2	IC	60	6
05414	MK-005-025-007-050-000-04									-	50	4
00814	MK-005-025-007-060-000-06			7	0	0,4	7	0,48	2	IC	60	6
05041	MK-006-030-003-050-000-04							0,57	2	-	50	4
11039	MK-006-030-003-060-000-06			3	0	0,45	3	0,58	2	IC	60	6
03810	MK-006-030-006-050-000-04									-	50	4
11040	MK-006-030-006-060-000-06			6	0	0,45	6	0,56	2	IC	60	6
05803	MK-006-030-009-050-000-04									-	50	4
00616	MK-006-030-009-060-000-06			9	0	0,45	9	0,58	2	IC	60	6
00818	MK-007-035-003-060-000-06			3	0	0,55	3	0,68	2	IC	60	6
00819	MK-007-035-007-060-000-06			7	0	0,55	7	0,66	2	IC	60	6
00820	MK-007-035-010-060-000-06	0,7	0,35	10	0	0,55	10	0,68	2	IC	60	6
01080	MK-008-040-002-060-000-06			2	0	0,6	2	0,76	2	IC	60	6
00588	MK-008-040-004-060-000-06							0,76	2	IC	60	6
03342	MK-008-040-004-050-000-04			4	0	0,6	4	0,78	2	-	50	4
11038	MK-008-040-005-060-000-06			5	0	0,6	5	0,78	2	IC	60	6
03476	MK-008-040-006-050-000-04			6	0	0,6	6	0,76	2	-	50	4
05804	MK-008-040-008-050-000-04							0,76	2	-	50	4
00617	MK-008-040-008-060-000-06			8	0	0,6	8	0,78	2	IC	60	6
09395	MK-008-040-010-060-000-06			10	0	0,6	10	0,78	2	IC	60	6
05805	MK-008-040-012-050-000-04	0,8	0,4	12	0	0,6	12	0,76	2	-	50	4

Dc1	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
03352	MK-010-050-002-050-000-04	1	0,5	2	0	0,75	2	0,97	2	-	50	4
06811	MK-010-050-003-050-000-04			3	0	0,75	3	0,97	2	-	50	4
10005	MK-010-050-004-050-000-04			4	0	0,75	4	0,97	2	-	50	4
05806	MK-010-050-005-050-000-04			5	0	0,75	5	0,96	2	-	50	4
00594	MK-010-050-005-060-000-06									IC	60	6
03343	MK-010-050-006-050-000-04									-	50	4
11285	MK-010-050-006-060-000-06			6	0	0,75	6	0,97	2	IC	60	6
11041	MK-010-050-008-060-000-06							0,96	2	IC	60	6
03344	MK-010-050-008-050-000-04									-	50	4
11045	MK-010-050-008-060-000-04									8	0	0,75
03806	MK-010-050-010-050-000-04			10	0	0,75	10	0,97	2	-	50	4
00498	MK-010-050-010-060-000-06									IC	60	6
03807	MK-010-050-012-050-000-04									-	50	4
02819	MK-010-050-012-060-000-06			12	0	0,75	12	0,97	2	IC	60	6
05807	MK-010-050-015-050-000-04			15	0	0,75	15	0,97	2	-	50	4
00499	MK-010-050-015-060-000-06									IC	60	6
05808	MK-010-050-018-050-000-04									-	50	4
05764	MK-010-050-018-060-000-06			18	0	0,75	18	0,97	2	IC	60	6
05809	MK-010-050-021-050-000-04			21	0					-	50	4
05765	MK-010-050-021-060-000-06									IC	60	6
03353	MK-012-060-003-050-000-04	1,2	0,6	3	0	0,9	3	1,13	2	-	50	4
10022	MK-012-060-012-055-000-04			12	0	0,9	12	1,13	2	-	55	4
16322	MK-012-060-018-050-000-04			18	0	0,9	18	1,17	2	-	50	4
10508	MK-015-075-003-050-000-04			3	0	1,15	3	1,43	2	-	50	4
03473	MK-015-075-006-050-000-04			6	0	1,15	6	1,47	2	-	50	4
04484	MK-015-075-007-060-000-04			7	0	1,15	7	1,47	2	-	60	4
03477	MK-015-075-008-050-000-04			8	0	1,15	8	1,43	2	-	50	4
00065	MK-015-075-008-060-000-06							1,47	2	IC	60	6
04485	MK-015-075-010-050-000-04							1,43	2	-	50	4
02823	MK-015-075-010-060-000-06			10	0	1,15	10	1,47	2	IC	60	6
04486	MK-015-075-012-050-000-04			12	0	1,15	12	1,43	2	-	50	4
02824	MK-015-075-012-060-000-06							1,47	2	IC	60	6
04487	MK-015-075-015-050-000-04							1,43		-	50	4
00500	MK-015-075-015-060-000-06			15	0	1,15	15	1,43	2	IC	60	6
04488	MK-015-075-020-050-000-04			20	0	1,15	20	1,47	2	-	50	4
02825	MK-015-075-020-060-000-06									IC	60	6
04489	MK-015-075-023-060-000-04									23	0	1,15
11484	MK-015-075-025-060-000-06	1,5	0,75	25	0	1,15	25	1,47	2	IC	60	6

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
10181	MK-020-100-005-060-000-06	2	1	5	0	2	5	1,9	2	-	60	6
05810	MK-020-100-006-050-000-04			6	0	2	6	1,9	2	-	50	4
02826	MK-020-100-006-060-000-06									-	60	6
03345	MK-020-100-008-050-000-04									-	50	4
03346	MK-020-100-010-050-000-04			10	0	2	10	1,93	2	-	50	4
00066	MK-020-100-010-060-000-06									-	60	6
03808	MK-020-100-012-050-000-04									-	50	4
02828	MK-020-100-012-060-000-06			12	0	2	12	1,93	2	-	60	6
02829	MK-020-100-015-060-000-06			15	0	2	15	1,9	2	-	60	6
03492	MK-020-100-016-050-000-04			16	0	2	16	1,9	2	-	50	4
09958	MK-020-100-016-055-000-04									-	55	4
03809	MK-020-100-020-050-000-04									1,9	2	-
00067	MK-020-100-020-060-000-06			20	0	2	20	1,93	2	-	60	6
05811	MK-020-100-025-060-000-04			25	0	2	25	1,9	2	-	60	4
02830	MK-020-100-025-060-000-06									-	60	6
05812	MK-020-100-030-070-000-04									-	70	4
00068	MK-020-100-030-075-000-06			30	0	2	30	1,9	2	-	75	6
05813	MK-020-100-035-075-000-04	3	1,5	35	0	2	35	1,9	2	-	75	4
02832	MK-030-150-010-060-000-06			10	0	3	10	2,85	2	-	60	6
05814	MK-030-150-010-050-000-04							2,88	2	-	50	4
05815	MK-030-150-012-050-000-04							-	50	4		
03355	MK-030-150-012-060-000-06			12	0	3	12	2,88	2	-	60	6
05816	MK-030-150-015-050-000-04			15	0	3	15	2,85	2	-	50	4
01054	MK-030-150-015-060-000-06							2,88	2	-	60	6
05817	MK-030-150-021-050-000-04							-	50	4		
01055	MK-030-150-021-060-000-06			21	0	3	21	2,88	2	-	60	6
05818	MK-030-150-027-070-000-04			27	0	3	27	2,85	2	-	70	4
01056	MK-030-150-027-075-000-06									-	75	6
10123	MK-030-150-030-075-000-06			30	0	3	30	2,85	2	-	75	6
05819	MK-030-150-033-070-000-04			33	0	3	33	2,85	2	-	70	4
01057	MK-030-150-033-075-000-06									-	75	6
05766	MK-030-150-038-075-000-06	38	0	3	38	2,85	2	-	75	6		

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
05821	MK-040-200-010-060-000-04									-		4
02833	MK-040-200-010-060-000-06			10	0	4	10	3,88	2	-	60	6
11046	MK-040-200-015-060-000-06			15	0	4	15	3,85	2	-	60	6
05412	MK-040-200-016-060-000-04									-		4
01058	MK-040-200-016-060-000-06			16	0	4	16	3,88	2	-	60	6
11047	MK-040-200-020-060-000-06			20	0	4	20	3,88	2	-	60	6
05822	MK-040-200-022-060-000-04							3,85	2	-	60	4
01059	MK-040-200-022-060-000-06			22	0	4	22	3,88	2	-	60	6
11286	MK-040-200-025-060-000-06			25	0	4	25	3,88	2	-	60	6
05413	MK-040-200-028-070-000-04									-	70	4
01060	MK-040-200-028-075-000-06			28	0	4	28	3,85	2	-	75	6
05823	MK-040-200-034-070-000-04									-	70	4
01061	MK-040-200-034-075-000-06			34	0	4	34	3,85	2	-	75	6
05767	MK-040-200-040-080-000-06	4	2	40	0	4	40	3,85	2	-	80	6
07884	MK-050-250-015-060-000-06			15	0	5	15	4,83	2	-	60	6
03495	MK-050-250-016-060-000-06			16	0	5	16	4,8	2	-	60	6
07909	MK-050-250-020-060-000-06			20	0	5	20	4,8	2	-	60	6
06816	MK-050-250-025-060-000-06			25	0	5	25	4,8	2	-	60	6
07358	MK-060-300-020-060-000-06			20	0	9	20	5,8	2	-	60	6
03505	MK-060-300-025-060-000-06	6	3	25	0	9	25	5,8	2	-	60	6



[sfb]



Cylindrical and reduced neck ballnose cutter with four flutes for finishing hardened and unhardened steels ≤ 52 HRC.

Areas of application

≤ 52 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Tool variations

Z 4

Cylindrical

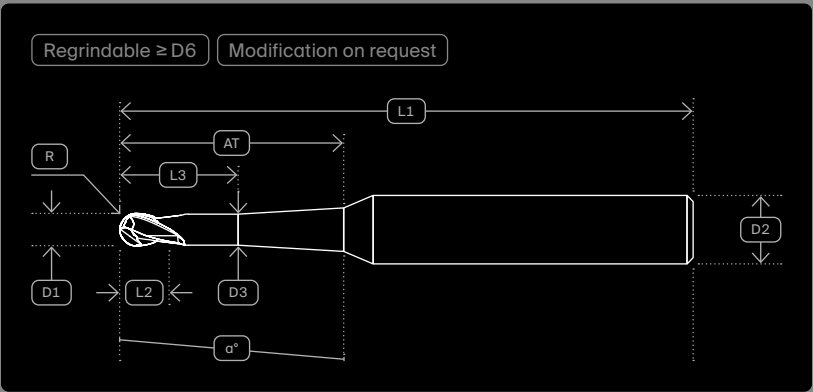
Z 4

Reduced Neck

HA

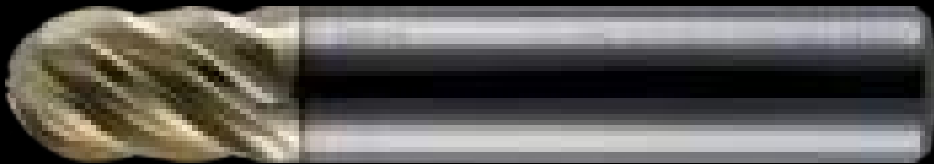
All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
23811	4SFB-030-150-008-051-000-04	3	1,5	10	0	8	10	2,85	4	-	51	4
23812	4SFB-040-200-010-051-000-04	4	2	10	0	10	10	4	4	-	51	4
23813	4SFB-050-250-015-060-000-06	5	2,5	15	0	12	15	4,8	4	-	60	6
23814	4SFB-060-300-015-060-000-06	6	3	15	0	15	15	6	4	-	60	6
23815	4SFB-080-400-017-064-000-08	8	4	17	0	17	17	8	4	-	64	8
23816	4SFB-100-500-022-075-000-10	10	5	22	0	22	22	10	4	-	75	10
22465	4SFB-120-600-025-084-000-12	12	6	25	0	25	25	12	4	-	84	12

[cfb]



Cylindrical cermet ballnose cutters with four to eight flutes for finishing unhardened steels.

Areas of application

- 1.400 N
- ≥ 1.000 N
- ≤ 1.000 N
- Steel
- GG

CER

Tool variations

- Z 4Cylindrical
- Z 6Cylindrical
- Z 8Cylindrical

HA

To ensure optimal and high-performance use of the tool, our technical sales team will support you with comprehensive advice and expertise.



Video

640 N

Finish.

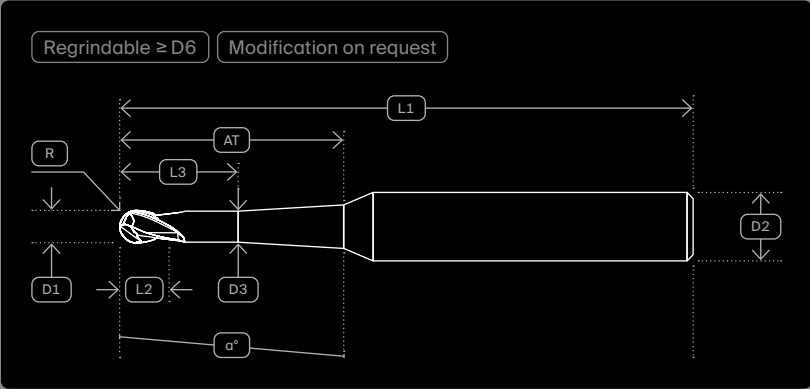
[cfb]

D8



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
34177	CFB-060-300-009-050-000-06	6	3	9	0	9	0	6	4	-	50	6
34178	CFB-080-400-012-060-000-08	8	4	12	0	12	0	8	6	-	60	8
34179	CFB-100-500-015-065-000-10	10	5	15	0	15	0	10	6	-	65	10
34180	CFB-120-600-018-070-000-12	12	6	18	0	18	0	12	6	-	70	12
34181	CFB-160-800-024-080-000-16	16	8	24	0	24	0	16	8	-	80	16

CK/Z

Serie

[ck]

[ckz]



Conical and reduced neck ballnose cutters with two flutes for roughing and finishing non-ferrous materials.

Areas of application

ALU

Cu

AlSi

Titan

Tool variations

Z2

Conical

Z2

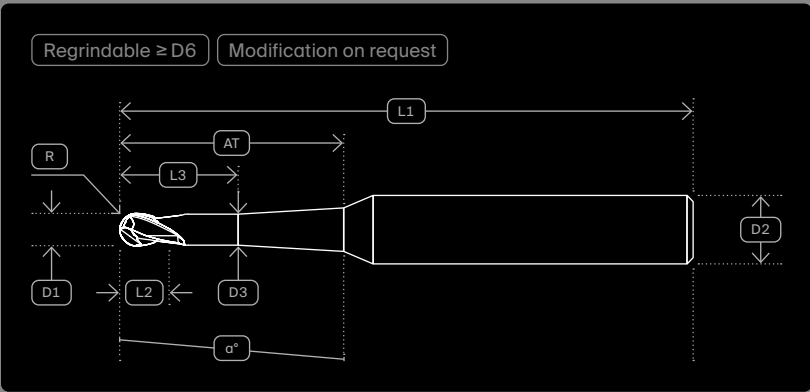
Reduced Neck

HA



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
07802	CKZ-008-040-010-060-000-06	W17	0,8	0,4	10	0	1	10	0,75	2	-	60	6
00247	CK-008-040-012-060-010-06	W09			12	1	1,2	3	0,7	2	-	60	6
00270	CK-008-040-022-070-008-06	W09			22	0,8	1,2	3	0,7	2	-	70	6
07801	CKZ-010-050-010-060-000-06	W17			10	0	2	10	0,9	2	-	60	6
00248	CK-010-050-012-060-010-06	W09			12	1	1,5	4	0,9	2	-	60	6
00271	CK-010-050-022-070-008-06	W09			22	0,8	1,5	4	0,9	2	-	70	6
00311	CK-010-050-033-080-008-06	W09	1	0,5	33	0,8	1,5	4	0,9	2	-	80	6
04536	CK-015-075-025-060-006-06	W09	1,5	0,75	25	0,6	2,25	7	1,4	2	-	60	6
04537	CK-015-075-040-075-006-06	W09			40	0,6	2,25	7	1,4	2	-	75	6
04538	CK-015-075-060-100-009-06	W09			60	0,9	2,25	7	1,4	2	-	100	6
07534	CKZ-018-090-003-040-000-06	W17	1,8	0,9	4	0	3	4	1,72	2	-	40	6
11472	CKZ-020-100-010-060-000-06	W17			10	0	4	10	1,92	2	-	60	6
04415	CK-020-100-020-060-009-06	W09			20	0,9	3	8	1,9	2	-	60	6
11945	CK-020-100-030-070-009-06	W09			30	0,9	4	8	1,9	2	-	70	6
04416	CK-020-100-040-080-009-06	W09	2	1	40	0,9	3	8	1,9	2	-	80	6
05298	CKZ-030-150-009-075-000-06	W17			9	0	6	9	2,88	2	-	75	6
07042	CKZ-030-150-010-060-000-06	W17			10	0	6	10	2,88	2	-	60	6
07881	CKZ-030-150-015-060-000-06	W17			15	0	6	15	2,88	2	-	60	6
07043	CKZ-030-150-020-060-000-06	W17			20	0	6	20	2,88	2	-	60	6
08762	CKZ-030-150-025-075-000-06	W17			25	0	6	25	2,88	2	-	75	6
11931	CK-030-150-040-085-009-06	W09			40	0,9	4	20	2,9	2	-	85	6
12132	CK-030-150-045-080-009-06	W09	3	1,5	45	0,9	4	12	2,9	2	-	80	6
00895	CK-030-150-080-120-009-06	W09			80	0,9	4,5	20	2,9	2	-	120	6
05299	CKZ-040-200-012-075-000-06	W17			12	0	8	12	3,7	2	-	75	6
07044	CKZ-040-200-015-060-000-06	W17			15	0	8	15	3,73	2	-	60	6
07045	CKZ-040-200-025-060-000-06	W17							3,7	2	-	60	6
08763	CKZ-040-200-025-075-000-06	W17							3,73	2	-	75	6
01165	CK-040-200-040-080-009-06	W09				0,9	6	20	3,8	2	-	80	6
01166	CK-040-200-040-100-015-06	W09				1,5	6	20	3,8	2	-	100	6
00894	CK-040-200-064-100-009-06	W09										100	6
12381	CK-040-200-064-120-009-06	W09	4	2	64	0,9	6	20	3,8	2	-	120	6
07882	CKZ-050-250-015-060-000-06	W17				0	8	15	4,54	2	-	60	6
05300	CKZ-050-250-015-080-000-06	W17					10	15	4,7	2	-	80	6
07883	CKZ-050-250-025-060-000-06	W17										60	6
08764	CKZ-050-250-025-075-000-06	W17	5	2,5	25	0	10	25	4,7	2	-	75	6
01689	CKZ-060-300-015-060-000-06	W17			15	0	12	15	5,5	2	-	60	6
05681	CKZ-060-300-020-080-000-06	W17			20	0	12	20	5,54	2	-	80	6
04544	CKZ-060-300-030-080-000-06	W17			30	0	12	30	5,5	2	-	80	6
00715	CK-060-300-040-080-009-08	W09			40	0,9	8	15	5,8	2	-	80	8
04417	CK-060-300-064-100-009-08	W09			64	0,9	8	20	5,8	2	-	100	8
01176	CK-060-300-070-120-008-08	W09			70	0,8	8	20	5,8	2	-	120	8
01164	CK-060-300-090-150-006-08	W09	6	3	90	0,6	8	20	5,8	2	-	150	8
02363	CKZ-080-400-020-064-000-08	W17			20	0	16	20	7,5	2	-	64	8
06483	CKZ-080-400-026-090-000-08	W17			26	0	16	26	7,54	2	-	90	8
00785	CKZ-080-400-040-080-000-08	W17			40	0	16	40	7,83	2	-	80	8
04418	CK-080-400-062-100-009-10	W09			62	0,9	10	20	7,8	2	-	100	10
00893	CK-080-400-080-120-007-10	W09			80	0,75	10	25	7,8	2	-	120	10
01169	CK-080-400-090-150-006-10	W09	8	4	90	0,6	10	20	7,8	2	-	150	10

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
04419	CKZ-100-500-025-075-000-10	W17			25	0	20	25	9,3	2	-	75	10
06484	CKZ-100-500-031-100-000-10	W17			31	0	20	31	9,3	2	-	100	10
04542	CKZ-100-500-045-100-000-10	W17			45	0	20	45	9,36	2	-	100	10
06485	CKZ-100-500-050-150-000-10	W17			50	0	20	50	9,3	2	-	150	10
04420	CK-100-500-065-100-009-12	W09			65	0,9	12	20	9,7	2	-	100	12
01174	CK-100-500-070-120-008-12	W09			70	0,8	10	30	9,7	2	-	120	12
01175	CK-100-500-090-150-006-12	W09	10	5	90	0,62	10	30	9,7	2	-	150	12
04421	CKZ-120-600-030-100-000-12	W17			30	0	24	30	11,35	2	-	100	12
05682	CKZ-120-600-037-120-000-12	W17			37	0	24	37	11,3	2	-	120	12
01177	CKZ-120-600-090-150-000-12	W17	12	6	90	0	24	90	11,3	2	-	150	12



[mkne]



Reduced neck ballnose cutters with two flutes for roughing and finishing non-ferrous materials.

application

ALUCuAlSiTitan

HSC

Tool variations

Z2Reduced Neck

HA

QR Code

Video

Alu

Finish.

[mkne]

R0,3

QR Code

All available dimensions and CAM export data can be found online at [iklick.aura.tools](#)

D1Cutter diameter

ATWorking depth

α°Conic

L1Total length

ZNumber of teeth

ICInternal coolant

RRadius

L3Cylindrical free length

D2Shank diameter

L2Cutting length

D3Neck diameter

Modification on request

Diagram showing tool dimensions: R, L1, AT, L3, D1, L2, D3, α°, D2

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
03551	MKNE-003-015-002-060-000-04	0,3	0,15	2	0	0,5	2	0,25	2	-	60	4
03555	MKNE-003-015-003-060-000-04			3	0	0,5	3	0,25	2	-	60	4
03556	MKNE-003-015-005-060-000-04			5	0	0,5	5	0,25	2	-	60	4
03557	MKNE-004-020-002-060-000-04	0,4	0,2	2	0	0,6	2	0,35	2	-	60	4
03558	MKNE-004-020-004-060-000-04			4	0	0,6	4	0,35	2	-	60	4
03559	MKNE-004-020-006-060-000-04			6	0	0,6	6	0,35	2	-	60	4
03560	MKNE-005-025-002-060-000-04	0,5	0,25	2	0	0,8	2	0,45	2	-	60	4
03561	MKNE-005-025-005-060-000-04			5	0	0,8	5	0,45	2	-	60	4
03562	MKNE-005-025-007-060-000-04			7	0	0,8	7	0,45	2	-	60	4
03563	MKNE-005-025-010-060-000-04	0,6	0,3	10	0	0,8	10	0,45	2	-	60	4
03564	MKNE-006-030-003-060-000-04			3	0	0,9	3	0,55	2	-	60	4
03565	MKNE-006-030-006-060-000-04			6	0	0,9	6	0,55	2	-	60	4
03566	MKNE-006-030-009-060-000-04	0,7	0,35	9	0	0,9	9	0,55	2	-	60	4
03567	MKNE-006-030-012-060-000-04			12	0	0,9	12	0,55	2	-	60	4
03568	MKNE-007-035-004-060-000-04			4	0	1,1	4	0,65	2	-	60	4
03569	MKNE-007-035-007-060-000-04	0,8	0,4	7	0	1,1	7	0,65	2	-	60	4
03571	MKNE-008-040-003-060-000-04			3	0	1,2	3	0,7	2	-	60	4
03572	MKNE-008-040-006-060-000-04			6	0	1,2	6	0,75	2	-	60	4
03573	MKNE-008-040-009-060-000-04	1	0,5	9	0	1,2	9	0,75	2	-	60	4
03574	MKNE-008-040-012-060-000-04			12	0	1,2	12	0,75	2	-	60	4
03578	MKNE-010-050-003-060-000-04			3	0	1,5	3	0,9	2	-	60	4
03579	MKNE-010-050-005-060-000-04	1,2	0,6	5	0	1,5	5	0,9	2	-	60	4
10336	MKNE-010-050-007-060-000-04			7	0	1,5	7	0,9	2	-	60	4
03580	MKNE-010-050-008-060-000-04			8	0	1,5	8	0,9	2	-	60	4
10337	MKNE-010-050-010-060-000-04	1,5	0,75	10	0	1,5	10	0,9	2	-	60	4
03582	MKNE-010-050-011-060-000-04			11	0	1,5	11	0,9	2	-	60	4
03583	MKNE-010-050-015-060-000-04			15	0	1,5	15	0,9	2	-	60	4
06694	MKNE-012-060-005-060-000-04	2	1	5	0	1,8	5	1,05	2	-	60	4
03584	MKNE-015-075-005-060-000-04			5	0	2,3	5	1,35	2	-	60	4
03585	MKNE-015-075-008-060-000-04			8	0	2,3	8	1,4	2	-	60	4
03586	MKNE-015-075-012-060-000-04	3	1,5	12	0	2,3	12	1,4	2	-	60	4
10338	MKNE-015-075-016-060-000-04			16	0	2,3	16	1,35	2	-	60	4
03590	MKNE-015-075-023-060-000-04			23	0	2,3	23	1,35	2	-	60	4
03592	MKNE-020-100-005-060-000-04	4	2	5	0	3	5	1,85	2	-	60	4
04543	MKNE-020-100-010-060-000-04			10	0	3	10	1,85	2	-	60	4
04586	MKNE-020-100-012-060-000-04			12	0	3	12	1,85	2	-	60	4
03595	MKNE-020-100-015-060-000-04	2	1	15	0	3	15	1,85	2	-	60	4
04587	MKNE-020-100-016-060-000-04			16	0	3	16	1,85	2	-	60	4
04588	MKNE-020-100-020-060-000-04			20	0	3	20	1,85	2	-	60	4
03598	MKNE-020-100-025-070-000-04	3	1,5	25	0	3	25	1,85	2	-	70	4
12479	MKNE-020-100-030-070-000-04			30	0	3	30	1,85	2	-	70	4
03600	MKNE-020-100-035-070-000-04			35	0	3	35	1,85	2	-	70	4
03601	MKNE-030-150-010-060-000-04	4	2	10	0	4,5	10	2,7	2	-	60	4
03602	MKNE-030-150-015-060-000-04			15	0	4,5	15	2,7	2	-	60	4
03604	MKNE-030-150-024-070-000-04			24	0	4,5	24	2,7	2	-	70	4
03608	MKNE-040-200-016-060-000-04	4	2	16	0	6	16	3,7	2	-	60	4
03610	MKNE-040-200-024-070-000-04			24	0	6	24	3,7	2	-	70	4
03611	MKNE-040-200-030-070-000-04			30	0	6	30	3,7	2	-	70	4
03612	MKNE-040-200-036-070-000-04	4	2	36	0	6	36	3,7	2	-	70	4

DK

Series

[2dk]

[3dk]

[dkk]



Conical, cylindrical and reduced neck diamond coated ballnose cutter with two or three flutes for roughing and finishing graphite.

Areas of application

Graph GFK

HSC Diamond coated

Tool variations

Z 2 Conical
Z 2 Reduced Neck
Z 3 Reduced Neck

HA



Video

TTK50

Finish.

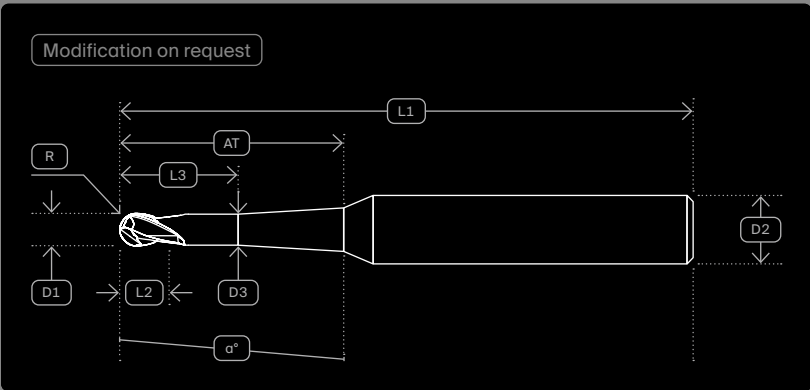
[3dk]

D2



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	L3	Cylindrical free length
α°	Conic	D2	Shank diameter
L1	Total length	L2	Cutting length
Z	Number of teeth	D3	Neck diameter
IC	Internal coolant		



[2dk]

[3dk]

[dkk]

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
02848	2DK-003-015-002-060-000-04	W190	0,3	0,15	2	0	0,25	2	0,28	2	-	60	4
02849	2DK-003-015-003-060-000-04	W190			3	0	0,25	3	0,27	2	-	60	4
02850	2DK-003-015-005-060-000-04	W190			5	0	0,25	5	0,27	2	-	60	4
02851	2DK-004-020-002-060-000-04	W190	0,4	0,2	2	0	0,3	2	0,38	2	-	60	4
02852	2DK-004-020-004-060-000-04	W190			4	0	0,3	4	0,36	2	-	60	4
02853	2DK-004-020-006-060-000-04	W190			6	0	0,3	6	0,37	2	-	60	4
11707	2DK-005-025-002-060-000-06	W190	0,5	0,25	2,5	0	0,4	2,5	0,48	2	-	60	6
02854	2DK-005-025-003-060-000-04	W190			3	0	0,4	3	0,48	2	-	60	4
02855	2DK-005-025-005-060-000-04	W190											4
11708	2DK-005-025-005-060-000-06	W190	0,6	0,3	5	0	0,4	5	0,45	2	-	60	6
11709	2DK-005-025-007-060-000-06	W190			7,5	0	0,4	7,5	0,45	2	-	60	6
02856	2DK-005-025-008-060-000-04	W190			8	0	0,4	8	0,45	2	-	60	4
02857	2DK-005-025-010-060-000-04	W190	0,7	0,35	10	0	0,4	10	0,47	2	-	60	4
02858	2DK-006-030-003-060-000-04	W190			3	0	0,45	3	0,55	2	-	60	4
02859	2DK-006-030-006-060-000-04	W190			6	0	0,45	6	0,55	2	-	60	4
02860	2DK-006-030-009-060-000-04	W190	0,8	0,4	9	0	0,45	9	0,55	2	-	60	4
02861	2DK-006-030-012-060-000-04	W190			12	0	0,45	12	0,55	2	-	60	4
02862	2DK-007-035-004-060-000-04	W190			4	0	0,55	4	0,68	2	-	60	4
02863	2DK-007-035-007-060-000-04	W190	0,9	0,45	7	0	0,55	7	0,64	2	-	60	4
02864	2DK-007-035-011-060-000-04	W190			11	0	0,55	11	0,65	2	-	60	4
02865	2DK-008-040-003-060-000-04	W190			3	0	0,6	3	0,75	2	-	60	4
02866	2DK-008-040-006-060-000-04	W190	1	0,5					0,75	2	-	60	4
09696	2DK-008-040-006-060-000-06	W190			6	0	0,6	6	0,78	2	-	60	6
02867	2DK-008-040-009-060-000-04	W190			9	0	0,6	9	0,72	2	-	60	4
02868	2DK-008-040-012-060-000-04	W190	1,5	0,75	12	0	0,6	12	0,72	2	-	60	4
02871	2DK-009-045-014-060-000-04	W190			14	0	0,7	14	0,81	2	-	60	4
02872	2DK-010-050-003-060-000-04	W190			3	0	0,75	3	0,95	2	-	60	4
02873	2DK-010-050-005-060-000-04	W190	1,5	0,75									4
11710	2DK-010-050-005-060-000-06	W190			5	0	0,75	5	0,97	2	-	60	6
02874	2DK-010-050-008-060-000-04	W190			8	0	0,75	8	0,97	2	-	60	4
01204	2DK-010-050-010-060-000-06	W190	1,5	0,75		0	0,75	10	0,9	2	-	60	6
06784	DKK-010-050-010-060-004-06	W190.1			10	0,4	0,75	4	0,97	2	-	60	6
02875	2DK-010-050-011-060-000-04	W190			11	0	0,75	11	0,9	2	-	60	4
02876	2DK-010-050-015-060-000-04	W190	1,5	0,75									4
09697	2DK-010-050-015-060-000-06	W190				0	0,75	15	0,9	2	-	60	6
06785	DKK-010-050-015-060-004-06	W190.1			15	0,4	0,75	4	0,97	2	-	60	6
03726	2DK-010-050-020-060-000-04	W190	1,5	0,75	20	0	0,75	20	0,9	2	-	60	4
02877	2DK-015-075-005-060-000-04	W190			5	0	1,15	5	1,43	2	-	60	4
11711	2DK-015-075-007-060-000-06	W190			7,5	0	1,15	0,9	1,47	2	-	60	6
02878	2DK-015-075-008-060-000-04	W190	1,5	0,75	8	0	1,15	8	1,43	2	-	60	4
09698	2DK-015-075-010-060-000-06	W190			10	0	1,15	10	1,47	2	-	60	6
02879	2DK-015-075-012-060-000-04	W190			12	0	1,15	12	1,43	2	-	60	4
02880	2DK-015-075-015-060-000-04	W190	1,5	0,75									4
01203	2DK-015-075-015-060-000-06	W190			15	0	1,15	15	1,4	2	-	60	6
02881	2DK-015-075-019-060-000-04	W190			19	0	1,15	19	1,4	2	-	60	4
11712	2DK-015-075-022-060-000-06	W190	1,5	0,75	22,5	0	1,15	22,5	1,4	2	-	60	6
02882	2DK-015-075-023-060-000-04	W190			23	0	1,15	23	1,43	2	-	60	4
01195	2DK-015-075-025-060-000-06	W190			25	0	1,15	25	1,4	2	-	60	6
11495	DKK-015-075-050-090-005-06	W190.1	1,5	0,75	50	0,5	1,5	6	1,47	2	-	90	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
02883	2DK-020-100-005-060-000-04	W190	2	1	5	0	2	5	1,93	2	-	60	4
01205	2DK-020-100-010-060-000-06	W190							1,9	2	-	60	6
02884	2DK-020-100-010-060-000-04	W190			10	0	2	10	1,93	2	-	60	4
09699	2DK-020-100-015-060-000-06	W190							1,9	2	-	60	6
02885	2DK-020-100-015-060-000-04	W190			15	0	2	15	1,93	2	-	60	4
01206	2DK-020-100-020-060-000-06	W190							1,9	2	-	60	6
02886	2DK-020-100-020-060-000-04	W190			20	0	2	20	1,93	2	-	60	4
11713	2DK-020-100-025-060-000-06	W190										60	6
02887	2DK-020-100-025-070-000-04	W190			25	0	2	25	1,9	2	-	70	4
01207	2DK-020-100-030-070-000-06	W190			30	0	2	30	1,9	2	-	70	6
02977	2DK-020-100-035-070-000-04	W190				0	2	35	1,9	2	-	70	4
06786	DKK-020-100-035-070-004-06	W190.1				0,4	2	6	1,9	2	-	70	6
06800	DKK-020-100-035-080-009-06	W190.1			35	0,9	2	6	1,9	2	-	80	6
06801	DKK-020-100-050-100-004-06	W190.1				0,4	2	6	1,9	2	-	100	6
10286	DKK-020-100-050-080-009-06	W190.1				0,9	2	6	1,9	2	-	80	6
10287	DKK-020-100-070-100-009-06	W190.1			70	0,9	2	6	1,9	2	-	100	6
07493	DKK-020-100-075-120-0045-06	W190.1			75	0,45	2	6	1,9	2	-	120	6
02888	2DK-030-150-010-060-000-04	W190	3	1,5					2,8	2	-	60	4
09700	2DK-030-150-010-060-000-06	W190			10	0	3	10	2,83	2	-	60	6
11714	2DK-030-150-015-060-000-06	W190							2,8	2	-	60	6
02889	2DK-030-150-015-060-000-04	W190			15	0	3	15	2,83	2	-	60	4
01208	2DK-030-150-021-060-000-06	W190			21	0	3	21	2,83	2	-	60	6
02890	2DK-030-150-024-070-000-04	W190			24	0	3	24	2,83	2	-	70	4
02891	2DK-030-150-030-070-000-04	W190							2,8	2	-	70	4
01209	2DK-030-150-030-070-000-06	W190										70	6
07831	2DK-030-150-030-080-000-06	W190			30	0	3	30	2,83	2	-	80	6
01210	2DK-030-150-040-080-000-06	W190				0	3	40	2,8	2	-	80	6
06799	DKK-030-150-040-080-009-06	W190.1				0,9	3	8	2,8	2	-	80	6
10288	DKK-030-150-050-080-009-06	W190.1			50	0,9	3	4	2,8	2	-	80	6
11235	DKK-030-150-058-100-005-06	W190.1			58	0,5	3	4	2,8	2	-	100	6
11424	DKK-030-150-070-120-005-06	W190.1				0,5	3	4	2,8	2	-	120	6
10289	DKK-030-150-070-100-009-06	W190.1				0,9	3	8	2,8	2	-	100	6
10750	DKK-030-150-080-110-009-06	W190.1			80	0,9	3	5,5	2,8	2	-	110	6
10987	DKK-030-150-100-135-0025-06	W190.1				0,25	3	12	2,8	2	-	135	6
10751	DKK-030-150-100-130-0085-06	W190.1				0,85	3	12	2,8	2	-	130	6
02892	2DK-040-200-016-060-000-04	W190	4	2	16	0	4	16	3,74	2	-	60	4
09992	2DK-040-200-020-060-000-04	W190											4
01211	2DK-040-200-020-060-000-06	W190			20	0	4	20	3,74	2	-	60	6
02893	2DK-040-200-024-070-000-04	W190			24	0	4	24	3,74	2	-	70	4
02894	2DK-040-200-030-070-000-04	W190			30	0	4	30	3,74	2	-	70	4
11715	2DK-040-200-032-070-000-06	W190			32	0	4	32	3,7	2	-	70	6
02895	2DK-040-200-036-070-000-04	W190			36	0	4	36	3,74	2	-	70	4
01212	2DK-040-200-040-080-000-06	W190			40	0	4	40	3,74	2	-	80	6
10290	DKK-040-200-050-080-009-06	W190.1			50	0,9	4	8	3,7	2	-	80	6
11716	2DK-040-200-060-100-000-06	W190				0	4	60	3,7	2	-	100	6
06798	DKK-040-200-060-100-009-08	W190.1				0,9	4	10	3,7	2	-	100	8
11425	DKK-040-200-070-110-005-06	W190.1				0,5	4	8	3,7	2	-	110	6
10291	DKK-040-200-070-100-009-06	W190.1				0,842	4	8	3,7	2	-	100	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
02896	2DK-050-250-015-060-000-06	W190	5	2,5	15	0	5	15	4,6	2	-	60	6
02897	2DK-050-250-020-060-000-06	W190			20	0	5	20	4,6	2	-	60	6
02898	2DK-050-250-030-075-000-06	W190			30	0	5	30	4,6	2	-	75	6
02978	2DK-050-250-045-100-000-06	W190			45	0	5	45	4,64	2	-	100	6
11497	DKK-050-250-060-100-005-08	W190.1			60	0,5	5	10	4,6	2	-	100	8
10292	DKK-050-250-060-100-009-08	W190.1				0,9	5	10	4,6	2	-	100	8
11498	DKK-050-250-080-120-005-08	W190.1			80	0,5	5	10	4,6	2	-	120	8
10293	DKK-050-250-080-110-009-08	W190.1				0,9	5	10	4,6	2	-	110	8
02899	3DK-060-300-018-060-000-06	W190.2			18	0	6	18	5,64	3	-	60	6
02900	3DK-060-300-024-060-000-06	W190.2			24	0	6	24	5,6	3	-	60	6
02901	3DK-060-300-036-075-000-06	W190.2			36	0	6	36	5,64	3	-	75	6
02974	3DK-060-300-045-100-000-06	W190.2	6	3	45	0	6	45	5,6	3	-	100	6
10294	DKK-060-300-060-100-009-08	W190.1			60	0,9	6	15	5,6	2	-	100	8
05627	3DK-060-300-075-100-000-06	W190.2			75	0	6	75	5,6	3	-	100	6
11325	DKK-060-300-075-120-005-08	W190.1				0,5	6	15	5,6	2	-	120	8
10295	DKK-060-300-090-120-006-08	W190.1			90	0,65	6	15	5,6	2	-	120	8
10988	DKK-060-300-100-135-0025-08	W190.1			100	0,25	6	25	5,6	2	-	135	8
10752	DKK-060-300-100-130-005-08	W190.1				0,5	6	25	5,6	2	-	130	8
11327	DKK-060-300-120-175-005-10	W190.1			120	0,5	6	12	5,6	2	-	175	10
06797	DKK-060-300-120-175-009-10	W190.1				0,9	6	12	5,6	2	-	175	10
10753	DKK-060-300-140-170-004-08	W190.1			140	0,4	6	25	5,6	2	-	170	8
10754	DKK-070-350-100-130-009-10	W190.1	7	3,5	100	0,9	7	30	6,5	2	-	130	10
02902	3DK-080-400-024-070-000-08	W190.2	8	4	24	0	8	24	7,5	3	-	70	8
02903	3DK-080-400-032-070-000-08	W190.2			32	0	8	32	7,55	3	-	70	8
02904	3DK-080-400-048-100-000-08	W190.2			48	0	8	48	7,55	3	-	100	8
06558	2DK-080-400-060-115-000-08	W190			60	0	8	60	7,55	2	-	115	8
10297	DKK-080-400-060-100-009-10	W190.1				0,9	8	20	7,5	2	-	100	10
07199	DKK-080-400-090-130-004-10	W190.1			90	0,4	8	15	7,5	2	-	130	10
02979	3DK-080-400-100-150-000-08	W190.2			100	0	8	100	7,5	3	-	150	8
10296	DKK-080-400-100-130-009-12	W190.1				0,9	8	20	7,5	2	-	130	12
07200	DKK-080-400-120-165-004-10	W190.1			120	0,4	8	15	7,5	2	-	165	10
02905	3DK-100-500-030-075-000-10	W190.2	10	5	30	0	10	30	9,5	3	-	75	10
02906	3DK-100-500-040-100-000-10	W190.2			40	0	10	40	9,5	3	-	100	10
02907	3DK-100-500-060-100-000-10	W190.2			60	0	10	60	9,5	3	-	100	10
02975	3DK-100-500-090-150-000-10	W190.2			90	0	10	90	9,5	3	-	150	10
02908	3DK-120-600-036-080-000-12	W190.2			36	0	12	36	11,46	3	-	80	12
02909	3DK-120-600-048-100-000-12	W190.2			48	0	12	48	11,4	3	-	100	12
02910	3DK-120-600-072-120-000-12	W190.2	12	6	72	0	12	72	11,4	3	-	120	12
02976	3DK-120-600-100-150-000-12	W190.2			100	0	12	100	11,4	3	-	150	12



Monolithic tools

Bullnose



Hard machining

[hmta]	≥ 48 HRC	Roughing + Finishing	H	P	K	-	-	-	-	62
[hgt]	≥ 48 HRC	Roughing + Finishing	H	P	K	-	-	-	-	64

Medium-hard machining

[sht] [shz]	≥ 44 HRC	Roughing + Finishing	H	P	K	M	S	-	-	66
[ht]	≥ 44 HRC	Roughing + Finishing	H	P	K	M	S	-	-	68
[sza]	≤ 56 HRC	Roughing + Finishing	H	P	K	M	S	-	-	70
[scmsf]	≥ 44 HRC	Finishing	H	P	K	M	-	-	-	72

Soft to medium-hard machining

[t] [tz]	≤ 56 HRC	Roughing + Finishing	H	P	K	M	S	-	-	74
[sgt]	≤ 52 HRC	Roughing + Finishing	H	P	K	-	-	-	-	82
[cft]	≤ 1.000 N	Finishing	-	P	K	-	-	-	-	84

Aluminum and non-ferrous machining

[ct] [ctz] [3cz] [4cz]	Roughing + Finishing	-	-	-	-	S	N	-	86
[mtne]	Roughing + Finishing	-	-	-	-	S	N	-	90

Graphite machining

[2dt] [3dt] [4dt]	Roughing + Finishing	-	-	-	-	-	-	Graph	92
-------------------	----------------------	---	---	---	---	---	---	-------	----



[hmta]



Reduced neck torus cutters with four or six flutes for roughing and finishing hardened steels.

Areas of application

≥ 48 HRC

1.400N

≥ 1.000N

GG

HSC

Tool variations

Z 4

Reduced Neck

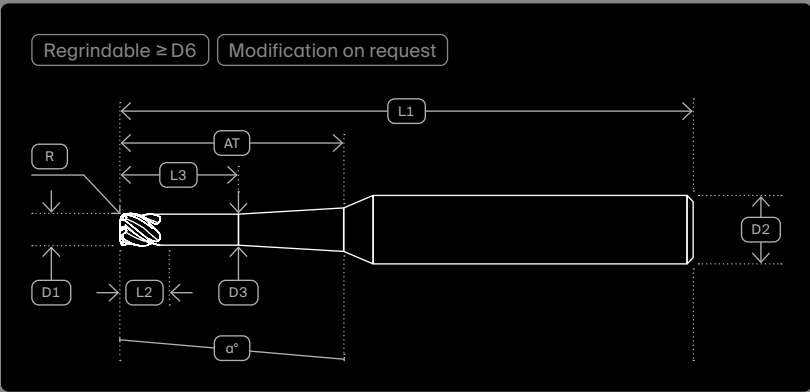
Z 6

Reduced Neck

HA

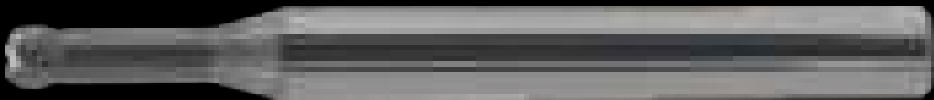
All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
00923	HMTA-030-010-012-060-000-06	3	0,1	12	0	3	12	2,82	4	-	60	6
06362	HMTA-030-025-015-060-000-06		0,25	15	0	3	15	2,8	4	-	60	6
00071	HMTA-035-030-012-060-000-06	3,5	0,3	12	0	3	12	3,14	4	-	60	6
16224	HMTA-035-050-012-060-000-06		0,5	12	0	3	12	3,3	4	-	60	6
06363	HMTA-040-010-015-060-000-06	4	0,1	15	0	4	15	3,64	4	-	60	6
01025	HMTA-040-030-015-060-000-06		0,3	15	0	4	15	3,64	4	-	60	6
06365	HMTA-040-050-015-060-000-06		0,5	15	0	4	15	3,64	4	-	60	6
16225	HMTA-040-100-015-060-000-06		1	15	0	4	15	3,6	4	-	60	6
00924	HMTA-050-010-015-060-000-06	5	0,1	15	0	4	15	4,64	4	-	60	6
06366	HMTA-050-030-015-060-000-06		0,3	15	0	4	15	4,6	4	-	60	6
00701	HMTA-050-050-015-060-000-06	6	0,5	15	0	4	15	4,6	4	-	60	6
00925	HMTA-060-010-018-060-000-06		0,1	18	0	5	18	5,64	4	-	60	6
06367	HMTA-060-030-018-060-000-06		0,3	18	0	5	18	5,64	4	-	60	6
00702	HMTA-060-050-018-060-000-06		0,5	18	0	5	18	5,64	4	-	60	6
05432	HMTA-060-050-030-060-000-06			30	0	5	30	5,64	4	-	60	6
01042	HMTA-060-100-018-060-000-06	8	1	18	0	5	18	5,64	4	-	60	6
00024	HMTA-080-050-026-064-000-08		0,5	26	0	8	26	7,64	4	-	64	8
01026	HMTA-080-100-026-064-000-08	10	1	26	0	8	26	7,64	4	-	64	8
00025	HMTA-100-050-030-075-000-10		0,5	30	0	8	30	9,64	4	-	75	10
01088	HMTA-100-100-030-075-000-10	12	1	30	0	8	30	9,6	4	-	75	10
06368	HMTA-120-050-040-084-000-12		0,5	40	0	10	40	11,64	6	-	84	12
07086	HMTA-120-100-040-100-000-12	12	1	40	0	10	40	11,6	6	-	100	12
06369	HMTA-120-100-040-084-000-12							11,64	6	-	84	12

[hgt]



Conical and reduced neck bullnose cutter with three or four flutes for roughing and finishing hardened steels.

Areas of application

≥ 48 HRC

1.400 N ≥ 1.000 N ≤ 1.000 N

GG

HSC

Large torus

Tool variations

Z3 Conical

Z3 Reduced Neck

Z4 Conical

Z4 Reduced Neck

HA

Video

58 HRC

Roug.

[hgt]

D6

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1 Cutter diameter

AT Working depth

α° Conic

L1 Total length

Z Number of teeth

IC Internal coolant

R Radius

F Chamfer

L3 Cylindrical free length

D2 Shank diameter

L2 Cutting length

D3 Neck diameter

Regrindable ≥ D6

Modification on request

IC

64 Tool Bullnose

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach
+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

H P K Roughing Finishing

[hgt]

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
22991	3HGT-020-020-008-060-000-06	2	0,2	8	0	2	8	1,9	3	-	60	6
22994	3HGT-020-020-010-060-000-06			10	0	2	10	1,9	3	-	60	6
22995	3HGT-020-020-012-060-000-06			12	0	2	12	1,9	3	-	60	6
22996	3HGT-020-020-015-060-000-06			15	0	2	15	1,9	3	-	60	6
20042	3HGTK-020-020-020-060-057-06			20	5,7	2	6	1,9	3	-	60	6
11302	HGTK-020-020-020-060-057-06								4	IC	60	6
19508	3HGTK-020-050-020-060-057-06								3	-	60	6
07589	HGTK-020-050-020-060-057-06	3	0,5	20	5,7	2	6	1,9	4	IC	60	6
22997	3HGT-030-020-010-060-000-06			10	0	2	10	2,82	3	-	60	6
22998	3HGT-030-020-015-060-000-06			15	0	2	15	2,8	3	-	60	6
22999	3HGT-030-030-010-060-000-06			10	0	2	10	2,8	3	-	60	6
23000	3HGT-030-030-015-060-000-06			15	0	2	15	2,8	3	-	60	6
23001	3HGT-030-050-010-060-000-06			10	0	2	10	2,82	3	-	60	6
23002	3HGT-030-050-015-060-000-06			15	0	2	15	2,8	3	-	60	6
20044	3HGTK-030-050-020-060-043-06			20	4,3	2	9	2,8	3	-	60	6
10733	HGTK-030-050-020-060-043-06								4	IC	60	6
20045	3HGTK-030-075-015-060-028-06			15	2,8	2	9	2,8	3	-	60	6
20046	3HGTK-030-080-020-060-043-06			20	4,3	2	9	2,8	3	-	60	6
07590	HGTK-030-080-020-060-043-06								4	IC	60	6
10268	HGT-040-040-016-060-000-06								4	IC	60	6
10269	HGT-040-050-016-060-000-06	4	1	16	0	2	16	3,6	4	IC	60	6
23003	3HGT-040-050-021-060-000-06			21	0	2	21	3,6	3	-	60	6
06601	HGT-040-100-012-060-000-06			12	0	2	12	3,64	4	IC	60	6
08085	HGT-040-100-016-060-000-06			16	0	2	16	3,6	4	IC	60	6
18029	HGTK-040-100-040-085-009-06			40	0,9	2	10	3,6	4	IC	85	6
11397	HGT-050-050-016-060-000-06			16	0	3	16	4,6	4	IC	60	6
07438	HGT-050-100-015-060-000-06			15	0	3	15	4,64	4	IC	60	6
10270	HGT-050-100-016-060-000-06			16	0	3	16	4,64	4	IC	60	6
07780	HGT-060-050-018-060-000-06			18	0	3	18	5,64	4	IC	60	6
06602	HGT-060-100-018-060-000-06			18	0	3	18	5,6	4	IC	60	6
07591	HGT-060-150-018-060-000-06	6	1,5	18	0	3	18	5,6	4	IC	60	6
10680	HGT-060-150-024-075-000-06			24	0	3	24	5,64	4	IC	75	6
10087	HGT-060-150-030-090-000-06			30	0	3	30	5,64	4	IC	90	6
11448	HGT-060-200-018-060-000-06			18	0	4	18	5,64	4	IC	60	6
07781	HGT-080-050-024-065-000-08			24	0	4	24	7,64	4	IC	65	8
08796	HGT-080-100-024-065-000-08			24	0	4	24	7,64	4	IC	65	8
06603	HGT-080-200-024-065-000-08			24	0	4	24	7,64	4	IC	65	8
11443	HGTK-080-200-050-100-004-10				0,4	4	10	7,6	4	IC	100	10
11444	HGTK-080-200-050-100-009-10				0,9	4	10	7,6	4	IC	100	10
11445	HGTK-080-200-050-100-012-10				1,19	4	10	7,6	4	IC	100	10
08082	HGT-100-100-030-085-000-10	10	2	30	0	5	30	9,64	4	IC	85	10
06604	HGT-100-200-030-085-000-10			30	0	5	30	9,64	4	IC	85	10
08620	HGT-120-100-035-080-000-12			35	0	6	35	11,6	4	IC	80	12
21616	HGT-120-100-050-100-000-12			50	0	6	50	11,64	4	IC	100	12
07676	HGT-120-200-060-100-000-12	12	3	60	0	6	60	11,64	4	IC	100	12
06605	HGT-120-300-040-100-000-12			40	0	6	40	11,64	4	IC	100	12

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach
+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

Tool Bullnose 65

SHT/Z Series

[sht] [shz]



Conical and reduced neck bullnose cutter with two flutes for roughing and finishing hardened and unhardened steels.

Areas of application

≥ 44 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Tool variations

Z 2

Conical

Z 2

Reduced Neck

HA

Video

56 HRC

Finish.

[shtz]

D 2

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

R

Radius

AT

Working depth

F

Chamfer

α°

Conic

L3

Cylindrical free length

L1

Total length

D2

Shank diameter

Z

Number of teeth

L2

Cutting length

IC

Internal coolant

D3

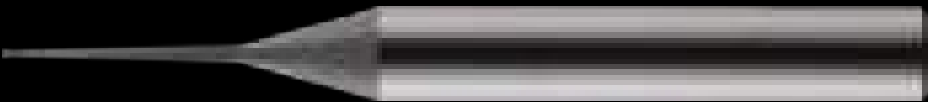
Neck diameter

Regrindable ≥ D6

Modification on request

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
19351	SHTZA-010-010-006-060-000-06	W04.2		0,1	6	0	0,75	6	0,97	2	-	60	6
10068	SHTZA-010-020-004-050-000-04	W04.2	1	0,2	4	0	0,75	4	0,97	2	-	50	4
19352	SHTZA-015-015-010-060-000-06	W04.2	1,5	0,15	10	0	1,15	10	1,47	2	-	60	6
19353	SHTZA-020-020-008-060-000-06	W04.2			8	0	2	8	1,9	2	-	60	6
19354	SHTZA-020-020-010-060-000-06	W04.2		0,2	10	0	2	10	1,93	2	-	60	6
19355	SHTZA-020-050-010-060-000-06	W04.2			10	0	2	10	1,93	2	-	60	6
19356	SHTZA-020-050-015-060-000-06	W04.2			15	0	2	15	1,93	2	-	60	6
19392	SHT-020-050-020-060-009-06	W01.3			20	0,9	2	6	1,9	2	-	60	6
19393	SHT-020-050-025-070-009-06	W01.3			25	0,9	2	6	1,9	2	-	70	6
19394	SHT-020-050-032-070-014-06	W01.3	2	0,5	32	1,4	2	6	1,9	2	-	70	6
23759	SHT-025-050-025-070-014-06	W01.3			25	1,4	4	8	2,35	2	-	70	6
18047	SHT-025-050-035-080-014-06	W01.3	2,5	0,5	35	1,4	2,5	8	2,35	2	-	80	6
19357	SHTZA-030-050-010-060-000-06	W04.2			10	0	3	10	2,85	2	-	60	6
19358	SHTZA-030-050-015-060-000-06	W04.2			15	0	3	15	2,85	2	-	60	6
19395	SHT-030-050-035-075-009-06	W01.3			35	0,9	3	8	2,85	2	-	75	6
19396	SHT-030-050-040-075-009-06	W01.3			40	0,9	3	8	2,85	2	-	75	6
19397	SHT-030-050-045-100-014-06	W01.3			45	1,4	3	8	2,85	2	-	100	6
19398	SHT-030-050-060-100-014-08	W01.3		0,5	60	1,4	3	8	2,85	2	-	100	8
19399	SHT-030-100-040-075-009-06	W01.3	3	1	40	0,9	3	8	2,85	2	-	75	6
23659	SHTZA-040-020-020-060-000-06	W04.2		0,2	20	0	4	20	3,85	2	-	60	6
18045	SHTZA-040-050-015-060-000-06	W04.2			15	0	4	15	3,85	2	-	60	6
19359	SHTZA-040-050-020-060-000-06	W04.2			20	0	4	20	3,85	2	-	60	6
23758	SHT-040-050-030-075-009-06	W01.3			30	0,9	6	8	3,85	2	-	75	6
19400	SHT-040-050-040-080-009-06	W01.3			40	0,9	4	10	3,85	2	-	80	6
19402	SHT-040-050-075-120-009-08	W01.3		0,5	75	0,9	4	10	3,85	2	-	120	8
19360	SHTZA-040-100-015-060-000-06	W04.2			15	0	4	15	3,85	2	-	60	6
19361	SHTZA-040-100-020-060-000-06	W04.2			20	0	4	20	3,85	2	-	60	6
19403	SHT-040-100-040-080-009-06	W01.3				0,9	4	10	3,85	2	-	80	6
19404	SHT-040-100-040-080-014-06	W01.3	4	1	40	1,4	4	10	3,85	2	-	80	6
19407	SHT-060-050-040-080-009-08	W01.3		0,5	40	0,9	8	15	5,8	2	-	80	8
19362	SHTZA-060-100-020-060-000-06	W04.2			20	0	6	20	5,8	2	-	60	6
19363	SHTZA-060-100-040-075-000-06	W04.2				0	6	40	5,8	2	-	75	6
19408	SHT-060-100-040-080-009-08	W01.3			40	0,9	8	15	5,8	2	-	80	8
19409	SHT-060-100-050-100-012-08	W01.3			50	1,2	8	15	5,8	2	-	100	8
19410	SHT-060-100-060-100-009-08	W01.3		1	60	0,9	8	15	5,8	2	-	100	8
19364	SHTZA-060-200-020-060-000-06	W04.2	6	2	20	0	6	20	5,8	2	-	60	6
19365	SHTZA-080-100-040-075-000-08	W04.2			40	0	8	40	7,7	2	-	75	8
18043	SHT-080-100-050-100-011-10	W01.3			50	1,1	8	20	7,7	2	-	100	10
19412	SHT-080-100-065-120-009-10	W01.3		1	65	0,9	8	20	7,7	2	-	120	10
19413	SHT-080-200-065-120-009-10	W01.3	8	2	65	0,9	8	20	7,7	2	-	120	10
19414	SHT-100-100-070-120-008-12	W01.3	10	1	70	0,8	10	30	9,69	2	-	120	12

[ht]



Conical and reduced neck bullnose cutter with two flutes for roughing and finishing hardened and unhardened steels.

Areas of application

≥ 44 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Tool variations

Z 2

Conical

Z 2

Reduced Neck

HA

Video

56 HRC

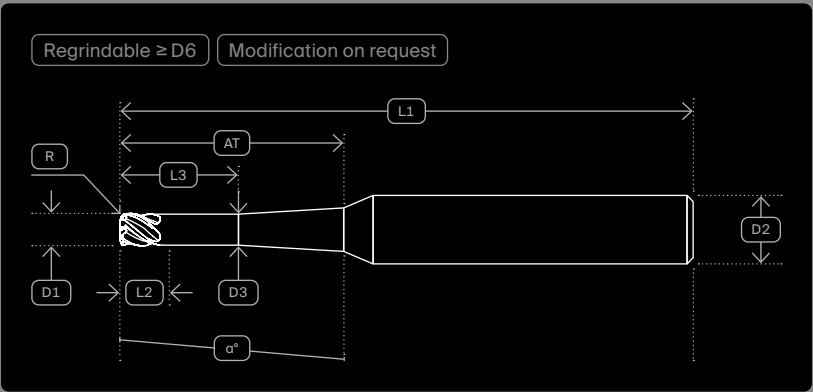
Finish.

[ht]

D0,8

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
09969	HT-006-010-015-051-011-06	W01.1	0,6	0,1	15	1,1	0,45	1,5	0,58	2	-	51	6
12364	HTZA-008-020-002-060-000-06	W01.1	0,8	0,2	2,4	0	1,3	2,4	0,76	2	-	60	6
17242	HTZA-010-010-004-060-000-06	W01.2	1	0,1	4	0	2	4	0,96	2	-	60	6
07852	HT-010-020-020-051-072-06	W01.1		0,2	20	7,2	0,75	5	0,96	2	-	51	6
07851	HT-015-030-020-058-065-06	W01.1	1,5	0,3	20	6,5	1,15	6	1,47	2	-	58	6
07850	HT-015-050-020-058-065-06	W01.1		0,5	20	6,5	1,15	6	1,47	2	-	58	6
07849	HT-017-030-020-058-062-06	W01.1	1,7	0,3	20	6,2	1,7	7	1,6	2	-	58	6
07848	HT-017-050-020-058-062-06	W01.1		0,5	20	6,2	1,7	7	1,63	2	-	58	6
07846	HT-020-050-020-058-058-06	W01.1	2	0,5	20	5,8	2	8	1,9	2	-	58	6
07845	HT-025-050-020-058-050-06	W01.1	2,5	0,5	20	5	2,5	9	2,35	2	-	58	6
07082	HT-030-050-020-058-044-06	W01.1	3	0,5	20	4,4	3	10	2,85	2	-	58	6

[sza]



Reduced neck mini milling cutters with two flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Tool variations

Z 2

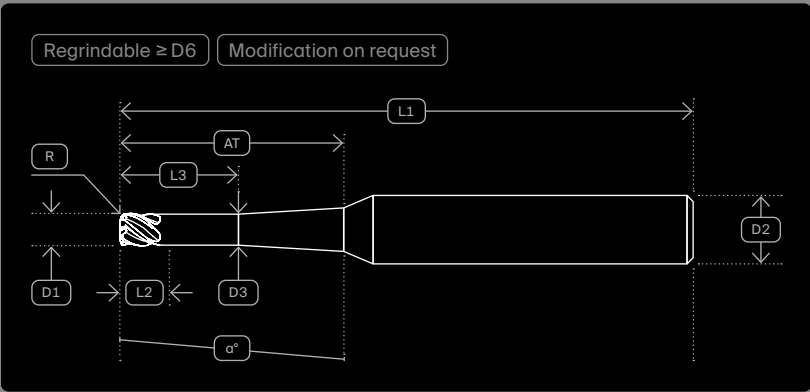
Reduced Neck

HA

Sharp-edged

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	S	Sharp-edged
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
04565	SZA-005-000-003-060-000-04	0,5	0	3	0	0,4	3	0,48	2	-	60	4
06374	SZA-008-000-004-060-000-04	0,8	0	4	0	0,6	4	0,78	2	-	60	4
04324	SZA-010-000-006-060-000-04	1	0	6	0	0,75	6	0,97	2	-	60	4
04325	SZA-010-000-008-060-000-04			8	0	0,75	8	0,97	2	-	60	4
04326	SZA-010-000-010-060-000-04			10	0	0,75	10	0,97	2	-	60	4
04327	SZA-010-000-012-060-000-04			12	0	0,75	12	0,97	2	-	60	4
06456	SZA-015-000-004-051-000-06	1,5	0	4	0	1,15	4	1,43	2	-	51	6
06378	SZA-015-000-010-060-000-04			10	0	1,15	10	1,47	2	-	60	4
06380	SZA-015-000-017-060-000-04			17	0	1,15	17	1,47	2	-	60	4
02193	SZA-020-000-006-050-000-06	2	0	6	0	2	6	1,93	2	-	51	6
04320	SZA-020-000-008-060-000-04			8	0	2	8	1,93	2	-	60	4
04321	SZA-020-000-012-060-000-04			12	0	2	12	1,93	2	-	60	4
04322	SZA-020-000-016-060-000-04			16	0	2	16	1,93	2	-	60	4
04323	SZA-020-000-020-060-000-04			20	0	2	20	1,93	2	-	60	4

[scmsf]



Cylindrical and reduced neck bullnose cutter with four flutes for finishing θ° surfaces of hardened and unhardened steels.

Areas of application

≥ 44 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Finishing θ° surfaces

Tool variations

Z 4

Cylindrical

Z 4

Reduced Neck

HA

Video

50 HRC

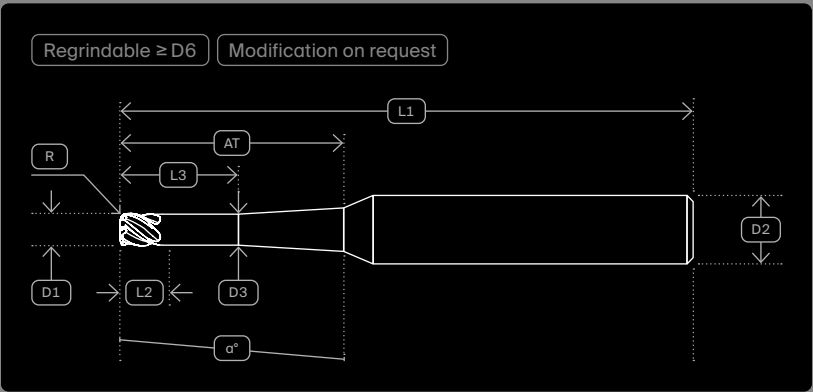
Finish.

[scmsf]

D12

 All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
29094	SCMSF-060-050-012-051-000-06	6	0,5	12	0	4	12	5,83	4	-	51	6
29095	SCMSF-060-100-012-051-000-06		1	12	0	4	12	5,9	4	-	51	6
29096	SCMSF-080-050-016-059-000-08	8	0,5	16	0	5	16	7,73	4	-	59	8
29097	SCMSF-080-100-016-059-000-08		1	16	0	5	16	7,73	4	-	59	8
26432	SCMSF-100-050-006-051-000-10	10	0,5	6	0	6	6	10	4	-	51	10
26433	SCMSF-100-100-006-051-000-10		1	6	0	6	6	10	4	-	51	10
26434	SCMSF-120-050-008-051-000-12	12	0,5	8	0	8	8	12	4	-	51	12
27117	SCMSF-120-050-048-090-000-12			48	0	8	48	11,65	4	-	90	12
26435	SCMSF-120-100-008-051-000-12		1	8	0	8	8	12	4	-	51	12
27116	SCMSF-120-100-048-090-000-12			48	0	8	48	11,65	4	-	90	12

T/Z

Series

[t]

[tz]



Conical, cylindrical and reduced neck bullnose cutter with two flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

- ≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Tool variations

- Z 2

Conical

Z 2

Cylindrical

Z 2

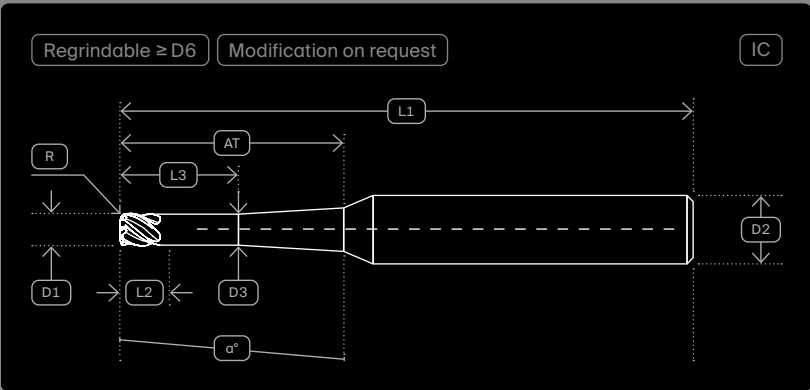
Reduced Neck

- HA



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
06132	TZA-003-005-001-060-000-04	W04	0,3	0,05	1	0	0,25	1	0,28	2	-	60	4
01216	TZA-003-005-001-060-000-06	W04			1,5	0	0,25	1,5	0,28	2	IC	60	6
01218	TZA-004-005-002-060-000-06	W04			2	0	0,3	2	0,38	2	IC	60	6
07538	TZA-004-005-004-060-000-06	W04	0,4	0,05	4	0	0,3	4	0,38	2	IC	60	6
05963	T-004-010-020-051-051-04	W01			20	5,1	0,3	2	0,38	2	-	51	4
07376	TZA-005-010-002-060-000-04	W04			2	0	0,4	2	0,48	2	-	60	4
01219	TZA-005-010-002-060-000-06	W04	0,5	0,1	2,5	0	0,4	2,5	0,48	2	IC	60	6
06203	TZA-006-006-003-060-000-06	W04			3	0	0,45	3	0,56	2	-	60	6
06204	TZA-006-006-006-060-000-06	W04			6	0	0,45	6	0,58	2	-	60	6
01220	TZA-006-010-003-060-000-06	W04	0,6	0,1	3	0	0,45	3	0,56	2	IC	60	6
06813	TZA-006-010-006-060-000-06	W04			6	0	0,45	6	0,58	2	IC	60	6
07354	T-006-010-020-051-051-04	W01			20	5,1	0,45	2	0,58	2	-	51	4
01221	TZA-007-010-003-060-000-06	W04	0,7	0,1	3,5	0	0,55	3,5	0,68	2	IC	60	6
01222	TZA-008-010-004-060-000-06	W04			4	0	0,6	4	0,78	2	IC	60	6
00391	T-008-010-005-060-004-06	W01			5	0,4	0,6	4	0,78	2	IC	60	6
00406	T-008-010-008-060-004-06	W01	0,8	0,1	8	0,4	0,6	4	0,78	2	IC	60	6
00407	T-008-010-011-060-004-06	W01			11	0,4	0,6	4	0,78	2	IC	60	6
05445	TZA-010-010-0015-060-000-06	W04			1,5	0	0,75	1,5	0,97	2	IC	60	6
05510	TZA-010-010-005-060-000-04	W04			5	0	0,75	5	0,97	2	-	60	4
02809	TZA-010-010-006-060-000-06	W04			6	0	0,75	6	0,97	2	IC	60	6
05511	TZA-010-010-010-060-000-04	W04											4
02810	TZA-010-010-010-060-000-06	W04			10	0	0,75	10	0,97	2	IC	60	6
05512	TZA-010-010-015-060-000-04	W04											4
03725	TZA-010-010-015-060-000-06	W04			15	0	0,75	15	0,97	2	IC	60	6
01224	TZA-010-015-005-060-000-06	W04				0	0,75	5	0,96	2	IC	60	6
00882	T-010-015-005-060-004-06	W01				0,4	0,75	4	0,97	2	IC	60	6
00659	T-010-015-005-060-009-06	W01			5	0,9	0,75	4	0,97	2	IC	60	6
00349	T-010-015-008-060-004-06	W01			8	0,4	0,75	4	0,97	2	IC	60	6
00660	TZA-010-015-010-060-000-06	W04				0	0,75	10	0,97	2	IC	60	6
00703	T-010-015-010-060-004-06	W01				0,4	0,75	4	0,97	2	IC	60	6
06326	T-010-015-010-060-009-06	W01			10	0,9	0,75	4	0,97	2	IC	60	6
00704	T-010-015-015-060-004-06	W01				0,4	0,75	4	0,97	2	IC	60	6
06327	T-010-015-015-060-009-06	W01			15	0,9	0,75	4	0,97	2	IC	60	6
07443	T-010-015-025-070-015-06	W01			25	1,5	0,75	4	0,97	2	-	70	6
05446	TZA-010-020-0015-060-000-06	W04			1,5	0	0,75	1,5	0,97	2	IC	60	6
02499	TZA-010-020-008-060-000-06	W04							0,96	2	IC	60	6
06624	TZA-010-020-008-060-000-04	W04			8	0	0,75	8	0,97	2	-	60	4
02498	TZA-010-020-020-060-000-06	W04											
05447	TZA-010-025-0015-060-000-06	W04			20	0	0,75	20	0,97	2	IC	60	6
08751	TZA-012-010-010-060-000-06	W04	1	0,25	1,5	0	0,75	1,5	0,97	2	IC	60	6
			1,2	0,1	10	0	0,9	10	1,17	2	IC	60	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
02811	TZA-015-015-010-060-000-06	W04	1,5	0,15	10	0	1,15	10	1,43	2	IC	60	6
05514	TZA-015-015-015-060-000-04	W04											4
07462	TZA-015-015-015-060-000-06	W04			15	0	1,15	15	1,47	2	-	60	6
05515	TZA-015-015-023-060-000-04	W04			23	0	1,15	23	1,47	2	-	60	4
10193	TZA-015-020-010-060-000-06	W04			10	0	1,15	10	1,47	2	IC	60	6
05449	TZA-015-025-0025-060-000-06	W04		0,25	2,5	0	1,15	2,5	1,47	2	IC	60	6
00087	T-015-025-008-060-015-06	W01			8	1,5	1,15	4	1,47	2	IC	60	6
05519	TZA-015-025-010-060-000-06	W04			10	0	1,15	10	1,47	2	IC	60	6
05520	TZA-015-025-015-060-000-06	W04			15	0	1,15	15	1,47	2	IC	60	6
06328	T-015-025-026-060-015-06	W01			26	1,5	1,15	4	1,47	2	IC	60	6
05450	TZA-015-050-0025-060-000-06	W04	1,5	0,5	2,5	0	1,15	2,5	1,47	2	IC	60	6
12105	T-015-050-016-060-015-06	W01			16	1,5	1,15	4	1,47	2	-	60	6
10060	TZA-020-010-010-060-000-06	W04			10	0	2	10	1,93	2	-	60	6
03501	TZA-020-020-005-060-000-06	W04		0,2	5	0	2	5	1,93	2	-	60	6
05281	TZA-020-020-008-060-000-04	W04							1,9	2	-	60	4
02500	TZA-020-020-008-060-000-06	W04			8	0	2	8	1,93	2	-	60	6
05516	TZA-020-020-010-060-000-04	W04											4
02812	TZA-020-020-010-060-000-06	W04			10	0	2	10	1,93	2	-	60	6
05284	TZA-020-020-012-060-000-04	W04							1,9	2	-	60	4
02516	TZA-020-020-012-060-000-06	W04			12	0	2	12	1,93	2	-	60	6
02501	TZA-020-020-016-060-000-06	W04			16	0	2	16	1,93	2	-	60	6
05517	TZA-020-020-020-060-000-04	W04							1,9	2	-	60	4
02794	TZA-020-020-020-060-000-06	W04			20	0	2	20	1,93	2	-	60	6
02795	TZA-020-020-025-060-000-06	W04			25	0	2	25	1,93	2	-	60	6
05518	TZA-020-020-030-060-000-04	W04	0,2	0,2								60	4
02797	TZA-020-020-030-070-000-06	W04			30	0	2	30	1,9	2	-	70	6
00867	TZA-020-025-005-060-000-06	W04			5	0	2	5	1,9	2	-	60	6
07163	TZA-020-025-015-060-000-06	W04			15	0	2	15	1,9	2	-	60	6
05521	TZA-020-025-020-060-000-06	W04			20	0	2	20	1,9	2	-	60	6
05625	T-020-030-067-100-014-06	W01		0,3	67	1,4	2	10	1,9	2	-	100	6
05454	TZA-020-050-004-060-000-06	W04			4	0	2	4	1,93	2	-	60	6
10966	TZA-020-050-010-060-000-04	W04							1,9	2	-	60	4
01122	TZA-020-050-010-060-000-06	W04			10	0	2	10	1,93	2	-	60	6
01119	TZA-020-050-015-060-000-06	W04			15	0	2	15	1,93	2	-	60	6
01120	TZA-020-050-020-060-000-06	W04	2	0,5		0	2	20	1,9	2	-	60	6
00985	T-020-050-020-060-004-06	W01				0,4	2	6	1,9	2	-	60	6
00115	T-020-050-020-060-009-06	W01			20	0,9	2	6	1,9	2	-	60	6
00987	T-020-050-025-070-004-06	W01				0,4	2	6	1,9	2	-	70	6
00986	T-020-050-025-070-009-06	W01				0,9	2	6	1,9	2	-	70	6
00117	T-020-050-025-070-015-06	W01			25	1,5	2	6	1,9	2	-	70	6
19813	T-020-050-032-070-009-06	W01				0,9	2	6	1,9	2	-	70	6
00119	T-020-050-032-070-015-06	W01			32	1,5	2	6	1,9	2	-	70	6
00760	T-020-050-043-075-025-06	W01			43	2,5	2	6	1,9	2	-	75	6
05927	T-020-050-060-100-015-06	W01			60	1,5	2	6	1,9	2	-	100	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
07663	TZA-025-020-010-060-000-06	W04	2,5	0,2	10	0	2,5	10	2,35	2	-	60	6
05455	TZA-025-025-004-060-000-06	W04		0,25	4	0	2,5	4	2,35	2	-	60	6
05456	TZA-025-040-004-060-000-06	W04		0,4	4	0	2,5	4	2,35	2	-	60	6
05457	TZA-025-050-004-060-000-06	W04		0,5	4	0	2,5	4	2,35	2	-	60	6
07452	TZA-025-050-011-060-000-06	W04			11	0	2,5	11	2,38	2	-	60	6
00101	T-025-050-013-060-015-06	W01			13	1,5	2,5	8	2,35	2	-	60	6
12324	T-025-050-016-060-015-06	W01			16	1,5	2,5	8	2,35	2	-	60	6
00103	T-025-050-025-070-015-06	W01			25	1,5	2,5	8	2,35	2	-	70	6
00105	T-025-050-035-080-015-06	W01			35	1,5	2,5	8	2,35	2	-	80	6
05458	TZA-025-100-004-060-000-06	W04		1	4	0	2,5	4	2,35	2	-	60	6
01158	T-025-100-035-080-015-06	W01			35	1,5	2,5	8	2,35	2	-	80	6
02502	TZA-030-020-012-060-000-06	W04	3	0,2	12	0	3	12	2,88	2	-	60	6
02514	TZA-030-020-020-060-000-06	W04			20	0	3	20	2,88	2	-	60	6
02515	TZA-030-020-030-070-000-06	W04			30	0	3	30	2,85	2	-	70	6
05459	TZA-030-025-005-060-000-06	W04		0,25	5	0	3	5	2,85	2	-	60	6
05523	TZA-030-025-020-060-000-06	W04			20	0	3	20	2,85	2	-	60	6
00922	T-030-025-090-150-010-08	W01			90	1	3	8	2,85	2	-	150	8
07910	TZA-030-030-012-060-000-06	W04		0,3	12	0	3	12	2,88	2	-	60	6
02147	TZA-030-050-005-060-000-06	W04			5	0	3	5	2,88	2	-	60	6
02798	TZA-030-050-010-060-000-06	W04			10	0	3	10	2,85	2	-	60	6
02800	TZA-030-050-015-060-000-06	W04			15	0	3	15	2,85	2	-	60	6
00527	TZA-030-050-020-060-000-06	W04			20	0	3	20	2,85	2	-	60	6
02801	TZA-030-050-025-070-000-06	W04			25	0	3	25	2,85	2	-	70	6
02802	TZA-030-050-030-070-000-06	W04				0	3	30	2,88	2	-	70	6
00139	T-030-050-030-075-015-06	W01			30	1,5	3	8	2,85	2	-	75	6
11042	TZA-030-050-035-070-000-06	W04				0	3	35	2,85	2	-	70	6
00729	T-030-050-035-075-010-06	W01			35	1	3	8	2,85	2	-	75	6
05525	TZA-030-050-040-070-000-06	W04	0,5	0,5		0	3	40	2,85	2	-	75	6
05953	T-030-050-040-075-010-06	W01			40	1	3	8	2,85	2	-	75	6
00141	T-030-050-045-100-015-06	W01			45	1,5	3	8	2,85	2	-	100	6
00143	T-030-050-060-100-015-08	W01			60	1,5	3	8	2,85	2	-	100	8
09984	T-030-050-075-120-004-06	W01			75	0,4	3	8	2,85	2	-	120	6
19795	TZA-030-100-010-060-000-06	W04			10	0	3	10	2,85	2	-	60	6
20054	T-030-100-030-075-009-06	W01			30	0,9	3	8	2,85	2	-	75	6
06192	T-030-100-040-075-010-06	W01			40	1	3	8	2,85	2	-	75	6
06682	T-030-100-060-100-009-06	W01			60	0,9	3	8	2,85	2	-	100	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2									
06370	TZA-040-025-006-060-000-06	W04	4	0,25	6	0	4	6	3,85	2	-	60	6									
05461	TZA-040-040-006-060-000-06	W04		0,4	6	0	4	6	3,85	2	-	60	6									
05462	TZA-040-050-006-060-000-06	W04		0,5	6	0	4	6	3,85	2	-	60	6									
00074	TZA-040-050-015-060-000-06	W04			15	0	4	15	3,88	2	-	60	6									
06195	TZA-040-050-020-060-000-06	W04			20	0	4	20	3,85	2	-	60	6									
01031	TZA-040-050-025-060-000-06	W04			25	0	4	25	3,85	2	IC	60	6									
00380	TZA-040-050-030-070-000-06	W04			30	0	4	30	3,85	2	-	70	6									
06329	T-040-050-030-075-010-06	W01				1	4	8	3,85	2	-	75	6									
00167	T-040-050-030-075-015-06	W01				1,5	4	8	3,85	2	-	75	6									
06116	T-040-050-040-080-009-06	W01			40	0,9	4	8	3,85	2	-	80	6									
00492	T-040-050-040-100-014-06	W01				1,4	4	15	3,85	2	-	100	6									
00163	T-040-050-040-085-015-08	W01				1,5	4	8	3,85	2	-	85	8									
00165	T-040-050-060-100-015-08	W01			60	1,5	4	8	3,85	2	-	100	8									
00217	T-040-050-075-120-010-08	W01			75	1	4	8	3,85	2	-	120	8									
00218	T-040-050-090-150-010-08	W01		90	1	4	8	3,85	2	-	150	8										
05463	TZA-040-100-006-060-000-06	W04		0,5	6	0	4	6	3,85	2	-	60	6									
02814	TZA-040-100-012-060-000-06	W04			12	0	4	12	3,85	2	-	60	6									
02785	TZA-040-100-015-060-000-06	W04			15	0	4	15	3,88	2	-	60	6									
11320	TZA-040-100-020-060-000-04	W04			20	0	4	20	3,85	2	-	60	4									
02804	TZA-040-100-020-060-000-06	W04											6									
05527	TZA-040-100-025-060-000-06	W04											6									
07728	TZA-040-100-030-070-000-04	W04			25	0	4	25	3,85	2	-	60	6									
19796	TZA-040-100-030-070-000-06	W04			30	0	4	30	3,85	2	-	70	4									
10676	T-040-100-030-080-009-06	W01											6									
05528	TZA-040-100-040-070-000-06	W04											6									
07729	TZA-040-100-040-080-000-04	W04			40	0	4	40	3,85	2	-	70	6									
01227	T-040-100-040-080-009-06	W01										80	4									
00493	T-040-100-040-100-014-06	W01										80	6									
00597	T-040-100-040-080-015-06	W01										100	6									
02277	T-040-100-060-120-009-08	W01			1,4688	4	20	3,85	2	-	80	6	6									
00030	T-040-100-060-120-015-08	W01										0,9	4	20	3,85	2	-	120	8			
00030	T-040-100-060-120-015-08	W01		1	60	1,5	4	20	3,85	2	-	120	8									
01156	T-040-150-040-080-015-06	W01											8									
04857	TZA-050-050-020-060-000-06	W04		5	1,5	40	1,5	4	20	3,85	2	-	80	6								
01032	TZA-050-050-025-060-000-06	W04												6								
00010	TZA-050-050-040-070-000-06	W04			0,5	20	0	5	20	4,83	2	-	60	6								
00228	T-050-050-040-100-015-08	W01												40	1,5	5	10	4,8	2	-	100	8
01653	T-050-050-060-120-015-08	W01												60	1,5	5	10	4,8	2	-	120	8
05530	TZA-050-100-040-070-000-06	W04												40	0	5	40	4,8	2	-	70	6
00394	T-050-100-045-100-006-06	W01			1	45	0,6	5	10	4,8	2	-	100	6								
12404	TZA-050-200-020-060-000-06	W04	6																			

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2																
05468	TZ-060-025-012-060-000-06	W04	6	0,25								60	6																
05473	TZ-060-025-012-070-000-06	W04			12	0	12	0	6	2	-	70	6																
05531	TZA-060-025-040-075-000-06	W04			40	0	9	40	5,8	2	-	75	6																
05469	TZ-060-050-012-060-000-06	W04										60	6																
00864	TZ-060-050-012-070-000-06	W04										70	6																
05476	TZ-060-050-012-100-000-06	W04		12								0	12	0	6	2	-	100	6										
07913	TZA-060-050-025-070-000-06	W04		25								0	9	25	5,83	2	-	70	6										
05370	T-060-050-040-080-009-08	W01		0,5									80	8															
12190	T-060-050-065-120-009-08	W01											40	0,9	6	20	5,8	2	-	80	8								
05470	TZ-060-100-012-060-000-06	W04											65	0,8882	6	20	5,8	2	-	120	8								
00346	TZ-060-100-012-070-000-06	W04																		60	6								
05477	TZ-060-100-012-100-000-06	W04		70	6																								
06891	TZA-060-100-020-060-000-06	W04		12	0	12	0	6	2	-	100	6																	
07272	TZA-060-100-030-060-000-06	W04		20	0	9	20	5,83	2	IC	60	6																	
10678	T-060-100-030-080-009-10	W01											60	6															
00718	TZA-060-100-040-075-000-06	W04											30	0,9	6	20	5,8	2	-	80	10								
01437	T-060-100-040-080-009-08	W01																				75	6						
00031	T-060-100-040-080-015-08	W01																				0	9	40	5,8	2	-	80	8
00482	T-060-100-050-100-012-08	W01		40	1,5	6	20	5,8	2	-	80	8																	
10305	T-060-100-060-100-009-08	W01											100	8															
11312	T-060-100-075-120-009-10	W01											50	1,1691	6	20	5,8	2	-	100	8								
00455	T-060-100-075-120-013-10	W01											60	0,9	6	20	5,8	2	-	100	8								
00219	T-060-100-085-150-010-10	W01																				120	10						
00220	T-060-100-110-165-010-12	W01		75	1,3	6	20	5,8	2	-	120	10																	
00762	TZ-060-200-012-070-000-06	W04		85	1	6	15	5,8	2	-	150	10																	
05479	TZ-060-200-012-100-000-06	W04											165	12															
07867	TZA-060-200-020-060-000-06	W04											110	1	6	12	5,8	2	-	165	12								
05534	TZA-060-200-040-075-000-06	W04																				70	6						
00598	T-060-200-040-080-015-08	W01																				12	0	12	0	6	2	-	100
00481	T-060-200-050-100-012-08	W01		20	0	9	20	5,83	2	-	60	6																	
09983	T-060-200-075-120-004-08	W01											75	6															
																					80	8							
																					40	1,5	6	20	5,8	2	-	80	8
																					50	1,1935	6	20	5,8	2	-	100	8

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
10368	TZA-080-025-040-075-000-08	W04	8	0,25	40	0	12	40	7,7	2	-	75	8
05480	TZ-080-050-014-070-000-08	W04		0,5	14	0	14	0	8	2	-	70	8
05482	TZ-080-050-014-100-000-08	W04										100	8
07277	TZA-080-050-020-070-000-08	W04										70	8
07821	TZA-080-050-020-100-000-08	W04										100	8
05415	TZA-080-050-040-075-000-08	W04									IC	75	8
05537	TZA-080-050-055-100-000-08	W04									-	100	8
03119	T-080-050-065-120-009-10	W01									-	120	10
00398	TZ-080-100-014-070-000-08	W04		1	14	0	14	0	8	2	-	70	8
00399	TZ-080-100-014-100-000-08	W04										100	8
06193	TZA-080-100-035-075-000-08	W04										75	8
03845	TZA-080-100-040-075-000-08	W04									IC	75	8
00431	T-080-100-050-100-011-10	W01									-	100	10
00470	T-080-100-065-120-009-10	W01									-	120	10
00221	T-080-100-090-150-010-12	W01									-	150	12
00222	T-080-100-120-175-010-12	W01									-	175	12
00494	TZ-080-200-014-070-000-08	W04		2	120	0,9629	12	15	7,7	2	-	70	8
00937	TZ-080-200-014-100-000-08	W04										100	8
07827	TZA-080-200-025-070-000-08	W04										70	8
19797	TZA-080-200-035-075-000-08	W04										75	8
07592	T-080-200-050-100-009-10	W01									-	100	10
00432	T-080-200-050-100-015-10	W01									-	100	10
05540	TZA-080-200-055-100-000-08	W04									-	100	8
00457	T-080-200-065-120-009-10	W01									-	120	10
10658	TZ-080-300-014-070-000-08	W04		3	14	0	14	0	8	2	-	70	8
05486	TZ-100-050-016-075-000-10	W04										75	10
05490	TZ-100-050-016-100-000-10	W04									-	100	10
05541	TZA-100-050-055-100-000-10	W04									-	100	10
05487	TZ-100-100-016-075-000-10	W04									-	75	10
05491	TZ-100-100-016-100-000-10	W04									-	100	10
00309	TZA-100-100-030-120-000-10	W04									-	120	10
00673	T-100-100-070-120-008-12	W01									-	120	12
06331	T-100-100-100-150-009-16	W01									-	150	16
05493	TZ-100-200-016-100-000-10	W04		10	16	0	16	0	10	2	-	100	10
00705	T-100-200-065-120-009-12	W01										120	12
07793	TZA-100-300-030-075-000-10	W04									-	75	10
03310	T-100-300-065-120-009-12	W01									-	120	12
06333	T-100-300-100-150-009-16	W01									-	150	16

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
05498	TZ-120-050-018-084-000-12	W04	12	0,5	18	0	18	0	12	2	-	84	12
05502	TZ-120-050-018-100-000-12	W04										100	12
05506	TZ-120-050-018-120-000-12	W04										120	12
05499	TZ-120-100-018-084-000-12	W04										84	12
00855	TZ-120-100-018-100-000-12	W04										100	12
05507	TZ-120-100-018-120-000-12	W04										120	12
05501	TZ-120-200-018-084-000-12	W04										84	12
05505	TZ-120-200-018-100-000-12	W04										100	12
05509	TZ-120-200-018-120-000-12	W04										120	12
07826	TZA-120-200-035-084-000-12	W04										84	12
07290	TZ-120-400-018-084-000-12	W04		4	18	0	18	0	12	2	-	84	12

[sgt]



Conical and reduced neck bullnose cutter with three or four flutes for roughing and finishing hardened and unhardened steels ≤ 52 HRC.

Areas of application

≤ 52 HRC

1.400 N ≥ 1.000 N ≤ 1.000 N Steel

GG GJV

HSC Large torus

Tool variations

Z3 Conical

Z4 Reduced Neck



Video

30 HRC

Finish.

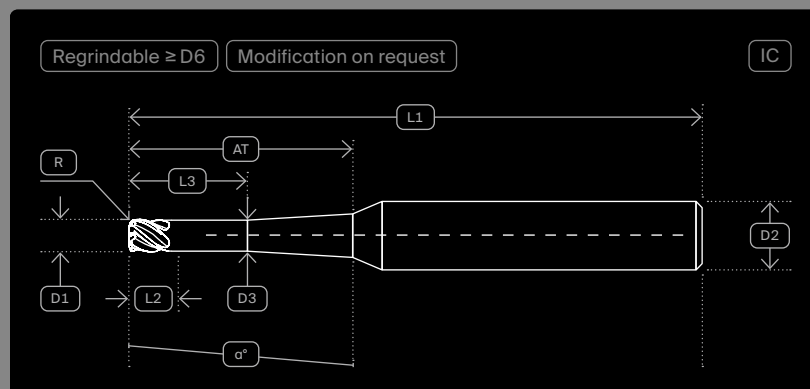
[sgt]

D10 R1



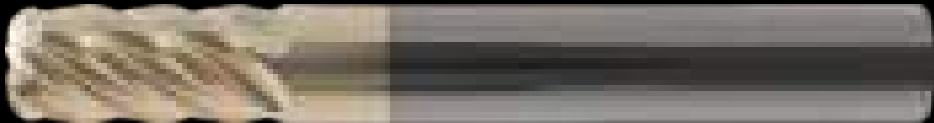
All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2	
20056	3SGTK-020-050-006/020-060-057-06	2	0,5	20	5,7	2	6	1,9	3	-	60	6	
20057	3SGTK-020-050-010/020-060-057-06						10	1,9	3	-	60	6	
20058	3SGTK-030-080-009/020-060-043-06	3	0,8	20	4,3	2	9	2,8	3	-	60	6	
07587	SGTK-030-080-009/020-060-043-06								4	IC	60	6	
20059	3SGTK-030-100-009/020-060-043-06								3	-	60	6	
08812	SGTK-030-100-009/020-060-043-06								4	IC	60	6	
20060	3SGTK-030-100-010/040-075-012-06			1	20	4,3	2	9	2,8	3	-	75	6
11836	SGTK-030-100-010/040-075-012-06									4	IC	75	6
20061	3SGTK-030-100-010/040-075-022-06									3	-	75	6
10547	SGTK-030-100-010/040-075-022-06									4	IC	75	6
06446	SGT-040-100-012-060-000-06	4	1	12	0	2	12	3,6	4	IC	60	6	
08084	SGT-040-100-016-060-000-06			16	0	2	16	3,64	4	IC	60	6	
10990	SGTK-040-100-012/040-075-015-06			40	1,5	2	12	3,6	4	IC	75	6	
06447	SGT-060-100-018-060-000-06	6	1	18	0	3	18	5,6	4	IC	60	6	
07588	SGT-060-150-018-060-000-06										60	6	
10143	SGT-060-150-018-110-000-06										110	6	
11546	SGT-080-100-024-065-000-08	8	1	24	0	4	24	7,6	4	IC	65	8	
06007	SGT-080-200-024-065-000-08			2	24	0	4	24	7,64	4	IC	65	8
06883	SGT-080-200-035-065-000-08											35	0
10674	SGT-080-300-024-065-000-08			3	24	0	4	24	7,6	4	IC	65	8
08794	SGT-100-100-030-085-000-10	10	1	30	0	5	30	9,64	4	IC	85	10	
10144	SGT-100-200-030-110-000-10							9,6	4	IC	110	10	
04532	SGT-100-200-030-085-000-10							2	30	0	5	30	9,64
08795	SGT-120-200-040-100-000-12	12	2	40	0	6	40	11,64	4	IC	100	12	
04533	SGT-120-300-040-100-000-12							3	40	0	6	40	11,64

[cft]



Cylindrical cermet bullnose cutter with five to seven flutes for finishing unhardened steels.

Areas of application

- 1.400 N
- ≥ 1.000 N
- ≤ 1.000 N
- Steel
- GG

- CER
- Large torus

Tool variations

- Z 5
- Cylindrical
- Z 6
- Cylindrical
- Z 7
- Cylindrical

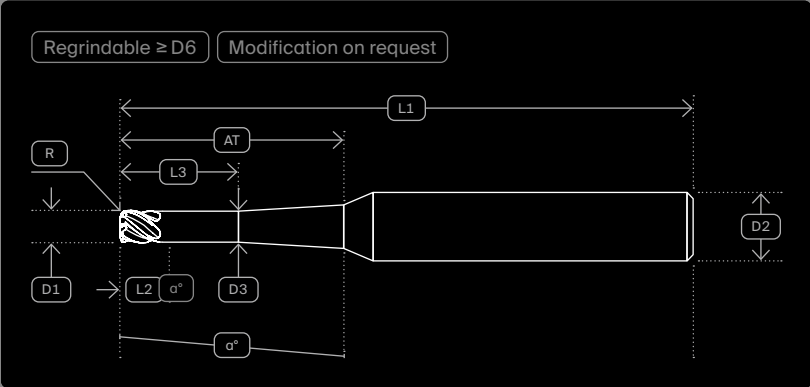
To ensure optimal and high-performance use of the tool, our technical sales team will support you with comprehensive advice and expertise.

- HA
-
-



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
25918	CFT-060-100-012-050-000-06	6	1	12	0	12	0	6	5	-	50	6
25919	CFT-060-200-012-050-000-06		2	12	0	12	0	6	5	-	50	6
25920	CFT-080-100-016-060-000-08	8	1	16	0	16	0	8	6	-	60	8
25921	CFT-080-200-016-060-000-08		2	16	0	16	0	8	6	-	60	8
25922	CFT-080-300-016-060-000-08		3	16	0	16	0	8	6	-	60	8
25923	CFT-100-100-020-065-000-10	10	1	20	0	20	0	10	6	-	65	10
25924	CFT-100-200-020-065-000-10		2	20	0	20	0	10	6	-	65	10
25925	CFT-100-400-020-065-000-10		4	20	0	20	0	10	6	-	65	10
25926	CFT-120-100-024-070-000-12	12	1	24	0	24	0	12	6	-	70	12
25927	CFT-120-300-024-070-000-12		3	24	0	24	0	12	6	-	70	12
25928	CFT-120-500-024-070-000-12		5	24	0	24	0	12	6	-	70	12
25930	CFT-160-600-032-080-000-16	16	6	32	0	32	0	16	7	-	80	16

CT/Z Series

[ct] [ctz] [3cz] [4cz]



Conical and reduced neck bullnose cutter with two to four flutes for roughing and finishing non-ferrous materials.

Areas of application

ALU Cu AISi

Titan

HSC

Tool variations

Z2 Conical

Z2 Reduced Neck

Z3 Reduced Neck

Z4 Reduced Neck

HA

Video

ALU

Finish.

[ct]

D6

All available dimensions and CAM export data can be found online at iklick.aura.tools

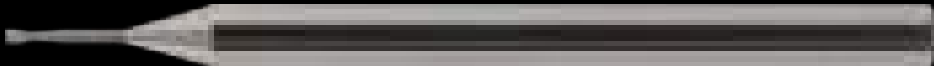
D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
06226	CT-007-010-011-060-004-06	W07	0,7	0,1	11	0,4	1	3	0,6	2	-	60	6
02672	CT-010-010-008-060-004-06	W07	1	0,1	8	0,4	2	6	0,9	2	-	60	6
02551	CT-010-010-015-060-009-06	W07			15	0,9	2	6	0,9	2	-	60	6
00250	CT-010-010-016-060-004-06	W07			16	0,4	1,5	6	0,9	2	-	60	6
02548	CT-010-010-020-060-004-06	W07			20	0,4	2	6	0,9	2	-	60	6
02552	CT-010-010-020-060-009-06	W07				0,9	2	6	0,9	2	-	60	6
02549	CT-010-010-025-075-004-06	W07			25	0,4	2	6	0,9	2	-	75	6
02553	CT-010-010-025-075-009-06	W07				0,9	2	6	0,9	2	-	75	6
02550	CT-010-010-030-075-004-06	W07			30	0,4	2	6	0,9	2	-	75	6
02554	CT-010-010-030-075-009-06	W07				0,9	2	6	0,9	2	-	75	6
02674	CT-012-010-015-060-004-06	W07	1,2	0,1	15	0,4	3	6	1,1	2	-	60	6
02675	CT-012-010-030-070-004-06	W07			30	0,4	3	6	1,1	2	-	70	6
06164	CT-012-010-033-070-009-06	W07			33	0,9	3	6	1,1	2	-	70	6
06165	CT-012-010-038-070-009-06	W07	2	0,1	38	0,9	3	6	1,1	2	-	70	6
07797	CTZA-020-020-015-057-000-06	W11			15	0	3	15	1,92	2	-	57	6
03529	CTZA-020-020-016-057-000-06	W11			16	0	3	16	1,92	2	-	57	6
07798	CTZA-020-050-015-057-000-06	W11	3	0,2	15	0	3	15	1,85	2	-	57	6
06475	3CZ-030-020-020-060-000-06	W12			20	0	5	20	2,7	3	-	60	6
00896	CT-030-020-080-120-009-06	W07			80	0,9	4	10	2,9	2	-	120	6
17255	CT-030-030-045-080-009-06	W07			45	0,9	4	10	2,9	2	-	80	6
05617	CTZA-030-050-009-057-000-06	W11			9	0	4	9	2,88	2	-	57	6
07799	CTZA-030-050-018-057-000-06	W11			18	0	4	18	2,88	2	-	57	6
12016	CT-030-050-040-085-009-06	W07			40	0,9	2	12	2,9	2	-	85	6
00595	3CZ-040-025-020-060-000-06	W12			20	0	6	20	3,73	3	-	60	6
10307	3CZ-040-025-025-060-000-06	W12			25	0	6	25	3,7	3	-	60	6
09754	CTZA-040-030-015-057-000-06	W11			15	0	5	15	3,7	2	-	57	6
05618	CTZA-040-050-012-057-000-06	W11			12	0	5	12	3,73	2	-	57	6
08810	CTZA-040-050-020-057-000-06	W11			20	0	5	20	3,73	2	-	57	6
06476	3CZ-040-050-028-060-000-06	W12			28	0	6	28	3,7	3	-	60	6
00792	CT-040-050-040-080-015-06	W07			40	1,5	6	20	3,8	2	-	80	6
07800	CTZA-040-100-025-057-000-06	W11			25	0	5	25	3,73	2	-	57	6
11946	CT-040-100-040-080-009-06	W07			40	0,9	6	20	3,8	2	-	80	6
00791	CT-040-100-040-080-015-06	W07				1,4688	6	20	3,8	2	-	80	6
00298	CT-040-100-040-100-015-06	W07				1,5	6	20	3,8	2	-	100	6
11934	CT-040-100-060-120-009-08	W07	4	1	60	0,9	4	20	3,8	2	-	120	8
10126	CTZA-050-030-020-057-000-06	W11			20	0	6	20	4,7	2	-	57	6
05619	CTZA-050-050-015-057-000-06	W11			15	0	6	15	4,7	2	-	57	6
10129	CTZA-050-050-020-057-000-06	W11								2	-	57	6
01303	3CZ-050-050-020-060-000-06	W12	5	0,5	20	0	6	20	4,7	3	-	60	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
06477	3CZ-060-025-032-060-000-06	W12	6	0,25	32	0	8	32	5,7	3	-	60	6
10127	CTZA-060-030-030-070-000-06	W11		0,3	30	0	7	30	5,54	2	-	70	6
16403	4CZ-060-050-020-060-000-06	W12.1		0,5	20	0	8	20	5,5	4	-	60	6
07217	CTZA-060-050-025-057-000-06	W11			25	0	7	25	5,54	2	-	57	6
10128	CTZA-060-050-030-070-000-06	W11			30	0	7	30	5,54	2	-	70	6
06478	3CZ-060-050-032-060-000-06	W12			32	0	8	32	5,54	3	-	60	6
00596	4CZ-060-050-035-075-000-06	W12.1			35	0	8	35	5,5	4	-	75	6
02679	CT-060-050-060-100-009-08	W07			60	0,9	9	40	5,8	2	-	100	8
02680	CT-060-050-085-120-009-10	W07			85	0,9	9	40	5,8	2	-	120	10
05620	CTZA-060-100-020-057-000-06	W11		1	20	0	7	20	5,44	2	-	57	6
05851	CTZA-060-100-033-070-000-06	W11			33	0	7	33	5,5	2	-	70	6
04540	4CZ-060-100-035-075-000-06	W12.1			35	0	8	35	5,5	4	-	75	6
04422	CT-060-100-060-100-009-08	W07			60	0,9	9	20	5,8	2	-	100	8
00795	CT-060-100-065-120-009-08	W07		2	65	0,9	9	20	5,8	2	-	120	8
00301	CT-060-200-060-120-009-08	W07			60	0,9	9	25	5,8	2	-	120	8
10011	CT-060-200-065-100-009-08	W07			65	0,9	9	25	5,8	2	-	100	8
06482	4CZ-080-050-035-075-000-08	W12.1	8	0,5	35	0	10	35	7,54	4	-	75	8
05621	CTZA-080-100-026-064-000-08	W11		1	26	0	9	26	7,5	2	-	64	8
03658	3CZ-080-100-030-064-000-08	W12			30	0	10	30	7,54	3	-	64	8
00624	4CZ-080-100-035-075-000-08	W12.1			35	0	10	35	7,54	4	-	75	8
05852	CTZA-080-100-043-080-000-08	W11			43	0	9	43	7,54	2	-	80	8
00789	CT-080-100-070-120-008-10	W07		2	70	0,8	10	20	7,8	2	-	120	10
09908	CTZA-080-200-030-080-000-08	W11			30	0	9	30	7,5	2	-	80	8
00790	CT-080-200-070-120-008-10	W07		3	70	0,8	10	20	7,8	2	-	120	10
01289	CT-080-300-070-120-009-12	W07			70	0,9	10	20	7,8	2	-	120	12
00728	4CZ-100-050-035-075-000-10	W12.1	10	0,5	35	0	12	35	9,35	4	-	75	10
00625	4CZ-100-100-035-075-000-10	W12.1		1	35	0	12	35	9,35	4	-	75	10
05622	CTZA-100-150-031-073-000-10	W11		1,5	31	0	11	31	9,3	2	-	73	10
05853	CTZA-100-150-043-085-000-10	W11			43	0	11	43	9,35	2	-	85	10
09909	CTZA-100-200-040-085-000-10	W11		2	40	0	11	40	9,3	2	-	85	10
07986	CT-100-300-100-150-009-16	W07		3	100	0,9	10	20	9,7	2	-	150	16
01290	CT-100-400-070-120-008-12	W07		4	70	0,8	10	20	9,7	2	-	120	12
04541	4CZ-120-100-042-100-000-12	W12.1		1	42	0	15	42	11,35	4	-	100	12
02681	CTZA-120-100-065-100-000-12	W11			65	0	13	65	11,3	2	-	100	12
02682	CTZA-120-100-090-120-000-12	W11			90	0	13	90	11,35	2	-	120	12
05623	CTZA-120-150-037-084-000-12	W11		1,5	37	0	13	37	11,35	2	-	84	12
05854	CTZA-120-150-055-100-000-12	W11			55	0	13	55	11,35	2	-	100	12
11026	CTZA-120-150-080-120-000-12	W11	12	2	80	0	13	80	11,35	2	-	120	12
09910	CTZA-120-200-040-084-000-12	W11		3	40	0	13	40	11,3	2	-	84	12
07995	CTZA-120-300-060-100-000-12	W11		1	60	0	13	60	11,3	2	-	100	12
00801	4CZ-160-100-095-150-000-16	W12.1		2	95	0	24	95	15,35	4	-	150	16
05624	CTZA-160-200-043-093-000-16	W11	16	2	43	0	17	43	15,3	2	-	93	16



[mtne]



Reduced neck bullnose cutters with two flutes for roughing and finishing non-ferrous materials.

Areas of application

ALU

Cu

AlSi

Titan

HSC

Werkzeugvariationen

Z 2

Reduced Neck

HA

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

R

Radius

F

Chamfer

L3

Cylindrical free length

D2

Shank diameter

L2

Cutting length

D3

Neck diameter

Modification on request

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
10690	MTNE-004-004-002-060-000-04	0,4	0,04	2	0	0,6	2	0,35	2	-	60	4
10691	MTNE-004-004-004-060-000-04			4	0	0,6	4	0,35	2	-	60	4
10692	MTNE-004-004-006-060-000-04			6	0	0,6	6	0,35	2	-	60	4
10693	MTNE-006-006-003-060-000-04	0,6	0,06	3	0	0,9	3	0,55	2	-	60	4
10694	MTNE-006-006-006-060-000-04			6	0	0,9	6	0,5	2	-	60	4
10695	MTNE-006-006-009-060-000-04			9	0	0,9	9	0,55	2	-	60	4
15832	MTNE-008-008-006-060-000-04	0,8	0,08	6	0	1,2	6	0,7	2	-	60	4
15833	MTNE-008-008-010-060-000-04			10	0	1,2	10	0,75	2	-	60	4
03624	MTNE-010-010-005-060-000-04	1	0,1	5	0	1,5	5	0,9	2	-	60	4
10334	MTNE-010-010-007-060-000-04			7	0	1,5	7	0,9	2	-	60	4
03625	MTNE-010-010-010-060-000-04			10	0	1,5	10	0,9	2	-	60	4
10688	MTNE-010-010-012-060-000-04			12	0	1,5	12	0,9	2	-	60	4
03626	MTNE-010-010-015-060-000-04			15	0	1,5	15	0,9	2	-	60	4
04539	MTNE-012-020-006-060-000-04	1,2	0,2	6	0	1,8	6	1,1	2	-	60	4
06696	MTNE-012-020-010-060-000-04			10	0	1,8	10	1,1	2	-	60	4
03627	MTNE-015-015-008-060-000-04	1,5	0,15	8	0	2,3	8	1,35	2	-	60	4
10335	MTNE-015-015-012-060-000-04			12	0	2,3	12	1,35	2	-	60	4
03628	MTNE-015-015-015-060-000-04			15	0	2,3	15	1,4	2	-	60	4
10687	MTNE-015-015-016-060-000-04			16	0	2,3	16	1,35	2	-	60	4
03629	MTNE-015-015-023-060-000-04			23	0	2,3	23	1,4	2	-	60	4
06697	MTNE-020-020-005-060-000-04	2	0,2	5	0	3	5	1,85	2	-	60	4
03630	MTNE-020-020-010-060-000-04			10	0	3	10	1,85	2	-	60	4
03632	MTNE-020-020-015-060-000-04			15	0	3	15	1,85	2	-	60	4
03634	MTNE-020-020-020-060-000-04			20	0	3	20	1,85	2	-	60	4
03636	MTNE-020-020-030-075-000-04			30	0	3	30	1,85	2	-	75	4
07057	MTNE-030-020-020-060-000-04	3	0,3	20	0	4,5	20	2,7	2	-	60	4
03638	MTNE-030-030-015-060-000-04			15	0	4,5	15	2,7	2	-	60	4
03640	MTNE-030-030-021-060-000-04			21	0	4,5	21	2,7	2	-	60	4
03642	MTNE-030-030-027-075-000-04			27	0	4,5	27	2,7	2	-	75	4
04342	MTNE-030-030-030-075-000-04	4	0,4	30	0	4,5	30	2,7	2	-	75	4
17078	MTNE-040-020-012-060-000-04			12	0	6	12	3,7	2	-	60	4
07058	MTNE-040-020-024-060-000-04			24	0	6	24	3,7	2	-	60	4
03645	MTNE-040-040-016-060-000-04			16	0	6	16	3,7	2	-	60	4
03648	MTNE-040-040-024-060-000-04			24	0	6	24	3,7	2	-	60	4
03650	MTNE-040-040-032-075-000-04	6	0,5	32	0	6	32	3,7	2	-	75	4
04343	MTNE-040-040-038-075-000-04			38	0	6	38	3,7	2	-	75	4
04585	MTNE-060-050-036-075-000-06			36	0	8	36	5,7	2	-	75	6

DT

Serie

[2dt] [3dt] [4dt]



Reduced neck diamond-coated bullnose cutter with two to four flutes for roughing and finishing graphite.

Areas of application

Graph GFK

HSC Diamond coated

Tool variations

Z 2 Reduced Neck
Z 3 Reduced Neck
Z 4 Reduced Neck

HA



TTK50

Roug.

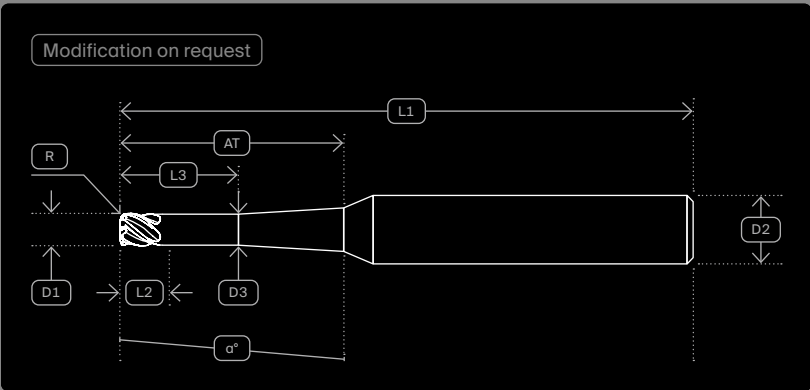
[2dt]

D3 R0,3



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
04559	2DT-005-010-004-060-000-04	W192	0,5	0,1	4	0	0,4	4	0,48	2	-	60	4
04578	2DT-006-010-004-060-000-04	W192	0,6	0,1	4	0	0,45	4	0,58	2	-	60	4
04579	2DT-006-010-007-060-000-04	W192			7	0	0,45	7	0,55	2	-	60	4
07049	2DT-008-010-007-060-000-04	W192	0,8	0,1	7	0	0,6	7	0,78	2	-	60	4
20066	2DT-008-010-010-060-000-04	W192			10	0	0,6	10	0,72	2	-	60	4
02911	2DT-010-010-005-060-000-04	W192	1	0,2	5	0	0,75	5	0,95	2	-	60	4
02912	2DT-010-010-010-060-000-04	W192			10	0	0,75	10	0,95	2	-	60	4
09702	2DT-010-010-010-060-000-06	W192											6
02913	2DT-010-010-015-060-000-04	W192			15	0	0,75	15	0,95	2	-	60	4
10140	2DT-010-020-005-060-000-04	W192	1,2	0,1	5	0	0,75	5	0,97	2	-	60	4
10141	2DT-010-020-010-060-000-04	W192			10	0	0,75	10	0,9	2	-	60	4
07050	2DT-012-010-010-060-000-04	W192	1,5	0,15	10	0	0,9	10	1,17	2	-	60	4
07051	2DT-012-010-015-060-000-04	W192			15	0	0,9	15	1,1	2	-	60	4
02914	2DT-015-015-008-060-000-04	W192			8	0	1,15	8	1,43	2	-	60	4
09703	2DT-015-015-008-060-000-06	W192							1,47	2	-	60	6
02915	2DT-015-015-015-060-000-04	W192	2	0,5	15	0	1,15	15	1,4	2	-	60	4
02916	2DT-015-015-023-060-000-04	W192			23	0	1,15	23	1,4	2	-	60	4
04597	2DT-020-010-025-060-000-04	W192	2	0,2	25	0	2	25	1,9	2	-	60	4
09704	2DT-020-020-010-060-000-06	W192			10	0	2	10	1,9	2	-	60	6
02917	2DT-020-020-010-060-000-04	W192							1,93	2	-	60	4
02919	2DT-020-020-015-060-000-04	W192			15	0	2	15	1,93	2	-	60	4
02921	2DT-020-020-020-060-000-04	W192	3	0,3	20	0	2	20	1,93	2	-	60	4
07052	2DT-020-020-025-060-000-04	W192			25	0	2	25	1,9	2	-	60	4
02923	2DT-020-020-030-070-000-04	W192			30	0	2	30	1,9	2	-	70	4
02918	2DT-020-050-010-060-000-04	W192			10	0	2	10	1,9	2	-	60	4
02920	2DT-020-050-015-060-000-04	W192	3	0,5	15	0	2	15	1,93	2	-	60	4
02922	2DT-020-050-020-060-000-04	W192			20	0	2	20	1,93	2	-	60	6
06770	2DT-020-050-020-060-000-06	W192			20	0	2	20	1,93	2	-	60	4
02924	2DT-020-050-030-070-000-04	W192			30	0	2	30	1,9	2	-	70	4
07053	2DT-030-020-015-060-000-04	W192	3	0,5	15	0	3	15	2,83	2	-	60	4
07054	2DT-030-020-021-060-000-04	W192			21	0	3	21	2,83	2	-	60	4
09705	2DT-030-030-015-060-000-06	W192			15	0	3	15	2,8	2	-	60	6
02925	2DT-030-030-015-060-000-04	W192							2,83	2	-	60	4
02927	2DT-030-030-021-060-000-04	W192	3	0,5	21	0	3	21	2,8	2	-	60	4
02929	2DT-030-030-027-070-000-04	W192			27	0	3	27	2,83	2	-	70	4
02926	2DT-030-050-015-060-000-04	W192			15	0	3	15	2,8	2	-	60	4
02928	2DT-030-050-021-060-000-04	W192			21	0	3	21	2,83	2	-	60	4
02930	2DT-030-050-027-070-000-04	W192	3	0,5	27	0	3	27	2,8	2	-	70	4
06769	2DT-030-050-030-070-000-06	W192			30	0	3	30	2,83	2	-	70	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
04558	2DT-040-020-024-060-000-04	W192			24	0	4	24	3,7	2	-	60	4
07055	2DT-040-020-025-060-000-04	W192			25	0	4	25	3,74	2	-	60	4
07463	2DT-040-020-040-075-000-04	W192		0,2	40	0	4	40	3,7	2	-	75	4
11591	2DT-040-030-025-060-000-04	W192		0,3	25	0	4	25	3,74	2	-	60	4
02931	2DT-040-040-016-060-000-04	W192			16	0	4	16	3,7	2	-	60	4
02963	4DT-040-040-020-100-000-04	W192.3			20	0	5	20	3,7	4	-	100	4
02933	2DT-040-040-024-060-000-04	W192			24	0	4	24	3,7	2	-	60	4
02935	2DT-040-040-032-075-000-04	W192			32	0	4	32	3,7	2	-	75	4
07056	2DT-040-040-040-075-000-04	W192		0,4	40	0	4	40	3,7	2	-	75	4
08738	2DT-040-050-026-060-000-04	W192			26	0	4	26	3,7	2	-	60	4
04441	2DT-040-050-032-070-000-04	W192			32	0	4	32	3,74	2	-	70	4
06771	2DT-040-050-040-075-000-06	W192		0,5	40	0	4	40	3,74	2	-	75	6
02932	2DT-040-100-016-060-000-04	W192		1	16	0	4	16	3,7	2	-	60	4
02934	2DT-040-100-024-060-000-04	W192			24	0	4	24	3,7	2	-	60	4
02936	2DT-040-100-032-070-000-04	W192			32	0	4	32	3,7	2	-	70	4
02937	2DT-050-050-020-060-000-06	W192			20	0	5	20	4,6	2	-	60	6
09706	2DT-050-050-030-070-000-06	W192		0,5	30	0	5	30	4,6	2	-	70	6
02939	2DT-050-050-040-100-000-06	W192			40	0	5	40	4,64	2	-	100	6
20073	2DT-050-100-030-070-000-06	W192			30	0	5	30	4,6	2	-	70	6
02940	2DT-050-100-040-100-000-06	W192			40	0	5	40	4,6	2	-	100	6
03325	2DT-060-030-036-075-000-06	W192		0,3	36	0	10	36	5,64	2	-	75	6
04440	2DT-060-030-048-100-000-06	W192			48	0	10	48	5,6	2	-	100	6
02941	2DT-060-050-024-060-000-06	W192			24	0	10	24	5,64	2	-	60	6
02964	4DT-060-050-030-100-000-06	W192.3		0,5	30	0	10	30	5,64	4	-	100	6
02943	2DT-060-050-036-075-000-06	W192			36	0	10	36	5,6	2	-	75	6
02945	2DT-060-050-048-100-000-06	W192			48	0	10	48	5,64	2	-	100	6
02965	4DT-060-100-030-100-000-06	W192.3			30	0	10	30	5,64	4	-	100	6
02944	2DT-060-100-036-075-000-06	W192		1	36	0	10	36	5,6	2	-	75	6
02946	2DT-060-100-048-100-000-06	W192			48	0	10	48	5,6	2	-	100	6
06775	2DT-060-100-060-100-000-06	W192			60	0	10	60	5,6	2	-	100	6
02947	3DT-080-050-032-070-000-08	W192.2			32	0	16	32	7,55	3	-	70	8
02966	4DT-080-050-040-100-000-08	W192.3			40	0	16	40	7,5	4	-	100	8
02949	3DT-080-050-048-100-000-08	W192.2			48	0	16	48	7,55	3	-	100	8
02951	3DT-080-050-064-120-000-08	W192.2			64	0	16	64	7,5	3	-	120	8
02953	3DT-080-050-080-150-000-08	W192.2			80	0	16	80	7,5	3	-	150	8
02948	3DT-080-100-032-070-000-08	W192.2			32	0	16	32	7,5	3	-	70	8
02967	4DT-080-100-040-100-000-08	W192.3			40	0	16	40	7,5	4	-	100	8
02950	3DT-080-100-048-100-000-08	W192.2			48	0	16	48	7,55	3	-	100	8
23269	3DT-080-100-050-075-000-08	W192.2						48	7,5	3	-	75	8
17794	4DT-080-100-050-100-000-08	W192.3			50	0	16	50	7,5	4	-	100	8
02952	3DT-080-100-064-120-000-08	W192.2			64	0	16	64	7,5	3	-	120	8
06777	3DT-080-100-070-100-000-08	W192.2			70	0	16	70	7,55	3	-	100	8
02954	3DT-080-100-080-150-000-08	W192.2	8	1	80	0	16	80	7,5	3	-	150	8

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2		
02955	3DT-100-050-030-075-000-10	W192.2	10		30	0	20	30	9,55	3	-	75	10		
20074	3DT-100-050-045-100-000-10	W192.2			45	0	20	45	9,55	3	-	100	10		
02968	4DT-100-050-050-100-000-10	W192.3			50	0	20	50	9,55	4	-	100	10		
02957	3DT-100-050-060-150-000-10	W192.2			60	0	20	60	9,5	3	-	150	10		
11174	4DT-100-050-076-100-000-10	W192.3		0,5	76	0	20	76	9,55	4	-	100	10		
02956	3DT-100-100-030-075-000-10	W192.2			30	0	20	30	9,5	3	-	75	10		
20075	3DT-100-100-045-100-000-10	W192.2			45	0	20	45	9,55	3	-	100	10		
02969	4DT-100-100-050-100-000-10	W192.3			50	0	20	50	9,55	4	-	100	10		
02958	3DT-100-100-080-150-000-10	W192.2			1	80	0	20	80	9,55	3	-	150	10	
02973	3DT-120-050-048-100-000-12	W192.2		12	0,5	48	0	24	48	11,44	3	-	100	12	
02970	4DT-120-050-060-120-000-12	W192.3				60	0	24	60	11,4	4	-	120	12	
11175	4DT-120-050-090-120-000-12	W192.3				90	0	24	90	11,46	4	-	120	12	
02959	3DT-120-100-036-080-000-12	W192.2			36	0	24	36	11,4	3	-	80	12		
02960	3DT-120-100-048-100-000-12	W192.2			48	0	24	48	11,4	3	-	100	12		
02961	3DT-120-100-060-120-000-12	W192.2							11,4	3	-	120	12		
02962	3DT-120-100-060-150-000-12	W192.2										3	-	150	12
02971	4DT-120-100-060-120-000-12	W192.3										60	0	24	60
07089	3DT-120-100-110-150-000-12	W192.2	12		1	110	0	24	110	11,4	3	-	150	12	



Monolithic tools

Endmill



Hard machining

[4hqz] [4hcqr] ≥ 48 HRC Roughing + Finishing H P K - - - - 98

Medium-hard machining

[kan] [lkan] ≤ 56 HRC Roughing + Finishing H P K M S - - 102

Soft to medium-hard machining

[3esv] [3esvr] [4esv] [4esvr] [4esvc] ≤ 52 HRC Roughing + Finishing H P K - - - - 104

[rdf] ≤ 56 HRC Roughing H P K M S - - 110

[rdg] ≤ 56 HRC Roughing H P K M - - - 112

[4krc] ≤ 52 HRC Roughing H P K M - - - 114

[4rvs] ≤ 52 HRC Roughing + Finishing H P K M S - - 116

[ssf] ≤ 52 HRC Finishing H P - - - - - 118

Aluminum and non-ferrous machining

[2aluw] [3aluw] Roughing + Finishing - - - - S N - 120

[chpc] Roughing + Finishing - - - - S N - 122

[tva] [tvar] Roughing + Finishing - - - - S N - 124

[nesza] Roughing + Finishing - - - - S N - 128

Graphite machining

[drsp] Roughing - - - - - - Graph 130

This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.

All available tools and cutting data can be found online at iklick.aura.tools

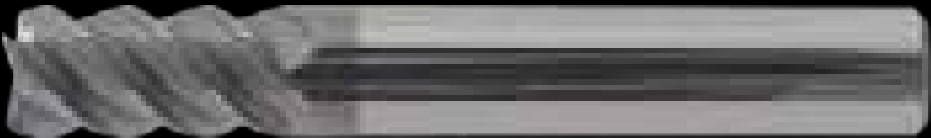


HQC

Series

[4hqc]

[4hqcr]



Cylindrical and reduced neck endmills with four flutes for roughing and finishing hardened steels ≥ 48 HRC.

Areas of application

≥ 48 HRC

1.400N

≥ 1.000N

GG

Trochoidal

Tool variations

Z4

Cylindrical

Radius

Z4

Cylindrical

Chamfer

Z4

Reduced Neck

Radius

Z4

Reduced Neck

Chamfer

HA

Corner radius

Chamfer

Video

58 HRC

Roug.

[4hqc]

D10

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

R

Radius

AT

Working depth

F

Chamfer

α°

Conic

S

Sharp-edged

L1

Total length

L3

Cylindrical free length

Z

Number of teeth

D2

Shank diameter

IC

Internal coolant

L2

Cutting length

SH

Shank type

D3

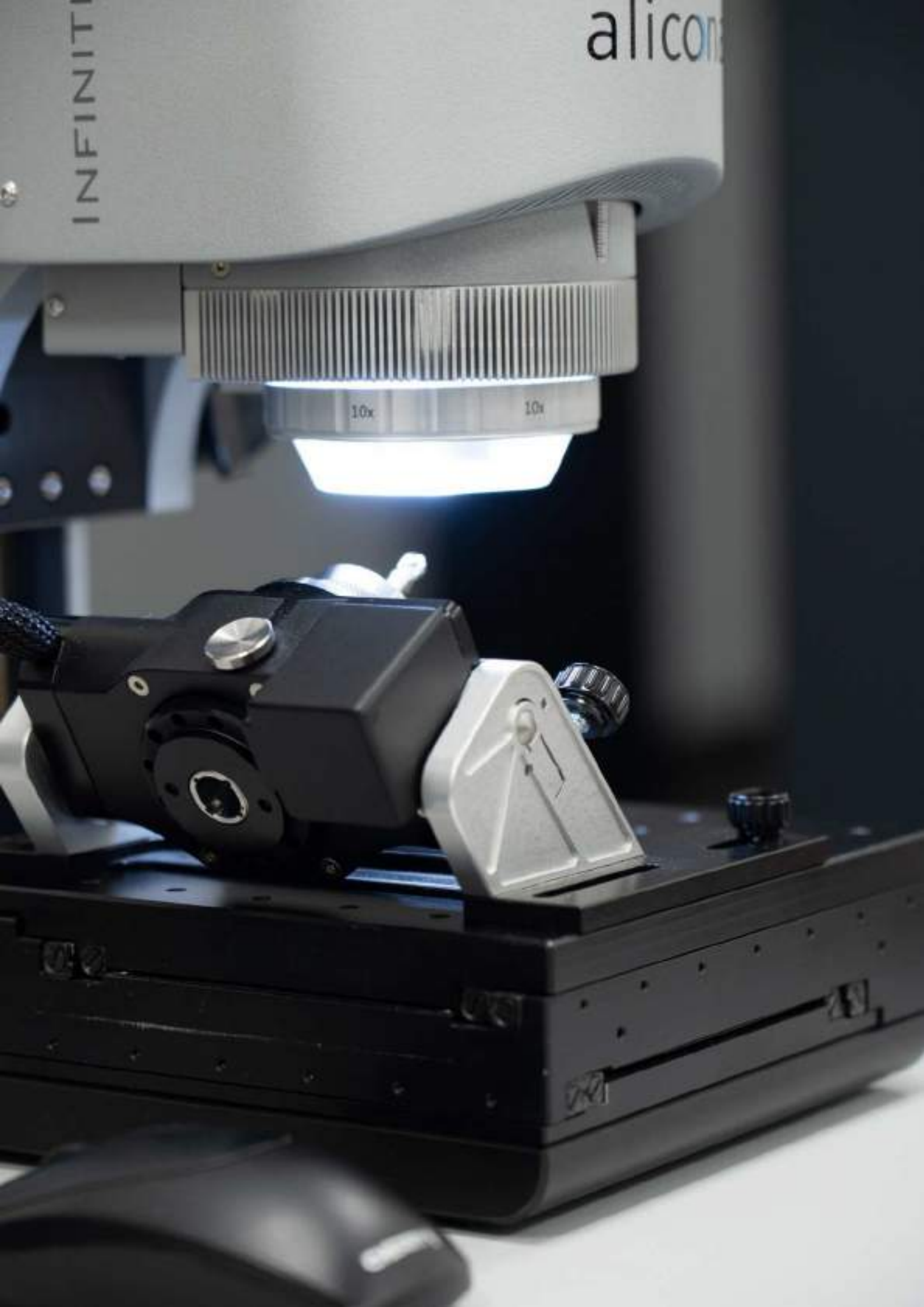
Neck diameter

Regrindable ≥ D6

Modification on request

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2	
19415	4HQCR-030-005-009-060-000-06	3	0,05	9	0	7	9	2,9	4	-	HA	60	6	
19416	4HQCR-030-005-012-060-000-06			12	0	10	12	2,9	4	-	HA	60	6	
19417	4HQCR-030-030-009-060-000-06			9	0	7	9	2,9	4	-	HA	60	6	
19418	4HQCR-030-030-012-060-000-06		0,3	12	0	10	12	2,9	4	-	HA	60	6	
19419	4HQCR-030-050-009-060-000-06			9	0	7	9	2,9	4	-	HA	60	6	
19420	4HQCR-030-050-012-060-000-06		0,5	12	0	10	12	2,9	4	-	HA	60	6	
19421	4HQCR-040-005-010-060-000-06	4	0,05	10	0	8	10	3,9	4	-	HA	60	6	
19422	4HQCR-040-005-015-060-000-06			15	0	13	15	3,9	4	-	HA	60	6	
19423	4HQCR-040-030-010-060-000-06			10	0	8	10	3,9	4	-	HA	60	6	
19424	4HQCR-040-030-015-060-000-06		0,3	15	0	13	15	3,88	4	-	HA	60	6	
19425	4HQCR-040-050-010-060-000-06			10	0	8	10	3,9	4	-	HA	60	6	
19426	4HQCR-040-050-015-060-000-06		0,5	15	0	13	15	3,9	4	-	HA	60	6	
19427	4HQCR-060-005-016-060-000-06	6	0,05	16	0	16	16	6	4	-	HA	60	6	
19428	4HQCR-060-005-026-070-000-06			26	0	26	26	6	4	-	HA	70	6	
19429	4HQCR-060-030-016-060-000-06			16	0	16	16	6	4	-	HA	60	6	
19430	4HQCR-060-030-026-070-000-06		0,3	26	0	26	26	6	4	-	HA	70	6	
19431	4HQCR-060-050-016-060-000-06			16	0	16	16	6	4	-	HA	60	6	
19432	4HQCR-060-050-026-070-000-06		0,5	26	0	26	26	6	4	-	HA	70	6	
19433	4HQCR-080-005-016-064-000-08	8	0,05	16	0	16	16	8	4	-	HA	64	8	
19434	4HQCR-080-005-025-064-000-08			25	0	25	25	8	4	-	HA	64	8	
19435	4HQCR-080-005-036-080-000-08			36	0	36	36	8	4	-	HA	80	8	
19436	4HQCR-080-030-016-064-000-08		0,3	16	0	16	16	8	4	-	HA	64	8	
19437	4HQCR-080-030-025-064-000-08			25	0	25	25	8	4	-	HA	64	8	
19438	4HQCR-080-030-036-080-000-08		0,5	36	0	36	36	8	4	-	HA	80	8	
19439	4HQCR-080-050-016-064-000-08	10		16	0	16	16	8	4	-	HA	64	8	
19440	4HQCR-080-050-025-064-000-08			25	0	25	25	8	4	-	HA	64	8	
19441	4HQCR-080-050-036-080-000-08			36	0	36	36	8	4	-	HA	80	8	
19442	4HQCR-100-050-020-075-000-10	10	0,5	20	0	20	20	10	4	-	HA	75	10	
19443	4HQCR-100-050-025-085-000-10			25	0	25	25	10	4	-	HA	85	10	
19444	4HQCR-100-050-046-100-000-10			46	0	46	46	10	4	-	HA	100	10	
19445	4HQCR-100-100-020-075-000-10		1	20	0	20	20	10	4	-	HA	75	10	
19446	4HQCR-100-100-025-085-000-10			25	0	25	25	10	4	-	HA	85	10	
19447	4HQCR-100-100-046-100-000-10			46	0	46	46	10	4	-	HA	100	10	
19448	4HQCR-120-050-024-084-000-10	12	0,5	24	0	24	24	12	4	-	HA	84	12	
19449	4HQCR-120-050-042-100-000-12			42	0	42	42	12	4	-	HA	100	12	
19450	4HQCR-120-050-056-120-000-12			56	0	56	56	12	4	-	HA	120	12	
19451	4HQCR-120-100-024-084-000-12		1	24	0	24	24	12	4	-	HA	84	12	
19452	4HQCR-120-100-042-100-000-12			42	0	42	42	12	4	-	HA	100	12	
19453	4HQCR-120-100-056-120-000-12			56	0	56	56	12	4	-	HA	120	12	
19454	4HQCR-160-050-048-100-000-16	16	0,5	48	0	48	48	16	4	-	HA	100	16	
19455	4HQCR-160-050-066-130-000-16			66	0	66	66	16	4	-	HA	130	16	
19456	4HQCR-160-100-048-100-000-16			48	0	48	48	16	4	-	HA	100	16	
19457	4HQCR-160-100-066-130-000-16		1	66	0	66	66	16	4	-	HA	130	16	
19458	4HQCR-200-050-045-100-000-20			45	0	45	45	20	4	-	HA	100	20	
19459	4HQCR-200-050-060-125-000-20			60	0	60	60	20	4	-	HA	125	20	
19460	4HQCR-200-050-080-150-000-20	0,5	80	0	80	80	20	4	-	HA	150	20		
19461	4HQCR-200-100-045-100-000-20		1	45	0	45	45	20	4	-	HA	100	20	
19462	4HQCR-200-100-060-125-000-20			60	0	60	60	20	4	-	HA	125	20	
19463	4HQCR-200-100-080-150-000-20			80	0	80	80	20	4	-	HA	150	20	

Code	Art. No.	D1	F	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
04453	4HQC-030-005-009-060-000-06	3	0,05	9	0	7	9	2,88	4	-	HA	60	6
04454	4HQC-030-005-012-060-000-06			12	0	10	12	2,88	4	-	HA	60	6
06487	4HQC-040-005-010-060-000-06	4	0,05	10	0	8	10	3,85	4	-	HA	60	6
06488	4HQC-040-005-015-060-000-06			15	0	13	15	3,88	4	-	HA	60	6
04455	4HQC-060-010-016-060-000-06	6	0,1	16	0	16	0	6	4	-	HA	60	6
04456	4HQC-060-010-026-070-000-06			26	0	26	0	6	4	-	HA	70	6
04457	4HQC-080-010-016-064-000-08	8	0,1	16	0	16	0	8	4	-	HA	64	8
05123	4HQC-080-010-025-064-000-08			25	0	25	0	8	4	-	HA	64	8
06489	4HQC-080-010-036-080-000-08			36	0	36	0	8	4	-	HA	80	8
04458	4HQC-100-010-020-075-000-10	10	0,1	20	0	20	0	10	4	-	HA	75	10
04459	4HQC-100-010-025-085-000-10			25	0	25	0	10	4	-	HA	85	10
04460	4HQC-100-010-046-100-000-10			46	0	46	0	10	4	-	HA	100	10
04461	4HQC-120-010-024-084-000-12	12	0,1	24	0	24	0	12	4	-	HA	84	12
04462	4HQC-120-010-042-100-000-12			42	0	42	0	12	4	-	HA	100	12
04463	4HQC-120-010-056-120-000-12			56	0	56	0	12	4	-	HA	120	12
04464	4HQC-160-010-048-100-000-16	16	0,1	48	0	48	0	16	4	-	HA	100	16
04465	4HQC-160-010-066-130-000-16			66	0	66	0	16	4	-	HA	130	16
04466	4HQC-200-010-045-100-000-20	20	0,1	45	0	45	0	20	4	-	HA	100	20
04467	4HQC-200-010-060-125-000-20			60	0	60	0	20	4	-	HA	125	20
04468	4HQC-200-010-080-150-000-20			80	0	80	0	20	4	-	HA	150	20

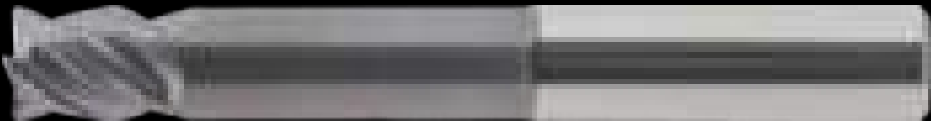


L / KAN

Series

[kan]

[lkan]



Reduced neck endmills with four flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Tool variations

Z 4

Reduced Neck

HA

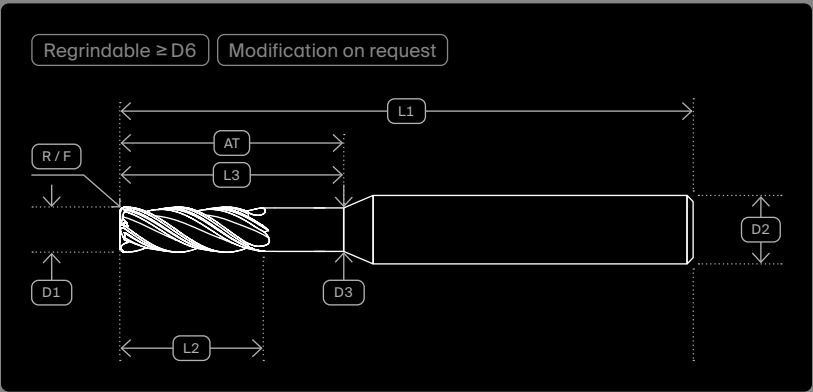
⌀

⌀

Corner radius

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2	
01481	KAN-030-010-012-060-000-06	W108	3	0,1	12	0	6	12	2,8	4	-	60	6	
01237	KAN-030-010-020-060-000-06	W108			20	0	6	20	2,83	4	-	60	6	
11917	KAN-030-010-025-060-000-06	W108			25	0	6	25	2,83	4	-	60	6	
01236	KAN-040-010-020-060-000-06	W108		0,1	20	0	6	20	3,8	4	-	60	6	
02648	KAN-040-010-025-060-000-06	W108			25	0	6	25	3,83	4	-	60	6	
00195	KAN-040-050-020-060-000-06	W108			20	0	6	20	3,83	4	-	60	6	
00994	KAN-040-100-020-060-000-06	W108	4	1	20	0	6	20	3,8	4	-	60	6	
00995	KAN-040-100-030-080-000-06	W108			30	0	6	30	3,83	4	-	80	6	
03111	KAN-050-010-025-060-000-06	W108			0,1	25	0	8	25	4,8	4	-	60	6
04880	KAN-050-050-020-060-000-06	W108	5	0,5	20	0	5	20	4,83	4	-	60	6	
01235	KAN-060-010-020-060-000-06	W108			20	0	8	20	5,83	4	-	60	6	
03110	KAN-060-010-025-060-000-06	W108			0,1	25	0	8	25	5,8	4	-	60	6
00716	KAN-060-050-020-060-000-06	W108		0,5	20	0	8	20	5,83	4	-	60	6	
01191	KAN-060-100-020-060-000-06	W108			1	20	0	8	20	5,8	4	-	60	6
03102	LKAN-060-150-025-100-000-06	W121			25	0	8	25	5,8	4	-	100	6	
04411	LKAN-060-150-040-075-000-06	W121	6	1,5	40	0	8	40	5,8	4	-	75	6	
00206	KAN-060-200-020-060-000-06	W108			2	20	0	8	20	5,83	4	-	60	6
00717	KAN-080-050-035-064-000-08	W108			0,5	35	0	10	35	7,8	4	-	64	8
00668	KAN-080-100-035-064-000-08	W108		1	35	0	10	35	7,83	4	-	64	8	
01201	LKAN-080-100-050-100-000-08	W121			50	0	10	50	7,83	4	-	100	8	
00204	KAN-080-200-035-064-000-08	W108			2	35	0	10	35	7,8	4	-	64	8
00016	KAN-100-050-035-075-000-10	W108		0,5	35	0	10	35	9,7	4	-	75	10	
11893	LKAN-100-050-040-085-000-10	W121			40	0	12	40	9,7	4	-	85	10	
11894	LKAN-100-050-050-100-000-10	W121			50	0	12	50	9,7	4	-	100	10	
11895	LKAN-100-050-060-100-000-10	W121		0,5	60	0	12	60	9,7	4	-	100	10	
00018	KAN-100-100-035-075-000-10	W108			35	0	10	35	9,73	4	-	75	10	
11896	LKAN-100-100-040-085-000-10	W121			40	0	12	40	9,7	4	-	85	10	
00034	LKAN-100-100-050-120-000-10	W121		1	50	0	12	50	9,7	4	-	120	10	
11897	LKAN-100-100-060-100-000-10	W121			60	0	12	60	9,73	4	-	100	10	
00775	LKAN-100-100-082-150-000-10	W121			82	0	12	82	9,73	4	-	150	10	
04426	LKAN-100-100-105-150-000-10	W121	10	1	105	0	12	105	9,73	4	-	150	10	
00020	KAN-120-050-045-100-000-12	W108		0,5	45	0	12	45	11,7	4	-	100	12	
11898	LKAN-120-050-060-120-000-12	W121			60	0	14	60	11,7	4	-	120	12	
11899	LKAN-120-050-082-150-000-12	W121			82	0	14	82	11,7	4	-	150	12	
00021	KAN-120-100-045-100-000-12	W108		1	45	0	12	45	11,7	4	-	100	12	
00468	LKAN-120-100-060-120-000-12	W121			60	0	14	60	11,7	4	-	120	12	
00208	LKAN-120-100-082-150-000-12	W121			82	0	14	82	11,7	4	-	150	12	
04427	LKAN-120-100-105-150-000-12	W121	12	1	105	0	14	105	11,73	4	-	150	12	
00328	LKAN-160-100-080-130-000-16	W121	16	1	80	0	50	80	15,73	4	-	130	16	
01278	LKAN-160-100-100-150-000-16	W121			100	0	40	100	15,7	4	-	150	16	
00327	LKAN-200-100-100-150-000-20	W121			100	0	30	100	19,5	4	-	150	20	
00957	LKAN-200-100-105-150-000-20	W121	20	1	105	0	50	105	19,5	4	-	150	20	
01190	LKAN-250-100-100-150/60	W121		1	100	0	60	100	24,5	4	-	150	25	
03844	LKAN-250-100-115-180-000-25	W121			115	0	105	115	24,5	4	-	180	25	
00350	LKAN-250-100-125-180-000-25	W121			125	0	70	125	24,5	4	-	180	25	
01111	LKAN-250-100-160-220-000-25	W121	25	1	160	0	80	160	24,55	4	-	220	25	
05010	LKAN-320-100-170-230-000-32	W121	32	1	170	0	155	170	31	4	-	230	32	

ESV / R

Series

[3esv]

[3esvr]

[4esv]

[4esvr]

[4esvc]



Cylindrical and reduced neck endmills with three or four flutes for roughing and finishing hardened and unhardened steels ≤ 52 HRC.

Areas of application

≤ 52 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

Trochoidal

Tool variations

Z3

Reduced Neck

Z3

Cylindrical

Z4

Reduced Neck

Z4

Cylindrical

HB

HA

⚡

⚡

Corner radius

Sharp-edged

Video

860 N

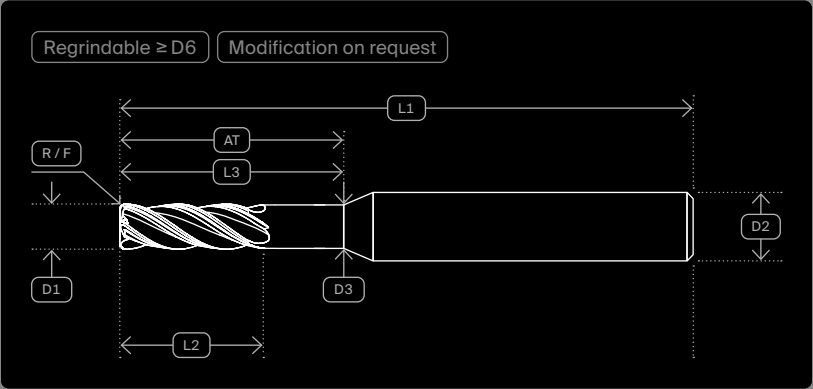
Roug.

[4esv]

D10

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
19751	4ESVR-030-100-009-051-000-06	W118	3	1	9	0	6	9	2,9	4	-	HB	51	6
07757	4ESVR-040-050-012-051-000-06	W118	4	0,5	12	0	8	12	3,84	4	-	HB	51	6
19753	4ESVR-040-100-012-051-000-06	W118		1	12	0	8	12	3,8	4	-	HB	51	6
07771	4ESVR-050-050-015-051-000-06	W118	5	0,5	15	0	10	15	4,65	4	-	HB	51	6
19756	4ESVR-050-100-015-051-000-06	W118		1	15	0	10	15	4,65	4	-	HB	51	6
02160	4ESVR-060-025-018-060-000-06	W118		0,25	18	0	12	18	5,6	4	-	HB	60	6
02159	4ESVR-060-050-018-060-000-06	W118		0,5	18	0	12	18	5,6	4	-	HB	60	6
00388	3ESVR-060-100-015-058-000-06	W101			15	0	15	0	6	3	-	HB	58	6
04566	4ESVR-060-100-018-060-000-06	W118			18	0	12	18	5,6	4	-	HB	60	6
19777	3ESVR-060-100-025-058-000-06	W101		1	25	0	15	25	5,6	3	-	HB	58	6
06730	4ESVR-060-150-018-060-000-06	W118		1,5	18	0	12	18	5,6	4	-	HA	60	6
11505	4ESVR-060-200-018-060-000-06	W118			18	0	12	18	5,6	4	-	HB	60	6
19778	3ESVR-060-200-025-058-000-06	W101		2	25	0	15	25	5,6	3	-	HB	58	6
02158	4ESVR-080-025-024-064-000-08	W118		0,25	24	0	16	24	7,65	4	-	HB	64	8
02157	4ESVR-080-050-024-064-000-08	W118		0,5	24	0	16	24	7,65	4	-	HB	64	8
00389	3ESVR-080-100-017-064-000-08	W101			17	0	17	0	8	3	-	HB	64	8
02156	4ESVR-080-100-024-064-000-08	W118		1	24	0	16	24	7,65	4	-	HB	64	8
06319	4ESVR-080-150-024-064-000-08	W118		1,5	24	0	16	24	7,6	4	-	HB	64	8
06320	4ESVR-080-200-024-064-000-08	W118			24	0	16	24	7,65	4	-	HB	64	8
19779	3ESVR-080-200-030-064-000-08	W101		2	30	0	17	30	7,6	3	-	HB	64	8
19780	3ESVR-080-300-030-064-000-08	W101		3	30	0	17	30	7,6	3	-	HB	64	8
02161	4ESVR-100-025-030-075-000-10	W118		0,25	30	0	20	30	9,5	4	-	HB	75	10
02162	4ESVR-100-050-030-075-000-10	W118		0,5	30	0	20	30	9,55	4	-	HB	75	10
00390	3ESVR-100-100-022-073-000-10	W101			22	0	22	0	10	3	-	HB	73	10
02163	4ESVR-100-100-030-075-000-10	W118		1	30	0	20	30	9,65	4	-	HB	75	10
06358	3ESVR-100-200-022-073-000-10	W101			22	0	22	0	10	3	-	HA	73	10
06322	4ESVR-100-200-030-075-000-10	W118			30	0	20	30	9,5	4	-	HA	75	10
19782	3ESVR-100-200-035-073-000-10	W101		2	35	0	22	35	9,5	3	-	HB	73	10
06359	3ESVR-100-300-022-073-000-10	W101			22	0	22	0	10	3	-	HA	73	10
19761	4ESVR-100-300-030-075-000-10	W118			30	0	20	30	9,5	4	-	HB	75	10
19783	3ESVR-100-300-035-073-000-10	W101		3	35	0	22	35	9,65	3	-	HB	73	10
02164	4ESVR-120-025-036-084-000-12	W118		0,25	36	0	24	36	11,55	4	-	HB	84	12
02165	4ESVR-120-050-036-084-000-12	W118		0,5	36	0	24	36	11,55	4	-	HB	84	12
19784	3ESVR-120-100-025-084-000-12	W101			25	0	25	0	12	3	-	HB	84	12
02166	4ESVR-120-100-036-084-000-12	W118			36	0	24	36	11,5	4	-	HB	84	12
00565	3ESVR-120-100-040-084-000-12	W101		1	40	0	25	40	11,5	3	-	HB	84	12
19786	3ESVR-120-200-025-084-000-12	W101			25	0	25	0	12	3	-	HB	84	12
19787	3ESVR-120-200-035-084-000-12	W101			35	0	25	35	11,5	3	-	HB	84	12
06341	4ESVR-120-200-036-084-000-12	W118		2	36	0	24	36	11,55	4	-	HB	84	12
19788	3ESVR-120-300-025-084-000-12	W101			25	0	25	0	12	3	-	HB	84	12
19789	3ESVR-120-300-035-084-000-12	W101			35	0	25	35	11,55	3	-	HB	84	12
19765	4ESVR-120-300-036-084-000-12	W118		3	36	0	24	36	11,5	4	-	HB	84	12
19767	4ESVR-120-400-036-084-000-12	W118		4	36	0	24	36	11,5	4	-	HB	84	12

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
02169	4ESVR-160-050-048-100-000-16	W118	16	0,5	48	0	32	48	15,55	4	-	HB	100	16
02170	4ESVR-160-100-048-100-000-16	W118		1	48	0	32	48	15,38	4	-	HB	100	16
01359	3ESVR-160-100-055-093-000-16	W101			55	0	32	55	15,55	3	-	HB	93	16
06342	4ESVR-160-150-048-100-000-16	W118		1,5	48	0	32	48	15,55	4	-	HA	100	16
19791	3ESVR-160-200-032-093-000-16	W101		2	32	0	32	0	16	3	-	HB	93	16
02171	4ESVR-160-200-048-100-000-16	W118			48	0	32	48	15,3	4	-	HB	100	16
01360	3ESVR-160-200-055-093-000-16	W101		2	55	0	32	55	15,5	3	-	HB	93	16
06343	4ESVR-160-300-048-100-000-16	W118		3	48	0	32	48	15,38	4	-	HA	100	16
02172	4ESVR-200-050-060-125-000-20	W118		0,5	60	0	40	60	19,38	4	-	HB	125	20
19792	3ESVR-200-100-038-105-000-20	W101		1	38	0	38	0	20	3	-	HB	105	20
02173	4ESVR-200-100-060-125-000-20	W118			60	0	40	60	19,3	4	-	HB	125	20
19793	3ESVR-200-200-038-105-000-20	W101		2	38	0	38	0	20	3	-	HB	105	20
06347	4ESVR-200-200-060-125-000-20	W118			60	0	40	60	19,38	4	-	HB	125	20
05713	3ESVR-200-300-038-105-000-20	W101		3	38	0	38	0	20	3	-	HA	105	20
06348	4ESVR-200-300-060-125-000-20	W118			60	0	40	60	19,3	4	-	HA	125	20
06349	4ESVR-200-400-060-125-000-20	W118	20	4	60	0	40	60	19,3	4	-	HA	125	20

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
05729	4ESV-030-010-006-051-000-06	W116	3	0	6	0	4,5	6	2,93	4	-	HB	51	6
05732	4ESV-030-010-009-051-000-06	W116			9	0	6	9	2,93	4	-	HB	51	6
00627	3ESV-030-000-010-058-000-06	W100			13	0	10	13	2,9	3	-	HB	58	6
05730	4ESV-040-010-008-051-000-06	W116	4	0	8	0	6	8	3,8	4	-	HB	51	6
05733	4ESV-040-010-012-051-000-06	W116			12	0	8	12	3,84	4	-	HB	51	6
00456	3ESV-040-000-010-058-000-06	W100			13	0	10	13	3,8	3	-	HB	58	6
10304	4ESV-040-010-015-060-000-04	W116	5	0	15	0	15	15	3,8	4	-	HB	60	4
05731	4ESV-050-010-010-051-000-06	W116			10	0	7,5	10	4,8	4	-	HB	51	6
00413	3ESV-050-000-010-058-000-06	W100			13	0	10	13	4,8	3	-	HB	58	6
05734	4ESV-050-010-015-051-000-06	W116	6	0	15	0	10	15	4,65	4	-	HB	51	6
02136	4ESV-060-010-012-051-000-06	W116			12	0	9	12	5,6	4	-	HB	51	6
00420	3ESV-060-000-015-058-000-06	W100			15	0	15	0	6	3	-	HB	58	6
01398	4ESV-060-010-018-060-000-06	W116			18	0	12	18	5,6	4	-	HB	60	6
21415	4ESVC-060-010-018-060-000-06	W116.1							5,65	4	-	HA	60	6
19740	3ESV-060-000-020-058-000-06	W100			20	0	15	20	5,6	3	-	HB	58	6
19741	3ESV-060-000-025-058-000-06	W100			25	0	15	25	5,6	3	-	HB	58	6
21757	4ESVC-060-010-030-070-000-06	W116.1			5,6	4	-	HA	70	6				
04874	4ESV-060-010-030-070-000-06	W116							5,65	4	-	HA	70	6
02151	4ESV-080-015-016-059-000-08	W116	8	0	16	0	12	16	7,6	4	-	HB	59	8
00383	3ESV-080-000-017-064-000-08	W100			17	0	17	0	8	3	-	HB	64	8
21417	4ESVC-080-015-024-064-000-08	W116.1			7,6	4	-	HA	64	8				
01399	4ESV-080-015-024-064-000-08	W116							7,65	4	-	HB	64	8
19743	3ESV-080-000-030-064-000-08	W100			30	0	17	30	7,65	3	-	HB	64	8
19734	4ESV-080-015-040-080-000-08	W116			40	0	16	40	7,65	4	-	HB	80	8
01542	3ESV-090-000-020-073-000-10	W100	9	0	20	0	20	0	9	3	-	HB	73	10
02152	4ESV-100-020-020-067-000-10	W116	10	0	20	0	15	20	9,55	4	-	HB	67	10
00384	3ESV-100-000-022-073-000-10	W100			22	0	22	0	10	3	-	HB	73	10
01400	4ESV-100-020-030-075-000-10	W116			30	0	20	30	9,65	4	-	HA	75	10
21419	4ESVC-100-020-030-075-000-10	W116.1							9,65	4	-	HA	75	10
19744	3ESV-100-000-032-073-000-10	W100			32	0	22	32	9,5	3	-	HB	73	10
19745	3ESV-100-000-035-073-000-10	W100			35	0	22	35	9,65	3	-	HB	73	10
19735	4ESV-100-020-050-090-000-10	W116			50	0	20	50	9,65	4	-	HB	90	10
02153	4ESV-120-025-024-074-000-12	W116	12	0	24	0	18	24	11,5	4	-	HB	74	12
00385	3ESV-120-000-025-084-000-12	W100			25	0	25	0	12	3	-	HB	84	12
19746	3ESV-120-000-035-084-000-12	W100			35	0	25	35	11,5	3	-	HB	84	12
01401	4ESV-120-025-036-084-000-12	W116			36	0	24	36	11,5	4	-	HA	84	12
21421	4ESVC-120-025-036-084-000-12	W116.1							11,5	4	-	HA	84	12
19736	4ESV-120-025-060-110-000-12	W116			60	0	24	60	11,55	4	-	HB	110	12
19732	4ESV-140-025-042-090-000-14	W116	14	0	42	0	28	42	13,55	4	-	HB	90	14
19737	4ESV-140-025-070-120-000-14	W116			70	0	28	70	13,5	4	-	HB	120	14
02154	4ESV-160-030-032-093-000-16	W116			32	0	24	32	15,55	4	-	HB	93	16
00386	3ESV-160-000-032-093-000-16	W100							16	3	-	HB	93	16
01402	4ESV-160-030-048-100-000-16	W116			48	0	32	48	15,55	4	-	HA	100	16
22065	4ESVC-160-030-048-100-000-16	W116.1							15,55	4	-	HA	100	16
05291	4ESV-160-030-080-130-000-16	W116			32	0	32	80	15,55	4	-	HA	130	16
20834	4ESV-160-030-080-130-000-16/SL50	W116							15,55	4	-	HA	130	16

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
19731	4ESV-180-030-036-093-000-18	W116	18	0	36	0	27	36	17,3	4	-	HB	93	18
19733	4ESV-180-030-054-105-000-18	W116			54	0	36	54	17,3	4	-	HB	105	18
19738	4ESV-180-030-090-140-000-18	W116			90	0	36	90	17,3	4	-	HB	140	18
02155	4ESV-200-035-040-100-000-20	W116	20	0	40	0	30	40	19,38	4	-	HB	100	20
01403	4ESV-200-035-060-125-000-20	W116					40	60	19,38	4	-	HB	125	20
19748	3ESV-200-000-060-125-000-20	W100			60	0	60	0	20	3	-	HB	125	20
19739	4ESV-200-035-100-150-000-20	W116	20	0	100	0	40	100	19,38	4	-	HB	150	20



[rdf]



Cylindrical endmills with five flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Trochoidal

Tool variations

Z 5

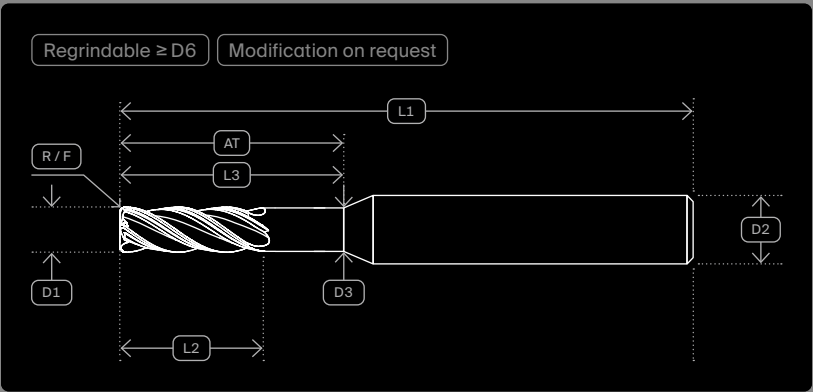
Cylindrical

HB

Corner radius

 All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
19493	RDF-060-025-014-058-000-06	6	0,25	14	0	14	0	6	5	-	HB	58	6
20514	RDF-060-025-020-060-000-06			20	0	20	0	6	5	-	HB	60	6
19494	RDF-060-050-014-058-000-06		0,5	14	0	14	0	6	5	-	HB	58	6
20515	RDF-060-050-020-060-000-06			20	0	20	0	6	5	-	HB	60	6
19495	RDF-080-025-019-064-000-08	8	0,25	19	0	19	0	8	5	-	HB	64	8
20516	RDF-080-025-026-064-000-08			26	0	26	0	8	5	-	HB	64	8
19496	RDF-080-050-019-064-000-08		0,5	19	0	19	0	8	5	-	HB	64	8
20517	RDF-080-050-026-064-000-08			26	0	26	0	8	5	-	HB	64	8
17943	RDF-100-050-024-073-000-10	10	0,5	24	0	24	0	10	5	-	HB	73	10
20518	RDF-100-050-032-075-000-10			32	0	32	0	10	5	-	HB	75	10
19497	RDF-100-100-024-073-000-10		1	24	0	24	0	10	5	-	HB	73	10
20519	RDF-100-100-032-075-000-10			32	0	32	0	10	5	-	HB	75	10
19498	RDF-120-050-030-084-000-12	12	0,5	30	0	30	0	12	5	-	HB	84	12
20520	RDF-120-050-043-090-000-12			43	0	43	0	12	5	-	HB	90	12
19499	RDF-120-100-030-084-000-12		1	30	0	30	0	12	5	-	HB	84	12
20521	RDF-120-100-043-090-000-12			43	0	43	0	12	5	-	HB	90	12
19500	RDF-160-100-040-093-000-16	16	1	40	0	40	0	16	5	-	HB	93	16
20522	RDF-160-100-052-110-000-16			52	0	52	0	16	5	-	HB	110	16

[rdg]



Cylindrical and reduced neck endmills with six flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

Trochoidal

Tool variations

Z 6

Reduced Neck

Z 6

Cylindrical

HB

With chip breaker

Chamfer

Video

1.1730

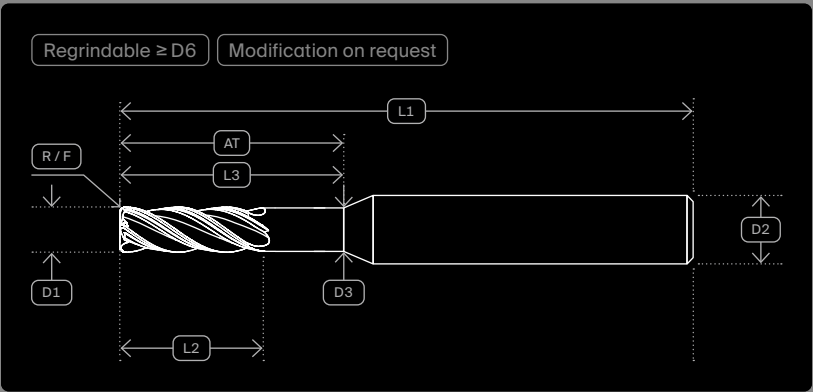
Rough.

[rdg]

D12 R3

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



Code	Art. No.	D1	F	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
24435	RDG-060-010-019-057-000-06	6	0,1	19	0	13	19	5,9	6	-	HB	57	6
24436	RDG-060-010-024-062-000-06			24	0	19	24	5,9	6	-	HB	62	6
24437	RDG-060-010-032-070-000-06			32	0	32	-	6	6	-	HB	70	6
24438	RDG-080-020-025-063-000-08	8	0,2	25	0	19	25	7,8	6	-	HB	63	8
24439	RDG-080-020-030-068-000-08			30	0	25	30	7,8	6	-	HB	68	8
24440	RDG-080-020-042-080-000-08			42	0	42	-	8	6	-	HB	80	8
24441	RDG-100-020-030-072-000-10	10	0,2	30	0	22	30	9,8	6	-	HB	72	10
24442	RDG-100-020-038-080-000-10			38	0	31	38	9,8	6	-	HB	80	10
24443	RDG-100-020-052-100-000-10			52	0	52	-	10	6	-	HB	100	10
24444	RDG-120-030-036-083-000-12	12	0,3	36	0	26	36	11,7	6	-	HB	83	12
24445	RDG-120-030-046-093-000-12			46	0	37	46	11,7	6	-	HB	93	12
24446	RDG-120-030-062-116-000-12			62	0	62	-	12	6	-	HB	116	12
24448	RDG-160-030-042-092-000-16	16	0,3	42	0	32	42	15,5	6	-	HB	92	16
24383	RDG-160-030-058-108-000-16			58	0	49	58	15,5	6	-	HB	108	16
24762	RDG-160-030-062-120-000-16			62	0	62	-	16	6	-	HB	120	16
24449	RDG-160-030-082-140-000-16	20	0,3	82	0	82	-	16	6	-	HB	140	16
24451	RDG-200-030-052-103-000-20			52	0	38	52	19,5	6	-	HB	103	20
24452	RDG-200-030-074-126-000-20			74	0	61	74	19,5	6	-	HB	126	20
24763	RDG-200-030-082-145-000-20			82	0	82	-	20	6	-	HB	145	20
24453	RDG-200-030-102-163-000-20			102	0	102	-	20	6	-	HB	163	20

[krc]



Cylindrical and reduced neck endmills with four flutes for roughing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

Tool variations

Z 4

Reduced Neck

Z 4

Cylindrical

HA

Ø

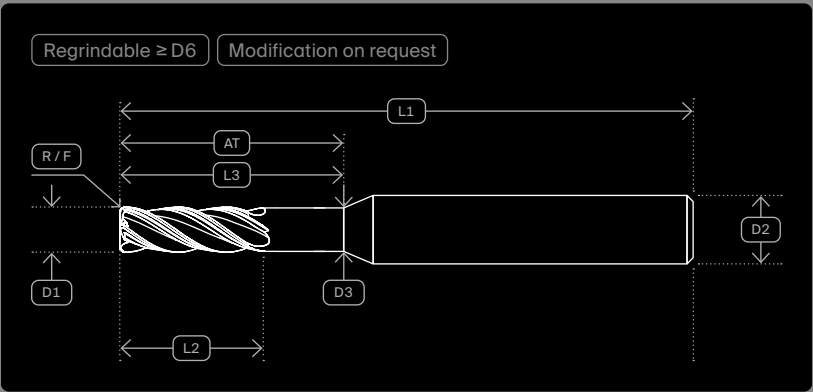
Ø

Corner radius

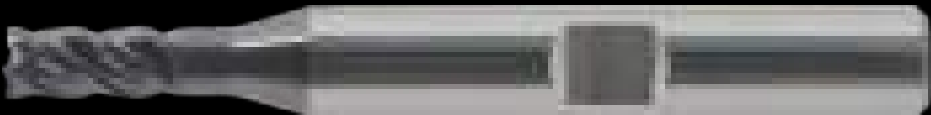
Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
00186	4KRC-040-040-007-050-000-04	4	0,4	7	0	7	-	4	4	-	HA	50	4
06395	4KRC-040-100-007-050-000-04		1	7	0	7	-	4	4	-	HA	50	4
02505	4KRC-040-100-012-060-000-06			15	0	12	15	3,8	4	-	HA	60	6
00187	4KRC-050-050-008-060-000-06	5	0,5	10	0	8	10	4,8	4	-	HA	60	6
00188	4KRC-060-050-015-060-000-06	6	0,5	15	0	15	-	6	4	-	HA	60	6
00189	4KRC-060-100-015-060-000-06		1	15	0	15	-	6	4	-	HA	60	6
02507	4KRC-060-150-015-060-000-06		1,5	15	0	15	-	6	4	-	HA	60	6
00190	4KRC-080-050-017-064-000-08	8	0,5	17	0	17	-	8	4	-	HA	64	8
00191	4KRC-080-100-017-064-000-08		1	17	0	17	-	8	4	-	HA	64	8
06400	4KRC-080-150-017-064-000-08		1,5	17	0	17	-	8	4	-	HA	64	8
02509	4KRC-080-200-017-064-000-08	10	2	17	0	17	-	8	4	-	HA	64	8
11159	4KRC-080-300-017-064-000-08		3	17	0	17	-	8	4	-	HA	64	8
00192	4KRC-100-050-022-075-000-10		0,5	22	0	22	-	10	4	-	HA	75	10
00648	4KRC-100-100-022-075-000-10	12	1	22	0	22	-	10	4	-	HA	75	10
02511	4KRC-100-200-022-075-000-10		2	22	0	22	-	10	4	-	HA	75	10
06405	4KRC-100-300-022-075-000-10		3	22	0	22	-	10	4	-	HA	75	10
00193	4KRC-120-050-025-084-000-12	16	0,5	25	0	25	-	12	4	-	HA	84	12
06406	4KRC-120-080-025-084-000-12		0,8	25	0	25	-	12	4	-	HA	84	12
00194	4KRC-120-100-025-084-000-12		1	25	0	25	-	12	4	-	HA	84	12
06407	4KRC-120-150-025-084-000-12	12	1,5	25	0	25	-	12	4	-	HA	84	12
02512	4KRC-120-200-025-084-000-12		2	25	0	25	-	12	4	-	HA	84	12
03834	4KRC-120-300-025-084-000-12		3	25	0	25	-	12	4	-	HA	84	12
06403	4KRC-160-080-032-100-000-16	16	0,8	32	0	32	-	16	4	-	HA	100	16
06411	4KRC-160-100-032-100-000-16		1	32	0	32	-	16	4	-	HA	100	16
20055	4KRC-160-150-032-100-000-16		1,5	32	0	32	-	16	4	-	HA	100	16
04950	4KRC-160-300-032-100-000-16	16	3	32	0	32	-	16	4	-	HA	100	16

All available dimensions and CAM export data can be found online at [iklick.aura.tools](#)

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



[rvs]



Reduced neck endmills with four flutes for roughing and finishing hardened and unhardened steels ≤ 52 HRC.

Areas of application

≤ 52 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Trochoidal

Tool variations

Z 4

Reduced Neck

HB

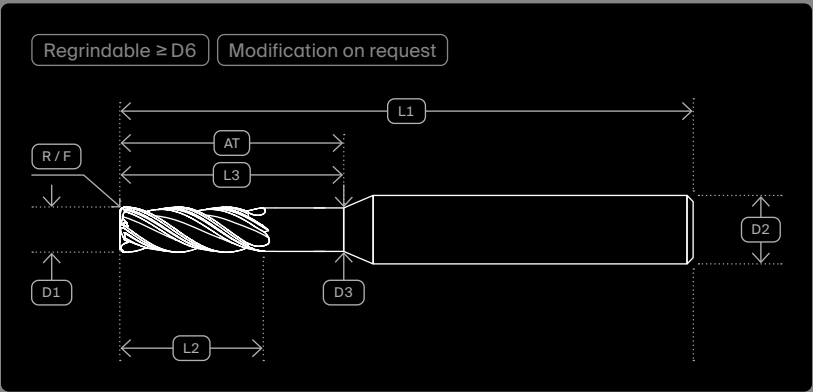
Ø

Ø

Corner radius

 All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



Code	Art. No.	D1	F	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
05735	4RVS-030-015-009-051-000-06	3	0,15	9	0	6	9	2,9	4	-	HB	51	6
05736	4RVS-040-015-012-051-000-06	4	0,15	12	0	8	12	3,84	4	-	HB	51	6
05737	4RVS-050-015-015-051-000-06	5	0,15	15	0	10	15	4,84	4	-	HB	51	6
05738	4RVS-060-025-018-058-000-06	6	0,25	18	0	12	18	5,65	4	-	HB	58	6
05739	4RVS-080-030-024-064-000-08	8	0,3	24	0	16	24	7,65	4	-	HB	64	8
05740	4RVS-100-040-030-073-000-10	10	0,4	30	0	20	30	9,65	4	-	HB	73	10
05741	4RVS-120-050-036-084-000-12	12	0,5	36	0	24	36	11,55	4	-	HB	84	12
05742	4RVS-160-050-048-100-000-16	16	0,5	48	0	32	48	15,3	4	-	HB	100	16

[ssf]



Cylindrical and reduced neck endmills with four to six flutes for finishing hardened and unhardened steels ≤ 52 HRC.

Areas of application

≤ 52 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

Tool variations

Z 4

Reduced Neck

Z 5

Reduced Neck

Z 6

Reduced Neck

HA

Scharfkantig

Video

40 HRC

Rough.

[ssf]

D12

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

SH

Shank type

R

Radius

F

Chamfer

S

Sharp-edged

L3

Cylindrical free length

D2

Shank diameter

L2

Cutting length

D3

Neck diameter

Regrindable ≥ D6

Modification on request

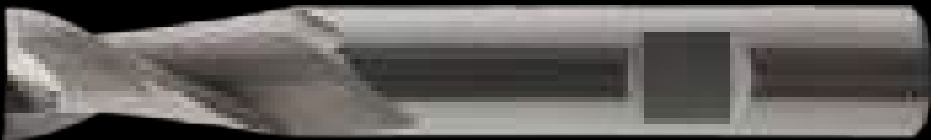
Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
02522	SSF-030-000-006-051-000-06	3	0	7,5	0	6	7,5	2,88	4	-	HA	51	6
02521	SSF-030-000-009-051-000-06			10,5	0	9	10,5	2,85	4	-	HA	51	6
00639	SSF-040-000-008-051-000-06	4	0	10	0	8	10	3,88	4	-	HA	51	6
00640	SSF-040-000-012-051-000-06			14	0	12	14	3,88	4	-	HA	51	6
00641	SSF-050-000-010-060-000-06	5	0	12,5	0	10	12,5	4,85	4	-	HA	60	6
00642	SSF-050-000-015-060-000-06			17,5	0	15	17,5	4,83	4	-	HA	60	6
00637	SSF-060-000-012-060-000-06	6	0	15	0	12	15	5,8	5	-	HA	60	6
00643	SSF-060-000-018-060-000-06			21	0	18	21	5,83	4	-	HA	60	6
00644	SSF-080-000-016-064-000-08	8	0	20	0	16	20	7,73	5	-	HA	64	8
00632	SSF-080-000-024-070-000-08			28	0	24	28	7,73	4	-	HA	70	8
00633	SSF-100-000-020-075-000-10	10	0	25	0	20	25	9,65	5	-	HA	75	10
00645	SSF-100-000-030-080-000-10			35	0	30	35	9,69	4	-	HA	80	10
00425	SSF-120-000-024-084-000-12	12	0	30	0	24	30	11,65	5	-	HA	84	12
02520	SSF-120-000-036-090-000-12			42	0	36	42	11,65	4	-	HA	90	12
00426	SSF-160-000-032-093-000-16	16	0	40	0	32	40	15,55	6	-	HA	93	16
00419	SSF-160-000-048-100-000-16			56	0	48	56	15,55	5	-	HA	100	16
00418	SSF-200-000-040-100-000-20	20	0	50	0	40	50	19,56	5	-	HA	100	20
02683	SSF-200-000-060-125-000-20			70	0	60	70	19,56	5	-	HA	125	20
02754	SSF-200-000-080-150-000-20	25	0	110	0	80	110	19,56	5	-	HA	150	20
06388	SSF-250-000-090-150-000-25			100	0	90	100	24,56	6	-	HA	150	25

ALUW

Series

[2aluw]

[3aluw]



Cylindrical endmills with two or three flutes for roughing and finishing non-ferrous materials.

Areas of application

ALU

Cu

AlSi

Titan

Tool variations

Z2

Cylindrical

Z3

Cylindrical

HB

Sharp-edged

Video

ALU

Rough.

[3aluw]

D8

All available dimensions and CAM export data can be found online at [iklick.aura.tools](#)

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

SH

Shank type

R

Radius

F

Chamfer

S

Sharp-edged

L3

Cylindrical free length

D2

Shank diameter

L2

Cutting length

D3

Neck diameter

Regrindable ≥ D6

Modification on request

R / F

D1

L2

D3

L1

AT

L3

D2

120

Tool

Endmill

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach

+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

N

S

Roughing

Finishing

[2aluw]

[3aluw]

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
02364	ALUW2-030-000-010-060-000-06	W119								2	-	HB	60	6
02374	ALUW3-030-000-010-060-000-06	W120	3	0	13	0	10	13	2,7	3	-	HB	60	6
02365	ALUW2-040-000-010-060-000-06	W119								2	-	HB	60	6
02375	ALUW3-040-000-010-060-000-06	W120	4	0	13	0	10	13	3,7	3	-	HB	60	6
02366	ALUW2-050-000-010-060-000-06	W119								2	-	HB	60	6
02376	ALUW3-050-000-010-060-000-06	W120	5	0	13	0	10	13	4,7	3	-	HB	60	6
02368	ALUW2-060-000-015-060-000-06	W119						0	6	2	-	HB	60	6
02377	ALUW3-060-000-015-060-000-06	W120	6	0	15	0	15	15	6	3	-	HB	60	6
02369	ALUW2-080-000-017-064-000-08	W119						0	8	2	-	HB	64	8
02378	ALUW3-080-000-017-064-000-08	W120			17	0	17	17	8	3	-	HB	64	8
04707	ALUW2-080-000-030-064-000-08	W119							7,5	2	-	HB	64	8
04712	ALUW3-080-000-030-064-000-08	W120	8	0	30	0	17	30	7,6	3	-	HB	64	8
02370	ALUW2-100-000-022-075-000-10	W119						0	10	2	-	HB	75	10
02379	ALUW3-100-000-022-075-000-10	W120			22	0	22	22	10	3	-	HB	75	10
04708	ALUW2-100-000-030-075-000-10	W119								2	-	HB	75	10
04713	ALUW3-100-000-030-075-000-10	W120	10	0	30	0	22	30	9,5	3	-	HB	75	10
02371	ALUW2-120-000-025-084-000-12	W119						0	12	2	-	HB	84	12
02380	ALUW3-120-000-025-084-000-12	W120			25	0	25	25	12	3	-	HB	84	12
04709	ALUW2-120-000-030-084-000-12	W119							11,5	2	-	HB	84	12
04714	ALUW3-120-000-030-084-000-12	W120	12	0	30	0	25	30	11,6	3	-	HB	84	12
02372	ALUW2-160-000-032-100-000-16	W119						0	16	2	-	HB	100	16
02381	ALUW3-160-000-032-100-000-16	W120			32	0	32	32	16	3	-	HB	100	16
04710	ALUW2-160-000-040-100-000-16	W119								2	-	HB	100	16
04715	ALUW3-160-000-040-100-000-16	W120	16	0	40	0	32	40	15,5	3	-	HB	100	16
02382	ALUW3-200-000-038-100-000-20	W120	20	0	38	0	38	38	20	3	-	HB	100	20

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach

+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

Tool

Endmill

121

[chpc]



Cylindrical endmills with two or three flutes with internal coolant through flutes for roughing and finishing non-ferrous materials.

Areas of application

- ALU
- Cu
- AISI
- Titan

Trochoidal

Tool variations

- Z2
- Cylindrical
- Z3
- Cylindrical

HA

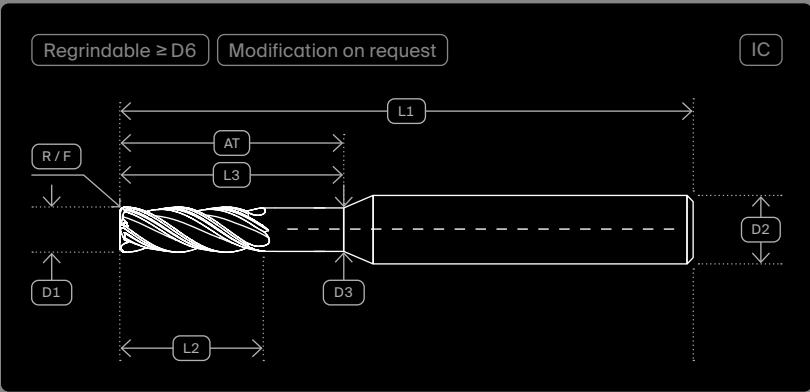


Corner radius

Code	Art. No.	D1	F	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
09987	2CHPC-060-010-020-060-000-06	6	0,1	20	0	20	20	6	2	IC	HA	58	6
20062	3CHPC-060-010-020-058-000-06								3	IC	HA	58	6
09988	2CHPC-080-010-025-064-000-08	8	0,1	25	0	25	25	8	2	IC	HA	64	8
20063	3CHPC-080-010-025-064-000-08								3	IC	HA	64	8
10509	2CHPC-100-020-026-073-000-10	10	0,2	26	0	26	26	10	2	IC	HA	73	10
20064	3CHPC-100-020-026-073-000-10								3	IC	HA	73	10
09989	2CHPC-120-020-028-084-000-12	12	0,2	28	0	28	28	12	2	IC	HA	84	12
20065	3CHPC-120-020-028-084-000-12								3	IC	HA	84	12
07847	3CHPC-140-020-032-084-000-14	14	0,2	32	0	32	32	14	3	IC	HA	84	14

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



TVA / R

Series

[tva]

[tvar]



Cylindrical endmills with three flutes for roughing and finishing non-ferrous materials.

Areas of application

ALU

Cu

AlSi

Titan

Trochoidal

Tool variations

Z 3

Cylindrical

HA

Corner radius

Sharp-edged

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

SH

Shank type

R

Radius

F

Chamfer

S

Sharp-edged

L3

Cylindrical free length

D2

Shank diameter

L2

Cutting length

D3

Neck diameter

Regrindable ≥ D6

Modification on request

124

Tool

Endmill

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach

+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

N

S

Roughing

Finishing

Corner radius

[tvar]

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
06893	TVAR-040-020-016-051-000-06	W36.1	4	0,2	16	0	10	16	3,7	3	-	HA	51	6
06894	TVAR-040-020-020-060-000-06	W36.1			20	0	6	20	3,7	3	-	HA	60	6
06895	TVAR-050-020-020-060-000-06	W36.1			20	0	12	20	4,73	3	-	HA	60	6
06896	TVAR-050-020-025-065-000-06	W36.1	5	0,2	25	0	8	25	4,7	3	-	HA	65	6
06899	TVAR-060-020-024-060-000-06	W36.1	6	0,2	24	0	16	24	5,73	3	-	HA	60	6
06900	TVAR-060-020-030-065-000-06	W36.1			30	0	9	30	5,73	3	-	HA	65	6
11514	TVAR-060-100-020-060-000-06	W36.1			20	0	20	0	6	3	-	HA	60	6
06903	TVAR-080-020-032-070-000-08	W36.1	8	0,2	32	0	20	32	7,6	3	-	HA	70	8
06904	TVAR-080-020-040-075-000-08	W36.1			40	0	12	40	7,6	3	-	HA	75	8
20027	TVAR-080-050-032-070-000-08	W36.1			32	0	20	32	7,6	3	-	HA	70	8
20028	TVAR-080-050-040-075-000-08	W36.1	0,5	0,5	40	0	12	40	7,6	3	-	HA	75	8
06905	TVAR-080-080-032-070-000-08	W36.1			32	0	20	32	7,6	3	-	HA	70	8
06906	TVAR-080-080-040-075-000-08	W36.1			40	0	12	40	7,6	3	-	HA	75	8
20029	TVAR-080-100-032-070-000-08	W36.1	1	1,6	32	0	20	32	7,64	3	-	HA	70	8
20030	TVAR-080-100-040-075-000-08	W36.1			40	0	12	40	7,6	3	-	HA	75	8
06908	TVAR-080-160-040-075-000-08	W36.1			40	0	12	40	7,6	3	-	HA	75	8
06909	TVAR-080-200-032-070-000-08	W36.1	2	0,8	32	0	20	32	7,6	3	-	HA	70	8
06910	TVAR-080-200-040-075-000-08	W36.1			40	0	12	40	7,6	3	-	HA	75	8
20031	TVAR-080-320-032-070-000-08	W36.1			32	0	20	32	7,6	3	-	HA	70	8
11036	TVAR-080-320-040-075-000-08	W36.1	3,2	0,8	40	0	12	40	7,6	3	-	HA	75	8
06913	TVAR-100-020-040-080-000-10	W36.1			40	0	22	40	9,55	3	-	HA	80	10
06914	TVAR-100-020-050-090-000-10	W36.1			50	0	15	50	9,55	3	-	HA	90	10
20032	TVAR-100-050-040-080-000-10	W36.1	0,5	0,5	40	0	22	40	9,5	3	-	HA	90	10
20033	TVAR-100-050-050-090-000-10	W36.1			50	0	15	50	9,55	3	-	HA	90	10
06915	TVAR-100-080-040-080-000-10	W36.1			40	0	22	40	9,5	3	-	HA	80	10
06916	TVAR-100-080-050-090-000-10	W36.1	0,8	0,8	50	0	15	50	9,55	3	-	HA	90	10
11515	TVAR-100-100-032-080-000-10	W36.1			32	0	32	0	10	3	-	HA	80	10
20034	TVAR-100-100-040-080-000-10	W36.1			40	0	22	40	9,5	3	-	HA	80	10
20035	TVAR-100-100-050-090-000-10	W36.1	1	1,6	50	0	15	50	9,55	3	-	HA	90	10
06917	TVAR-100-160-040-080-000-10	W36.1			40	0	22	40	9,5	3	-	HA	80	10
06918	TVAR-100-160-050-090-000-10	W36.1			50	0	15	50	9,5	3	-	HA	90	10
06919	TVAR-100-200-040-080-000-10	W36.1	2	0,8	40	0	22	40	9,55	3	-	HA	80	10
06920	TVAR-100-200-050-090-000-10	W36.1			50	0	15	50	9,5	3	-	HA	90	10
06921	TVAR-100-320-040-080-000-10	W36.1			40	0	22	40	9,5	3	-	HA	80	10
06922	TVAR-100-320-050-090-000-10	W36.1	3,2	10	50	0	15	50	9,5	3	-	HA	90	10
06925	TVAR-120-020-048-090-000-12	W36.1			48	0	26	48	11,35	3	-	HA	90	12
06926	TVAR-120-020-060-100-000-12	W36.1			60	0	18	60	11,35	3	-	HA	100	12
20036	TVAR-120-050-048-090-000-12	W36.1	0,5	0,5	48	0	26	48	11,3	3	-	HA	90	12
20037	TVAR-120-050-060-100-000-12	W36.1			60	0	18	60	11,35	3	-	HA	100	12
06927	TVAR-120-080-048-090-000-12	W36.1			48	0	26	48	11,3	3	-	HA	90	12
06928	TVAR-120-080-060-100-000-12	W36.1	0,8	0,8	60	0	18	60	11,3	3	-	HA	100	12
06929	TVAR-120-100-048-090-000-12	W36.1			48	0	26	48	11,35	3	-	HA	90	12
06930	TVAR-120-100-060-100-000-12	W36.1			60	0	18	60	11,3	3	-	HA	100	12
06931	TVAR-120-200-048-090-000-12	W36.1	1	2	48	0	26	48	11,3	3	-	HA	90	12
06932	TVAR-120-200-060-100-000-12	W36.1			60	0	18	60	11,3	3	-	HA	100	12
06933	TVAR-120-320-048-090-000-12	W36.1			48	0	26	48	11,3	3	-	HA	90	12
06934	TVAR-120-320-060-100-000-12	W36.1	3,2	12	60	0	18	60	11,3	3	-	HA	100	12

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach

+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

Tool

Endmill

125

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
06937	TVAR-160-020-064-110-000-16	W36.1		0,2	64	0	35	64	15,25	3	-	HA	110	16
06938	TVAR-160-020-080-130-000-16	W36.1			80	0	25	80	15,25	3	-	HA	130	16
20038	TVAR-160-050-064-110-000-16	W36.1			64	0	35	64	15,25	3	-	HA	110	16
20039	TVAR-160-050-080-130-000-16	W36.1		0,5	80	0	25	80	15,2	3	-	HA	130	16
06939	TVAR-160-080-064-110-000-16	W36.1			64	0	35	64	15,2	3	-	HA	110	16
06940	TVAR-160-080-080-130-000-16	W36.1		0,8	80	0	25	80	15,2	3	-	HA	130	16
20040	TVAR-160-100-064-110-000-16	W36.1			64	0	35	64	15,25	3	-	HA	110	16
20041	TVAR-160-100-080-130-000-16	W36.1		1	80	0	25	80	15,2	3	-	HA	130	16
06942	TVAR-160-160-080-130-000-16	W36.1			80	0	25	80	15,2	3	-	HA	130	16
06943	TVAR-160-200-064-110-000-16	W36.1		2	64	0	35	64	15,2	3	-	HA	110	16
06944	TVAR-160-200-080-130-000-16	W36.1			80	0	25	80	15,25	3	-	HA	130	16
06945	TVAR-160-320-064-110-000-16	W36.1		3,2	64	0	35	64	15,2	3	-	HA	110	16
06946	TVAR-160-320-080-130-000-16	W36.1			80	0	25	80	15,3	3	-	HA	130	16
11037	TVAR-160-320-092-130-000-16	W36.1			92	0	25	92	15,25	3	-	HA	130	16
06948	TVAR-160-400-080-130-000-16	W36.1	16	4	80	0	25	80	15,2	3	-	HA	130	16
06953	TVAR-200-080-080-130-000-20	W36.1	20	0,8	80	0	45	80	19,05	3	-	HA	130	20
10892	TVAR-200-200-060-100-000-20	W36.1		2	60	0	25	60	19	3	-	HA	100	20
06961	TVAR-200-400-080-130-000-20	W36.1		4	80	0	45	80	19	3	-	HA	130	20

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
06897	TVA-060-000-015-051-000-06	W36	6	0	15	0	15	15	6	3	-	HA	51	6
06898	TVA-060-000-020-060-000-06	W36			20	0	20	20	6	3	-	HA	60	6
06901	TVA-080-000-017-059-000-08	W36	8	0	17	0	17	17	8	3	-	HA	59	8
06902	TVA-080-000-025-064-000-08	W36			25	0	25	25	8	3	-	HA	64	8
06911	TVA-100-000-022-073-000-10	W36	10	0	22	0	22	22	10	3	-	HA	73	10
06912	TVA-100-000-032-080-000-10	W36			32	0	32	32	10	3	-	HA	80	10
06923	TVA-120-000-025-080-000-12	W36	12	0	25	0	25	25	12	3	-	HA	80	12
06924	TVA-120-000-038-100-000-12	W36			38	0	38	38	12	3	-	HA	100	12
06935	TVA-160-000-035-093-000-16	W36	16	0	35	0	35	35	16	3	-	HA	93	16
06936	TVA-160-000-050-100-000-16	W36			50	0	50	50	16	3	-	HA	100	16
06949	TVA-200-000-042-100-000-20	W36			42	0	42	42	20	3	-	HA	100	20
06950	TVA-200-000-060-125-000-20	W36	20	0	60	0	60	60	20	3	-	HA	125	20

[nesza]



Reduced neck endmills with two or three flutes for roughing and finishing non-ferrous materials.

Areas of application

ALU

Cu

AISI

Titan

Tool variations

Z 2

Reduced Neck

Z 3

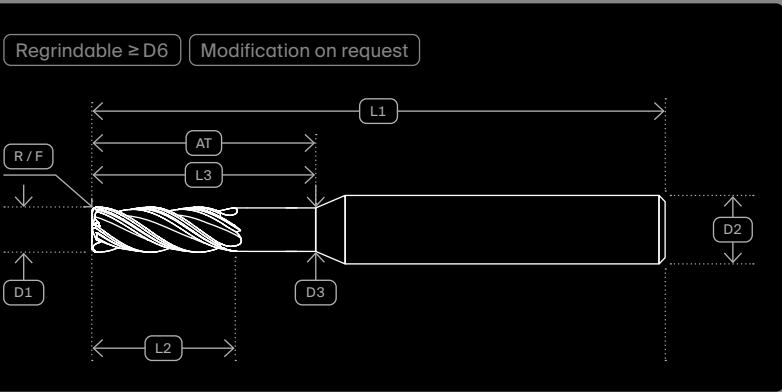
Reduced Neck

HA

Sharp-edged

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	S	Sharp-edged
L1	Total length	L3	Cylindrical free length
Z	Number of teeth	D2	Shank diameter
IC	Internal coolant	L2	Cutting length
SH	Shank type	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
04560	NESZA-005-000-003-060-000-04	0,5	0	3	0	1,5	3	0,4	2	-	HA	60	4
04545	NESZA-010-000-005-060-000-04	1	0	5	0	2	5	0,92	2	-	HA	60	4
04547	NESZA-015-000-008-060-000-04	1,5	0	8	0	3	8	1,42	2	-	HA	60	4
06173	NESZA-015-000-010-060-000-04			10	0	3	10	1,4	2	-	HA	60	4
04548	NESZA-020-000-010-060-000-04	2	0	10	0	3	10	1,9	2	-	HA	60	4
04550	NESZA-030-000-015-060-000-04	3	0	15	0	5	15	2,9	2	-	HA	60	4
04551	NESZA-040-000-020-060-000-04	4	0	20	0	8	20	3,8	2	-	HA	60	4
04555	NESZA-060-000-030-060-000-06	6	0	30	0	18	30	5,8	3	-	HA	60	6
04556	NESZA-080-000-040-080-000-08	8	0	40	0	24	40	7,8	3	-	HA	80	8
04557	NESZA-100-000-045-080-000-10	10	0	45	0	30	45	9,74	3	-	HA	80	10

[drsp]



Reduced neck endmills with three flutes for roughing graphite.

Areas of application

Graph

TrochoidalDiamond coated

Tool variations

Z3Reduced Neck

HA

Corner radiusSharp-edged



▶

Video

TTK50

Roug.

[drsp]

D12



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

R

Radius

AT

Working depth

F

Chamfer

α°

Conic

S

Sharp-edged

L1

Total length

L3

Cylindrical free length

Z

Number of teeth

D2

Shank diameter

IC

Internal coolant

L2

Cutting length

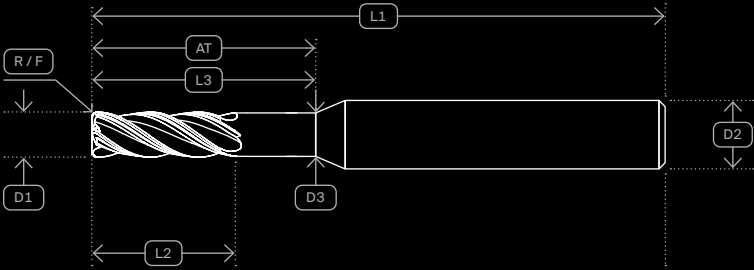
SH

Shank type

D3

Neck diameter

Modification on request



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
17540	DRSPR-040-200-028-060-000-06	4	2	28	0	15	28	3,7	3	-	HA	60	6
17541	DRSPR-060-300-040-070-000-06	6	3	40	0	20	40	5,6	3	-	HA	70	6

Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	SH	L1	D2
17538	DRSP-060-000-035-070-000-06	6	0	35	0	18	35	5,6	3	-	HA	70	6
17534	DRSP-080-000-030-065-000-08	8	0	30	0	12	30	7,55	3	-	HA	65	8
17539	DRSP-080-000-052-085-000-08			52	0	20	52	7,6	3	-	HA	85	8
17537	DRSP-100-000-060-100-000-10	10	0	60	0	40	60	9,55	3	-	HA	100	10
17585	DRSP-120-000-060-100-000-12	12	0	60	0	40	60	11,5	3	-	HA	100	12
17586	DRSP-160-000-045-080-000-16	16	0	45	0	20	45	15,46	3	-	HA	80	16
17536	DRSP-160-000-060-100-000-16			60	0	40	60	15,5	3	-	HA	100	16



Monolithic tools

High-Feed



Hard machining

[shr] ≥ 48 HRC Roughing H - K - - - - 134

Soft to medium-hard machining

[pl] [plk] ≤ 48 HRC Roughing H P K M S - - 136

[vs] ≤ 48 HRC Roughing H P K M S - - 138

This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.



[shr]



Reduced neck high-feed cutters with five or six flutes for roughing hardened steels ≥ 48 HRC.

Areas of application

≥ 48 HRC

GG

HSC

Tool variations

Z 5

Reduced Neck

Z 6

Reduced Neck

HA

Video

58 HRC

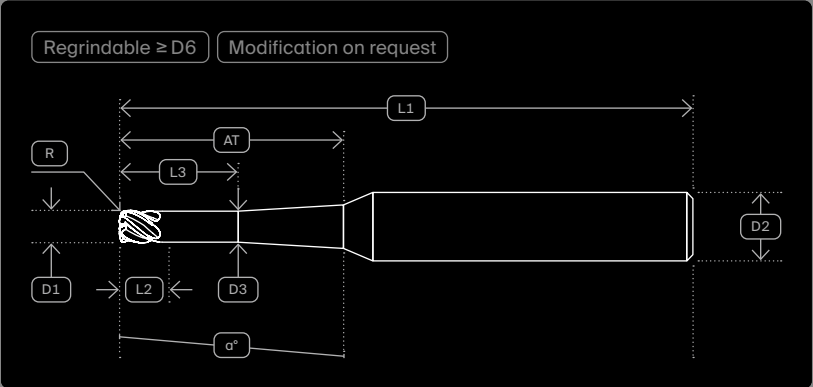
Roug.

[shr]

D10

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
23540	SHR-030-040-009-050-000-06	3	0,4	9	0	2	9	2,85	5	-	50	6
23539	SHR-040-060-012-050-000-06	4	0,6	12	0	3	12	3,8	5	-	50	6
23946	SHR-050-070-015-060-000-06	5	0,7	15	0	4	15	4,8	5	-	60	6
23303	SHR-060-090-018-060-000-06	6	0,9	18	0	5	18	5,7	6	-	60	6
23304	SHR-080-120-024-075-000-08	8	1,2	24	0	8	24	7,6	6	-	75	8
23305	SHR-100-140-030-080-000-10	10	1,4	30	0	10	30	9,5	6	-	80	10

PL /K Series

[pl] [plk]



Conical and reduced neck high feed milling cutters with three flutes and internal coolant in the center for roughing hardened and unhardened steels ≤ 48HRC.

Areas of application

≤ 48 HRC

1.400 N ≥ 1.000 N ≤ 1.000 N Steel

GG GjV

CrNi

INC Titan

HSC

Tool variations

Z3 Conical

Z3 Reduced Neck

HA

Video

48 HRC

Roug.

[plk]

D6 R0,42

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1 Cutter diameter

AT Working depth

α° Conic

L1 Total length

Z Number of teeth

IC Internal coolant

R Radius

F Chamfer

L3 Cylindrical free length

D2 Shank diameter

L2 Cutting length

D3 Neck diameter

Regrindable ≥ D6

Modification on request

IC

H P K M S Roughing

[pl] [plk]

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
05762	PL-040-028-010-060-000-06	W14	4	0,28	10	0	4	10	3,64	3	IC	60	6
01356	PL-040-028-020-060-000-06	W14			20	0	4	20	3,64	3	IC	60	6
01357	PLK-040-028-012/040-080-009-06	W14.2			40	0,9	4	12	3,6	3	IC	80	6
07810	PLK-040-028-012/065-100-009-06	W14.2			65	0,9	4	12	3,6	3	IC	100	6
03978	PL-050-035-025-060-000-06	W14	5	0,35	25	0	6	25	4,6	3	IC	60	6
03979	PL-050-035-040-080-000-06	W14			40	0	6	40	4,6	3	IC	80	6
16147	PL-060-042-015-060-000-06	W14			15	0	6	15	5,64	3	IC	60	6
01353	PL-060-042-025-060-000-06	W14			25	0	6	25	5,64	3	IC	60	6
04877	PL-060-042-040-060-000-06	W14				0	6	40	5,6	3	IC	60	6
03980	PL-060-042-040-075-000-06	W14							5,64	3	IC	75	6
01276	PLK-060-042-020/040-085-009-08	W14.2			40	0,9	6	20	5,64	3	IC	85	8
02282	PL-060-042-060-100-000-06	W14			60	0	6	60	5,6	3	IC	100	6
07809	PLK-060-042-020/065-100-009-08	W14.2			65	0,8871	6	20	5,6	3	IC	100	8
02774	PLK-060-042-020/065-120-015-10	W14.2	6	0,42		1,5	6	20	5,6	3	IC	120	10
04003	PL-070-049-030-065-000-08	W14	7	0,49	30	0	8	30	6,6	3	IC	65	8
01355	PL-080-056-030-065-000-08	W14			30	0	8	30	7,64	3	IC	65	8
22096	PL-080-056-040-075-000-08	W14			40	0	8	40	7,64	3	IC	75	8
01277	PLK-080-056-020/045-100-009-10	W14.2			45	0,9	8	20	7,6	3	IC	100	10
02283	PL-080-056-060-100-000-08	W14			60	0	8	60	7,64	3	IC	100	8
02775	PLK-080-056-020/065-120-009-10	W14.2	8	0,56	65	0,889	8	20	7,6	3	IC	120	10
03665	PL-100-070-040-075-000-10	W14	10	0,7	40	0	8	40	9,64	3	IC	75	10
00778	PL-100-070-040-100-000-10	W14										100	10
07087	PL-120-084-050-100-000-12	W14	12	0,84	50	0	8	50	11,6	3	IC	100	12
00890	PL-120-084-050-125-000-12	W14							11,64	3	IC	125	12

136 Tool High-Feed

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach
+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach
+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

Tool High-Feed 137

[vs]



Reduced neck high feed milling cutters with three flutes and internal coolant in the center for roughing hardened and unhardened steels ≤ 48HRC.

Areas of application

- ≤ 48 HRC
- 1.400 N ≥ 1.000 N ≤ 1.000 N Steel
- GG GJV
- CrNi
- INC Titan
- HSC

Tool variations

- Z 3
- Reduced Neck

- HA
- Ø
- Ø

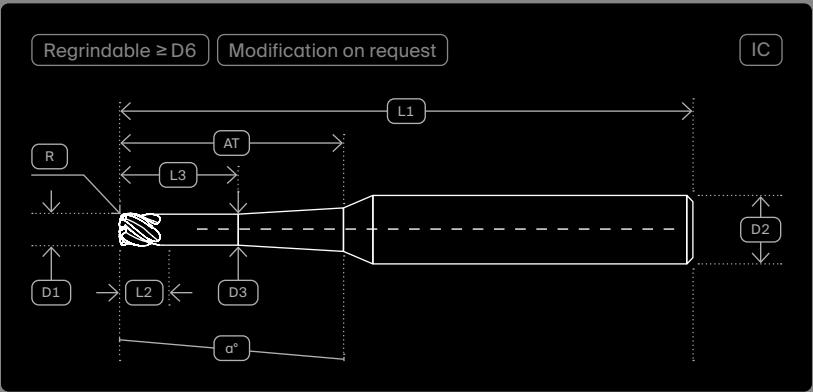


- Video
- 30 HRC
- Roug.
- [vs]
- D12 R1



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Blanchet phase
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
11404	VS-060-066-025-060-000-06	6	0,66	25	0	6	25	5,6	3	IC	60	6
11405	VS-080-088-030-065-000-08	8	0,88	30	0	8	30	7,64	3	IC	65	8
00613	VS-100-110-040-075-000-10	10	1,1	40	0	8	40	9,6	3	IC	75	10
00889	VS-120-110-040-080-000-12	12	1,1	40	0	8	40	11,64	3	IC	80	12
05958	VS-120-110-060-100-000-12			60	0	8	60	11,64	3	IC	100	12



Monolithic tools

Rib mill



Soft to medium-hard machining

[psm]	[psmz]	≤56 HRC	Roughing (+) Finishing	H	P	K	M	S	-	-	142
[f]	[fz]	≤56 HRC	Roughing (+) Finishing	H	P	K	M	S	-	-	154

Aluminum and non-ferrous machining

[cf]	Roughing (+) Finishing	-	-	-	-	-	N	-	162
------	------------------------	---	---	---	---	---	---	---	-----

This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.



PSM / Z Series

[psm] [psmz]



Conical and reduced neck rib milling cutters with four flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N ≥ 1.000 N ≤ 1.000 N Steel

GG GJV

CrNi

INC Titan

HSC

Tool variations

Z4 Conical

Z4 Reduced Neck

HA

Video

48 HRC

Roug.

[psm]

D2,5

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1 Cutter diameter

AT Working depth

α° Conic

L1 Total length

Z Number of teeth

IC Internal coolant

R Radius

F Chamfer

L3 Cylindrical free length

D2 Shank diameter

L2 Cutting length

D3 Neck diameter

Regrindable ≥ D6

Modification on request

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
24885	PSMZ-010-015-004-051-000-04	W02.3	0,15	0,15	4	0	1	4	0,95	4	-	51	4
24886	PSMZ-010-015-005-051-000-04	W02.3			0,4	0	1	5	0,95	4	-	51	4
24147	PSM-010-015-005-060-004-04	W02.2				0,4	1	2	0,95	4	-	60	4
24148	PSM-010-015-005-060-009-04	W02.2			5	0,9	1	2	0,95	4	-	60	4
24887	PSMZ-010-015-006-051-000-04	W02.3			6	0	1	6	0,95	4	-	51	4
24888	PSMZ-010-015-008-051-000-04	W02.3			8	0	1	8	0,95	4	-	51	4
24889	PSMZ-010-015-010-051-000-04	W02.3			0,4	0	1	10	0,95	4	-	51	4
24149	PSM-010-015-010-060-004-04	W02.2				0,4	1	2	0,95	4	-	60	4
24150	PSM-010-015-010-060-009-04	W02.2				0,9	1	2	0,95	4	-	60	4
24890	PSMZ-010-015-012-051-000-04	W02.3			12	0	1	12	0,95	4	-	51	4
24891	PSMZ-010-015-015-051-000-04	W02.3			0,4	0	1	15	0,95	4	-	51	4
24151	PSM-010-015-015-060-004-04	W02.2				0,4	1	2	0,95	4	-	60	4
24152	PSM-010-015-015-060-009-04	W02.2				0,9	1	2	0,95	4	-	60	4
24153	PSM-010-015-020-060-004-04	W02.2			0,4	0,4	1	2	0,95	4	-	60	4
24154	PSM-010-015-020-060-009-04	W02.2				0,9	1	2	0,95	4	-	60	4
24892	PSMZ-010-020-004-051-000-04	W02.3			4	0	1	4	0,95	4	-	51	4
25133	PSM-010-020-005-060-004-04	W02.2			0,4	0,4	1	2	0,95	4	-	60	4
25134	PSM-010-020-005-060-009-04	W02.2				0,9	1	2	0,95	4	-	60	4
24894	PSMZ-010-020-006-051-000-04	W02.3			6	0	1	6	0,95	4	-	51	4
24895	PSMZ-010-020-008-051-000-04	W02.3			8	0	1	8	0,95	4	-	51	4
24896	PSMZ-010-020-010-051-000-04	W02.3			0,4	0	1	10	0,95	4	-	51	4
25135	PSM-010-020-010-060-004-04	W02.2				0,4	1	2	0,95	4	-	60	4
25136	PSM-010-020-010-060-009-04	W02.2				0,9	1	2	0,95	4	-	60	4
24897	PSMZ-010-020-012-051-000-04	W02.3			12	0	1	12	0,95	4	-	51	4
24898	PSMZ-010-020-015-051-000-04	W02.3			0,4	0	1	15	0,95	4	-	51	4
25137	PSM-010-020-015-060-004-04	W02.2				0,4	1	2	0,95	4	-	60	4
25138	PSM-010-020-015-060-009-04	W02.2				0,9	1	2	0,95	4	-	60	4
25139	PSM-010-020-020-060-004-04	W02.2			0,4	0,4	1	2	0,95	4	-	60	4
25140	PSM-010-020-020-060-009-04	W02.2				0,9	1	2	0,95	4	-	60	4
24899	PSMZ-010-030-004-051-000-04	W02.3			4	0	1	4	0,95	4	-	51	4
24900	PSMZ-010-030-005-051-000-04	W02.3			5	0	1	5	0,95	4	-	51	4
24901	PSMZ-010-030-006-051-000-04	W02.3			6	0	1	6	0,95	4	-	51	4
24902	PSMZ-010-030-008-051-000-04	W02.3			8	0	1	8	0,95	4	-	51	4
24903	PSMZ-010-030-010-051-000-04	W02.3			10	0	1	10	0,95	4	-	51	4
24904	PSMZ-010-030-012-051-000-04	W02.3			12	0	1	12	0,95	4	-	51	4
24905	PSMZ-010-030-015-051-000-04	W02.3	1	0,3	15	0	1	15	0,95	4	-	51	4

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
24906	PSMZ-012-020-004-051-000-04	W02.3	1,2	0,2	4	0	1,2	4	1,1	4	-	51	4
24907	PSMZ-012-020-005-051-000-04	W02.3			5	0	1,2	5	1,13	4	-	51	4
24908	PSMZ-012-020-006-051-000-04	W02.3			6	0	1,2	6	1,1	4	-	51	4
24155	PSM-012-020-006-060-004-04	W02.2				0,4	1,5	2,5	1,1	4	-	60	4
24156	PSM-012-020-006-060-009-04	W02.2				0,9	1,5	2,5	1,1	4	-	60	4
24909	PSMZ-012-020-008-051-000-04	W02.3			8	0	1,2	8	1,1	4	-	51	4
24910	PSMZ-012-020-010-051-000-04	W02.3			10	0	1,2	10	1,1	4	-	51	4
24911	PSMZ-012-020-012-051-000-04	W02.3			12	0	1,2	12	1,1	4	-	51	4
24157	PSM-012-020-012-060-004-04	W02.2				0,4	1,5	2,5	1,1	4	-	60	4
24158	PSM-012-020-012-060-009-04	W02.2				0,9	1,5	2,5	1,1	4	-	60	4
24912	PSMZ-012-020-015-051-000-04	W02.3			15	0	1,2	15	1,1	4	-	51	4
24159	PSM-012-020-018-060-004-04	W02.2			18	0,4	1,5	2,5	1,1	4	-	60	4
24160	PSM-012-020-018-060-009-04	W02.2				0,9	1,5	2,5	1,1	4	-	60	4
24161	PSM-012-020-024-060-004-04	W02.2				0,4	1,5	2,5	1,1	4	-	60	4
24162	PSM-012-020-024-060-009-04	W02.2			24	0,9	1,5	2,5	1,1	4	-	60	4
24913	PSMZ-012-030-004-051-000-04	W02.3		0,3	4	0	1,2	4	1,1	4	-	51	4
24914	PSMZ-012-030-005-051-000-04	W02.3			5	0	1,2	5	1,1	4	-	51	4
24915	PSMZ-012-030-006-051-000-04	W02.3			6	0	1,2	6	1,1	4	-	51	4
24916	PSMZ-012-030-008-051-000-04	W02.3			8	0	1,2	8	1,1	4	-	51	4
24917	PSMZ-012-030-010-051-000-04	W02.3			10	0	1,2	10	1,1	4	-	51	4
24918	PSMZ-012-030-012-051-000-04	W02.3			12	0	1,2	12	1,1	4	-	51	4
24919	PSMZ-012-030-015-051-000-04	W02.3			15	0	1,2	15	1,1	4	-	51	4
24920	PSMZ-015-015-005-051-000-04	W02.3		0,15	5	0	1,5	5	1,4	4	-	51	4
24921	PSMZ-015-015-007-051-000-04	W02.3			7	0	1,5	7	1,4	4	-	51	4
24922	PSMZ-015-015-010-051-000-04	W02.3			10	0	1,5	10	1,4	4	-	51	4
24923	PSMZ-015-015-012-051-000-04	W02.3			12	0	1,5	12	1,4	4	-	51	4
24924	PSMZ-015-015-015-051-000-04	W02.3			15	0	1,5	15	1,4	4	-	51	4
24925	PSMZ-015-015-018-051-000-04	W02.3			18	0	1,5	18	1,4	4	-	51	4
24926	PSMZ-015-025-005-051-000-04	W02.3			5	0	1,5	5	1,43	4	-	51	4
24927	PSMZ-015-025-007-051-000-04	W02.3			7	0	1,5	7	1,4	4	-	51	4
24163	PSM-015-025-008-060-004-04	W02.2			8	0,4	2	3	1,4	4	-	60	4
24164	PSM-015-025-008-060-009-04	W02.2				0,9	2	3	1,4	4	-	60	4
24928	PSMZ-015-025-010-051-000-04	W02.3			10	0	1,5	10	1,4	4	-	51	4
24929	PSMZ-015-025-012-051-000-04	W02.3			12	0	1,5	12	1,4	4	-	51	4
24930	PSMZ-015-025-015-051-000-04	W02.3			15	0	1,5	15	1,43	4	-	51	4
24165	PSM-015-025-015-060-004-04	W02.2				0,4	2	3	1,4	4	-	60	4
24166	PSM-015-025-015-060-009-04	W02.2				0,9	2	3	1,4	4	-	60	4
24931	PSMZ-015-025-018-051-000-04	W02.3			18	0	1,5	18	1,4	4	-	51	4
24167	PSM-015-025-023-060-004-04	W02.2			23	0,4	2	3	1,4	4	-	60	4
24168	PSM-015-025-023-060-009-04	W02.2				0,9	2	3	1,4	4	-	60	4
24169	PSM-015-025-030-060-004-04	W02.2				0,4	2	3	1,4	4	-	60	4
24170	PSM-015-025-030-060-009-04	W02.2	1,5	0,3	30	0,9	2	3	1,4	4	-	60	4
24932	PSMZ-015-030-005-051-000-04	W02.3			5	0	1,5	5	1,43	4	-	51	4
24933	PSMZ-015-030-007-051-000-04	W02.3			7	0	1,5	7	1,4	4	-	51	4
24934	PSMZ-015-030-010-051-000-04	W02.3			10	0	1,5	10	1,4	4	-	51	4
24935	PSMZ-015-030-012-051-000-04	W02.3			12	0	1,5	12	1,4	4	-	51	4
24936	PSMZ-015-030-015-051-000-04	W02.3			15	0	1,5	15	1,4	4	-	51	4
24937	PSMZ-015-030-018-051-000-04	W02.3			18	0	1,5	18	1,4	4	-	51	4

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
24938	PSMZ-020-025-006-060-000-04	W02.3	2	0,5	6	0	2	6	1,93	4	-	60	4
24939	PSMZ-020-025-008-060-000-04	W02.3			8	0	2	8	1,9	4	-	60	4
24940	PSMZ-020-025-010-060-000-04	W02.3			10	0	2	10	1,93	4	-	60	4
24171	PSM-020-025-010-060-004-06	W02.2				0,4	3	4	1,9	4	-	60	6
23235	PSM-020-025-010-060-009-06	W02.2				0,9	3	4	1,9	4	-	60	6
24941	PSMZ-020-025-012-060-000-04	W02.3			12	0	2	12	1,9	4	-	60	4
24942	PSMZ-020-025-015-060-000-04	W02.3			15	0	2	15	1,93	4	-	60	4
24173	PSM-020-025-016-060-004-06	W02.2			16	0,4	3	4	1,9	4	-	60	6
23236	PSM-020-025-016-060-009-06	W02.2				0,9	3	4	1,9	4	-	60	6
24943	PSMZ-020-025-018-060-000-04	W02.3			18	0	2	18	1,9	4	-	60	4
24944	PSMZ-020-025-020-060-000-04	W02.3			20	0	2	20	1,9	4	-	60	4
24175	PSM-020-025-020-060-004-06	W02.2				0,4	3	4	1,9	4	-	60	6
23237	PSM-020-025-020-060-009-06	W02.2				0,9	3	4	1,9	4	-	60	6
24945	PSMZ-020-025-022-060-000-04	W02.3			22	0	2	22	1,9	4	-	60	4
24946	PSMZ-020-025-025-060-000-04	W02.3			25	0	2	25	1,9	4	-	60	4
24177	PSM-020-025-030-070-004-06	W02.2			30	0,4	3	4	1,9	4	-	70	6
24179	PSM-020-025-030-070-009-06	W02.2				0,9	3	4	1,9	4	-	70	6
24181	PSM-020-025-040-080-004-06	W02.2			40	0,4	3	4	1,9	4	-	80	6
24183	PSM-020-025-040-080-009-06	W02.2				0,9	3	4	1,9	4	-	80	6
24185	PSM-020-025-050-100-004-06	W02.2				0,4	3	4	1,9	4	-	100	6
24187	PSM-020-025-050-100-009-06	W02.2			50	0,9	3	4	1,9	4	-	100	6
24947	PSMZ-020-050-006-060-000-04	W02.3		0,25	6	0	2	6	1,93	4	-	60	4
24948	PSMZ-020-050-008-060-000-04	W02.3			8	0	2	8	1,93	4	-	60	4
24949	PSMZ-020-050-010-060-000-04	W02.3			10	0	2	10	1,93	4	-	60	4
24172	PSM-020-050-010-060-004-06	W02.2				0,4	3	4	1,9	4	-	60	6
23238	PSM-020-050-010-060-009-06	W02.2				0,9	3	4	1,9	4	-	60	6
24950	PSMZ-020-050-012-060-000-04	W02.3			12	0	2	12	1,9	4	-	60	4
24951	PSMZ-020-050-015-060-000-04	W02.3			15	0	2	15	1,9	4	-	60	4
24174	PSM-020-050-016-060-004-06	W02.2			16	0,4	3	4	1,9	4	-	60	6
23239	PSM-020-050-016-060-009-06	W02.2				0,9	3	4	1,9	4	-	60	6
24952	PSMZ-020-050-018-060-000-04	W02.3			18	0	2	18	1,9	4	-	60	4
24953	PSMZ-020-050-020-060-000-04	W02.3			20	0	2	20	1,93	4	-	60	4
24176	PSM-020-050-020-060-004-06	W02.2				0,4	3	4	1,9	4	-	60	6
23240	PSM-020-050-020-060-009-06	W02.2				0,9	3	4	1,9	4	-	60	6
24954	PSMZ-020-050-022-060-000-04	W02.3			22	0	2	22	1,9	4	-	60	4
24955	PSMZ-020-050-025-060-000-04	W02.3			25	0	2	25	1,9	4	-	60	4
24178	PSM-020-050-030-070-004-06	W02.2			30	0,4	3	4	1,9	4	-	70	6
24180	PSM-020-050-030-070-009-06	W02.2				0,9	3	4	1,93	4	-	70	6
24182	PSM-020-050-040-080-004-06	W02.2				0,4	3	4	1,9	4	-	80	6
24184	PSM-020-050-040-080-009-06	W02.2			40	0,9	3	4	1,9	4	-	80	6
24186	PSM-020-050-050-100-004-06	W02.2				0,4	3	4	1,9	4	-	100	6
24188	PSM-020-050-050-100-009-06	W02.2				0,9	3	4	1,9	4	-	100	

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
25012	PSMZ-030-100-025-060-000-04	W02.3	3	1									4
25013	PSMZ-030-100-025-060-000-06	W02.3			25	0	3	25	2,85	4	-	60	6
25141	PSM-030-100-030-075-009-06	W02.2			30	0,9	4,5	5,5	2,85	4	-	75	6
25142	PSM-030-100-040-075-009-06	W02.2			40	0,9	4,5	5,5	2,85	4	-	75	6
25143	PSM-030-100-060-100-009-06	W02.2	3	1	60	0,9	4,5	5,5	2,85	4	-	100	6
25014	PSMZ-040-025-012-060-000-06	W02.3			12	0	4	12	3,85	4	-	60	6
25015	PSMZ-040-025-016-060-000-06	W02.3			16	0	4	16	3,85	4	-	60	6
25016	PSMZ-040-025-020-060-000-06	W02.3			20	0	4	20	3,85	4	-	60	6
25017	PSMZ-040-025-024-060-000-06	W02.3			24	0	4	24	3,85	4	-	60	6
25018	PSMZ-040-025-028-070-000-06	W02.3			28	0	4	28	3,85	4	-	70	6
25019	PSMZ-040-025-032-070-000-06	W02.3			32	0	4	32	3,85	4	-	70	6
25020	PSMZ-040-025-036-070-000-06	W02.3			36	0	4	36	3,85	4	-	70	6
25021	PSMZ-040-025-040-070-000-06	W02.3		0,25	40	0	4	40	3,88	4	-	70	6
25022	PSMZ-040-040-012-060-000-06	W02.3			12	0	4	12	3,85	4	-	60	6
25023	PSMZ-040-040-016-060-000-06	W02.3			16	0	4	16	3,88	4	-	60	6
25024	PSMZ-040-040-020-060-000-06	W02.3			20	0	4	20	3,85	4	-	60	6
24219	PSM-040-040-020-060-004-06	W02.2				0,4	6	7	3,85	4	-	60	6
23261	PSM-040-040-020-060-009-06	W02.2				0,9	6	7	3,85	4	-	60	6
25025	PSMZ-040-040-024-060-000-06	W02.3			24	0	4	24	3,85	4	-	60	6
25026	PSMZ-040-040-028-070-000-06	W02.3			28	0	4	28	3,85	4	-	70	6
24221	PSM-040-040-028-070-004-06	W02.2				0,4	6	7	3,85	4	-	70	6
23262	PSM-040-040-028-070-009-06	W02.2				0,9	6	7	3,85	4	-	70	6
25027	PSMZ-040-040-032-070-000-06	W02.3			32	0	4	32	3,85	4	-	70	6
24223	PSM-040-040-032-080-004-06	W02.2				0,4	6	7	3,85	4	-	80	6
23263	PSM-040-040-032-080-009-06	W02.2				0,9	6	7	3,85	4	-	80	6
25028	PSMZ-040-040-036-070-000-06	W02.3			36	0	4	36	3,85	4	-	70	6
25029	PSMZ-040-040-040-070-000-06	W02.3			40	0	4	40	3,85	4	-	70	6
24225	PSM-040-040-040-080-004-06	W02.2				0,4	6	7	3,85	4	-	80	6
23264	PSM-040-040-040-080-009-06	W02.2				0,9	6	7	3,85	4	-	80	6
23935	PSM-040-040-050-100-009-06	W02.2			50	0,9	6	7	3,85	4	-	100	6
24227	PSM-040-040-052-100-004-06	W02.2			52	0,4	6	7	3,85	4	-	100	6
24229	PSM-040-040-052-100-009-06	W02.2				0,9	6	7	3,85	4	-	100	6
25030	PSMZ-040-050-012-060-000-04	W02.3		0,5									4
25031	PSMZ-040-050-012-060-000-06	W02.3			12	0	4	12	3,85	4	-	60	6
25032	PSMZ-040-050-016-060-000-04	W02.3			16	0	4	16	3,85	4	-	60	4
25033	PSMZ-040-050-016-060-000-06	W02.3							3,88	4	-	60	6
25034	PSMZ-040-050-020-060-000-04	W02.3			20	0	4	20	3,85	4	-	60	4
25035	PSMZ-040-050-020-060-000-06	W02.3							3,88	4	-	60	6
25036	PSMZ-040-050-024-060-000-04	W02.3			24	0	4	24	3,85	4	-	60	4
25037	PSMZ-040-050-024-060-000-06	W02.3							3,88	4	-	60	6
25038	PSMZ-040-050-028-070-000-04	W02.3			28	0	4	28	3,85	4	-	70	4
25039	PSMZ-040-050-028-070-000-06	W02.3							3,85	4	-	70	6
25040	PSMZ-040-050-032-070-000-04	W02.3			32	0	4	32	3,85	4	-	70	4
25041	PSMZ-040-050-032-070-000-06	W02.3							3,85	4	-	70	6
25042	PSMZ-040-050-036-070-000-04	W02.3			36	0	4	36	3,85	4	-	70	4
25043	PSMZ-040-050-036-070-000-06	W02.3							3,85	4	-	70	6
25044	PSMZ-040-050-040-070-000-04	W02.3			40	0	4	40	3,85	4	-	70	4
25045	PSMZ-040-050-040-070-000-06	W02.3							3,88	4	-	70	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
25047	PSMZ-040-100-012-060-000-06	W02.3	4	1	12	0	4	12	3,85	4	-	60	6
25048	PSMZ-040-100-016-060-000-04	W02.3			16	0	4	16	3,88	4	-	60	4
25049	PSMZ-040-100-016-060-000-06	W02.3											6
25050	PSMZ-040-100-020-060-000-04	W02.3			20	0	4	20	3,85	4	-	60	4
25051	PSMZ-040-100-020-060-000-06	W02.3											6
24220	PSM-040-100-020-060-004-06	W02.2											6
23265	PSM-040-100-020-060-009-06	W02.2											6
25052	PSMZ-040-100-024-060-000-04	W02.3			24	0	4	24	3,85	4	-	60	4
25053	PSMZ-040-100-024-060-000-06	W02.3							3,88	4	-	60	6
25054	PSMZ-040-100-028-070-000-04	W02.3			28	0	4	28	3,85	4	-	70	4
25055	PSMZ-040-100-028-070-000-06	W02.3							3,85	4	-	70	6
24222	PSM-040-100-028-070-004-06	W02.2							3,85	4	-	70	6
23266	PSM-040-100-028-070-009-06	W02.2							3,85	4	-	70	6
25056	PSMZ-040-100-032-070-000-04	W02.3			32	0	4	32	3,85	4	-	70	4
25057	PSMZ-040-100-032-070-000-06	W02.3							3,85	4	-	70	6
24224	PSM-040-100-032-080-004-06	W02.2							3,85	4	-	80	6
23267	PSM-040-100-032-080-009-06	W02.2							3,85	4	-	80	6
25058	PSMZ-040-100-036-070-000-04	W02.3			36	0	4	36	3,85	4	-	70	4
25059	PSMZ-040-100-036-070-000-06	W02.3							3,85	4	-	70	6
25060	PSMZ-040-100-040-070-000-04	W02.3			40	0	4	40	3,85	4	-	70	4
25061	PSMZ-040-100-040-070-000-06	W02.3							3,85	4	-	70	6
24226	PSM-040-100-040-080-004-06	W02.2							3,85	4	-	80	6
23268	PSM-040-100-040-080-009-06	W02.2							3,85	4	-	80	6
24228	PSM-040-100-052-100-004-06	W02.2			52	0,4	6	7	3,85	4	-	100	6
24230	PSM-040-100-052-100-009-06	W02.2											6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
25062	PSMZ-060-025-015-060-000-06	W02.3	6	0,25	15	0	6	15	5,8	4	-	60	6
25063	PSMZ-060-025-020-060-000-06	W02.3			20	0	6	20	5,8	4	-	60	6
25064	PSMZ-060-025-025-060-000-06	W02.3			25	0	6	25	5,8	4	-	60	6
25066	PSMZ-060-025-035-075-000-06	W02.3			35	0	6	35	5,8	4	-	75	6
25067	PSMZ-060-025-040-075-000-06	W02.3			40	0	6	40	5,8	4	-	75	6
25068	PSMZ-060-050-015-060-000-06	W02.3		0,5	15	0	6	15	5,83	4	-	60	6
25069	PSMZ-060-050-020-060-000-06	W02.3			20	0	6	20	5,83	4	-	60	6
25070	PSMZ-060-050-025-060-000-06	W02.3			25	0	6	25	5,8	4	-	60	6
25071	PSMZ-060-050-030-075-000-06	W02.3			30	0	6	30	5,8	4	-	75	6
25072	PSMZ-060-050-035-075-000-06	W02.3			35	0	6	35	5,8	4	-	75	6
25073	PSMZ-060-050-040-075-000-06	W02.3			40	0	6	40	5,8	4	-	75	6
25075	PSMZ-060-100-020-060-000-06	W02.3		1	20	0	6	20	5,83	4	-	60	6
25076	PSMZ-060-100-025-060-000-06	W02.3			25	0	6	25	5,83	4	-	60	6
25077	PSMZ-060-100-030-075-000-06	W02.3			30	0	6	30	5,83	4	-	75	6
25078	PSMZ-060-100-035-075-000-06	W02.3			35	0	6	35	5,8	4	-	75	6
25079	PSMZ-060-100-040-075-000-06	W02.3			40	0	6	40	5,83	4	-	75	6
25144	PSM-060-100-040-080-009-08	W02.2				0,9	6	15	5,8	4	-	80	8
25145	PSM-060-100-050-100-009-08	W02.2				0,9	6	15	5,8	4	-	100	8
25146	PSM-060-100-050-080-012-08	W02.2			50	1,2	6	15	5,8	4	-	80	8
25147	PSM-060-100-060-100-009-08	W02.2			60	0,9	6	15	5,8	4	-	100	8
25080	PSMZ-060-150-015-060-000-06	W02.3		1,5	15	0	6	15	5,8	4	-	60	6
25081	PSMZ-060-150-020-060-000-06	W02.3			20	0	6	20	5,8	4	-	60	6
25082	PSMZ-060-150-025-060-000-06	W02.3			25	0	6	25	5,8	4	-	60	6
25083	PSMZ-060-150-030-075-000-06	W02.3			30	0	6	30	5,8	4	-	75	6
25084	PSMZ-060-150-035-075-000-06	W02.3			35	0	6	35	5,8	4	-	75	6
25085	PSMZ-060-150-040-075-000-06	W02.3			40	0	6	40	5,8	4	-	75	6
25086	PSMZ-060-200-015-060-000-06	W02.3			15	0	6	15	5,8	4	-	60	6
25087	PSMZ-060-200-020-060-000-06	W02.3			20	0	6	20	5,8	4	-	60	6
25088	PSMZ-060-200-025-060-000-06	W02.3			25	0	6	25	5,8	4	-	60	6
25089	PSMZ-060-200-030-075-000-06	W02.3			30	0	6	30	5,8	4	-	75	6
25090	PSMZ-060-200-035-075-000-06	W02.3			35	0	6	35	5,8	4	-	75	6
25091	PSMZ-060-200-040-075-000-06	W02.3			40	0	6	40	5,8	4	-	75	6
27476	PSM-060-200-040-080-015-08	W02.2				1,5	6	15	5,8	4	-	80	8
27475	PSM-060-200-050-100-012-08	W02.2	6	2	50	1,1935	6	15	5,8	4	-	100	8

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
25092	PSMZ-080-050-020-064-000-08	W02.3	8	0,5	20	0	8	20	7,7	4	-	64	8
25093	PSMZ-080-050-030-075-000-08	W02.3			30	0	8	30	7,73	4	-	75	8
25094	PSMZ-080-050-040-085-000-08	W02.3			40	0	8	40	7,7	4	-	85	8
25095	PSMZ-080-050-050-100-000-08	W02.3			50	0	8	50	7,7	4	-	100	8
25096	PSMZ-080-100-020-064-000-08	W02.3		1	20	0	8	20	7,7	4	-	64	8
25097	PSMZ-080-100-030-075-000-08	W02.3			30	0	8	30	7,73	4	-	75	8
25098	PSMZ-080-100-040-085-000-08	W02.3			40	0	8	40	7,73	4	-	85	8
25099	PSMZ-080-100-050-100-000-08	W02.3			50	0	8	50	7,73	4	-	100	8
25148	PSM-080-100-050-100-009-10	W02.2				0,9	8	20	7,7	4	-	100	10
25149	PSM-080-100-050-100-011-10	W02.2				1,1	8	20	7,7	4	-	100	10
25150	PSM-080-100-065-120-009-10	W02.2			65	0,9	8	20	7,7	4	-	120	10
27472	PSM-080-100-090-150-010-12	W02.2			90	1	8	20	7,7	4	-	150	12
27473	PSM-080-100-120-175-010-12	W02.2			120	0,963	8	20	7,7	4	-	175	12
25100	PSMZ-080-200-020-064-000-08	W02.3		2	20	0	8	20	7,7	4	-	64	8
25101	PSMZ-080-200-030-075-000-08	W02.3			30	0	8	30	7,7	4	-	75	8
25102	PSMZ-080-200-040-085-000-08	W02.3			40	0	8	40	7,73	4	-	85	8
25103	PSMZ-080-200-050-100-000-08	W02.3			50	0	8	50	7,7	4	-	100	8
27480	PSM-080-200-050-100-009-10	W02.2				0,9	8	20	7,7	4	-	100	10
27474	PSM-080-200-050-100-015-10	W02.2				1,193	8	20	7,7	4	-	100	10
27036	PSMZ-080-300-016-064-000-08	W02.3		3	16	0	8	16	7,73	4	-	64	8
25104	PSMZ-080-300-020-064-000-08	W02.3			20	0	8	20	7,7	4	-	64	8
25105	PSMZ-080-300-030-075-000-08	W02.3			30	0	8	30	7,7	4	-	75	8
25106	PSMZ-080-300-040-085-000-08	W02.3			40	0	8	40	7,7	4	-	85	8
25107	PSMZ-080-300-050-100-000-08	W02.3			50	0	8	50	7,7	4	-	100	8
25108	PSMZ-100-100-030-075-000-10	W02.3			30	0	10	30	9,69	4	-	75	10
25109	PSMZ-100-100-040-085-000-10	W02.3	10	1	40	0	10	40	9,65	4	-	85	10
25110	PSMZ-100-100-050-100-000-10	W02.3			50	0	10	50	9,69	4	-	100	10
27477	PSM-100-100-070-120-008-12	W02.2			70	0,8	10	20	9,65	4	-	120	12
25111	PSMZ-100-200-030-075-000-10	W02.3			30	0	10	30	9,65	4	-	75	10
25112	PSMZ-100-200-040-085-000-10	W02.3			40	0	10	40	9,65	4	-	85	10
25113	PSMZ-100-200-050-100-000-10	W02.3			50	0	10	50	9,65	4	-	100	10
27478	PSM-100-200-065-120-009-12	W02.2		2	65	0,9	10	20	9,65	4	-	120	12
25114	PSMZ-100-300-030-075-000-10	W02.3			30	0	10	30	9,65	4	-	75	10
25115	PSMZ-100-300-040-085-000-10	W02.3			40	0	10	40	9,65	4	-	85	10
25116	PSMZ-100-300-050-100-000-10	W02.3			50	0	10	50	9,65	4	-	100	10
27037	PSMZ-100-400-020-075-000-10	W02.3			20	0	10	20	9,65	4	-	75	10

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
25117	PSMZ-120-100-030-074-000-12	W02.3	12	1	30	0	12	30	11,64	4	-	74	12
25118	PSMZ-120-100-040-084-000-12	W02.3			40	0	12	40	11,65	4	-	84	12
25119	PSMZ-120-100-050-100-000-12	W02.3			50	0	12	50	11,6	4	-	100	12
25120	PSMZ-120-100-060-120-000-12	W02.3			60	0	12	60	11,65	4	-	120	12
25121	PSMZ-120-200-030-074-000-12	W02.3		2	30	0	12	30	11,6	4	-	74	12
25122	PSMZ-120-200-040-084-000-12	W02.3			40	0	12	40	11,6	4	-	84	12
25123	PSMZ-120-200-050-100-000-12	W02.3			50	0	12	50	11,6	4	-	100	12
25124	PSMZ-120-200-060-120-000-12	W02.3			60	0	12	60	11,65	4	-	120	12
25125	PSMZ-120-300-030-074-000-12	W02.3		3	30	0	12	30	11,6	4	-	74	12
25126	PSMZ-120-300-040-084-000-12	W02.3			40	0	12	40	11,6	4	-	84	12
25127	PSMZ-120-300-050-100-000-12	W02.3			50	0	12	50	11,6	4	-	100	12
25128	PSMZ-120-300-060-120-000-12	W02.3			60	0	12	60	11,65	4	-	120	12
25129	PSMZ-120-400-030-074-000-12	W02.3		4	30	0	12	30	11,6	4	-	74	12
25130	PSMZ-120-400-040-084-000-12	W02.3			40	0	12	40	11,6	4	-	84	12
25131	PSMZ-120-400-050-100-000-12	W02.3			50	0	12	50	11,6	4	-	100	12
25132	PSMZ-120-400-060-120-000-12	W02.3			60	0	12	60	11,6	4	-	120	12
27038	PSMZ-120-500-024-074-000-12	W02.3		5	24	0	12	24	11,65	4	-	74	12



F/Z

Series

[f]

[fz]



Conical and reduced neck rib milling cutters with four flutes for roughing and finishing hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤ 56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

HSC

Tool variations

Z4

Conical

Z4

Reduced Neck

HA

⌀

⌀

▶

Video

35 HRC

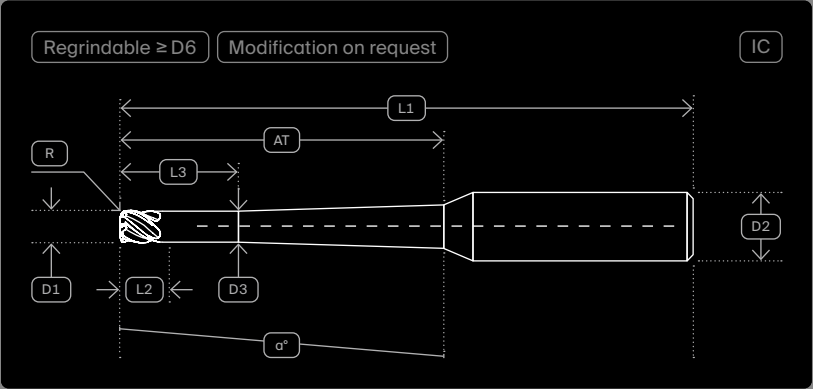
Roug.

[f]

D1,5

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
03854	FZ-008-010-004-060-000-06	W05	0,8	0,1	4	0	1,2	4	0,75	4	IC	60	6
03846	F-008-010-005-060-004-06	W02			5	0,4	1,2	3	0,75	4	IC	60	6
05556	F-008-010-005-060-009-06	W02				0,9	1,2	3	0,75	4	IC	60	6
06382	FZ-008-010-008-060-000-06	W05			8	0	1,2	8	0,75	4	IC	60	6
03848	F-008-010-008-060-004-06	W02				0,4	1,2	3	0,75	4	IC	60	6
05557	F-008-010-008-060-009-06	W02				0,9	1,2	3	0,75	4	IC	60	6
05545	FZ-008-010-012-060-000-06	W05			12	0	1,2	12	0,75	4	IC	60	6
05555	F-008-010-012-060-004-06	W02				0,4	1,2	3	0,75	4	IC	60	6
05558	F-008-010-012-060-009-06	W02				0,9	1,2	3	0,75	4	IC	60	6
03855	FZ-010-015-005-060-000-06	W05	1	0,15	5	0	1,5	5	0,95	4	IC	60	6
03856	FZ-010-015-008-060-000-06	W05			8	0	1,5	8	0,96	4	IC	60	6
03849	F-010-015-008-060-004-06	W02				0,4	1,5	4	0,95	4	IC	60	6
05559	F-010-015-008-060-009-06	W02			12	0,9	1,5	4	0,95	4	IC	60	6
03850	F-010-015-012-060-004-06	W02				0,4	1,5	4	0,95	4	IC	60	6
03851	F-010-015-012-060-009-06	W02				0,9	1,5	4	0,95	4	IC	60	6
03852	F-010-015-015-060-004-06	W02			15	0,4	1,5	4	0,95	4	IC	60	6
03853	F-010-015-015-060-009-06	W02				0,9	1,5	4	0,95	4	IC	60	6
03857	FZ-012-020-006-060-000-06	W05			6	0	1,8	6	1,13	4	IC	60	6
00540	FZ-012-020-010-060-000-06	W05			10	0	1,8	10	1,13	4	IC	60	6
00529	F-012-020-010-060-004-06	W02				0,4	2	4	1,1	4	IC	60	6
00531	F-012-020-010-060-009-06	W02			15	0,9	2	4	1,1	4	IC	60	6
00541	FZ-012-020-015-060-000-06	W05				0	1,8	15	1,1	4	IC	60	6
00530	F-012-020-015-060-004-06	W02			20	0,4	2	4	1,1	4	IC	60	6
00537	F-012-020-015-060-009-06	W02				0,9	2	4	1,1	4	IC	60	6
00536	F-012-020-020-060-004-06	W02			25	0,4	2	4	1,1	4	IC	60	6
00532	F-012-020-020-060-009-06	W02				0,9	2	4	1,1	4	IC	60	6
05560	F-012-020-025-060-004-06	W02			30	0,4	2	4	1,1	4	IC	60	6
05562	F-012-020-025-060-009-06	W02				0,9	2	4	1,1	4	IC	60	6
05561	F-012-020-030-070-004-06	W02	1,2	0,2	10	0,4	2	4	1,3	4	IC	60	6
01043	F-012-020-030-070-009-06	W02				0,9	2	4	1,3	4	IC	60	6
00533	F-014-025-010-060-004-06	W02	1,4	0,25	15	0,4	2	4	1,3	4	IC	60	6
00517	F-014-025-010-060-009-06	W02				0,9	2	4	1,3	4	IC	60	6
00534	F-014-025-015-060-004-06	W02			25	0,4	2	4	1,3	4	IC	60	6
00535	F-014-025-015-060-009-06	W02				0,9	2	4	1,3	4	IC	60	6
05567	F-014-025-025-060-009-06	W02				0,9	2	4	1,3	4	IC	60	6

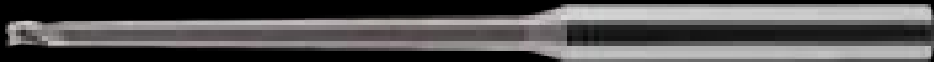
Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2		
03858	FZ-015-025-006-060-000-06	W05	1,5	0,5	6	0	2,25	6	1,43	4	IC	60	6		
00392	F-015-025-008-060-004-06	W02			8	0,4	3	5	1,4	4	IC	60	6		
05572	F-015-025-008-060-009-06	W02				0,9	3	5	1,4	4	IC	60	6		
00542	FZ-015-025-010-060-000-06	W05			10	0	2,25	10	1,43	4	IC	60	6		
05569	F-015-025-010-060-004-06	W02				0,4	3	5	1,4	4	IC	60	6		
00538	F-015-025-010-060-009-06	W02				0,9	3	5	1,4	4	IC	60	6		
00543	FZ-015-025-015-060-000-06	W05			15	0	2,25	15	1,4	4	IC	60	6		
00348	F-015-025-015-060-004-06	W02				0,4	3	5	1,4	4	IC	60	6		
00539	F-015-025-015-060-009-06	W02				0,9	3	5	1,4	4	IC	60	6		
00544	FZ-015-025-020-060-000-06	W05			20	0	2,25	20	1,4	4	IC	60	6		
00393	F-015-025-020-060-004-06	W02				0,4	3	5	1,4	4	IC	60	6		
05573	F-015-025-020-060-009-06	W02				0,9	3	5	1,4	4	IC	60	6		
01238	F-015-025-026-070-004-06	W02			26	0,4	3	5	1,4	4	-	70	6		
00330	F-015-025-026-070-009-06	W02				0,9	3	5	1,4	4	-	70	6		
05570	F-015-025-030-075-004-06	W02			30	0,4	3	5	1,4	4	-	75	6		
05574	F-015-025-030-075-009-06	W02				0,9	3	5	1,4	4	-	75	6		
05571	F-015-025-035-080-004-06	W02			35	0,4	3	5	1,4	4	-	80	6		
00936	F-015-025-035-080-009-06	W02				0,9	3	5	1,4	4	-	80	6		
00887	F-015-025-050-100-010-06	W02		0,25	50	1	3	5	1,4	4	-	100	6		
00662	F-015-025-050-100-015-06	W02				1,5	3	5	1,4	4	-	100	6		
07773	FZ-015-050-006-060-000-06	W05	1,5	0,5	6	0	2,25	6	1,4	4	IC	60	6		
05575	F-017-025-012-060-004-06	W02	1,7	0,25	12	0,4	3	5	1,6	4	IC	60	6		
05578	F-017-025-012-060-009-06	W02				0,9	3	5	1,6	4	IC	60	6		
05576	F-017-025-017-060-004-06	W02			17	0,4	3	5	1,6	4	IC	60	6		
02304	F-017-025-017-060-009-06	W02				0,9	3	5	1,6	4	IC	60	6		
05579	F-017-025-022-060-009-06	W02			22	0,9	3	5	1,6	4	IC	60	6		
05577	F-017-025-028-070-004-06	W02			28	0,4	3	5	1,6	4	-	70	6		
01202	F-017-040-015-060-004-06	W02			0,4	15	0,4	3	5	1,6	4	IC	60	6	
03456	F-017-050-015-060-004-06	W02			0,5	15	0,4	3	5	1,6	4	IC	60	6	
00917	F-019-020-050-100-009-06	W02			1,9	0,4	50	0,9	3	6	1,8	4	-	100	6
00891	F-019-020-070-120-009-06	W02						70	0,9	3	6	1,8	4	-	120
05581	F-019-025-015-060-004-06	W02	15	0,4			3	6	1,8	4	-	60	6		
00914	F-019-025-015-060-009-06	W02		0,9			3	6	1,8	4	-	60	6		
01286	F-019-025-025-060-004-06	W02	25	0,4			3	6	1,8	4	-	60	6		
00915	F-019-025-025-060-009-06	W02		0,9			3	6	1,8	4	-	60	6		
00916	F-019-025-035-080-009-06	W02	0,25	35			0,9	3	6	1,8	4	-	80	6	
04043	F-019-040-015-060-009-06	W02	1,9	0,4			15	0,9	3	6	1,8	4	-	60	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
05345	FZ-020-020-004-060-000-04	W05	2,5	0,4	4	0	2	4	1,93	4	-	60	4
05346	FZ-020-020-008-060-000-04	W05			8	0	2	8	1,93	4	-	60	4
05347	FZ-020-020-010-060-000-04	W05			10	0	2	10	1,93	4	-	60	4
05348	FZ-020-020-012-060-000-04	W05			12	0	2	12	1,9	4	-	60	4
05349	FZ-020-020-016-060-000-04	W05			16	0	2	16	1,9	4	-	60	4
05350	FZ-020-020-020-060-000-04	W05			20	0	2	20	1,9	4	-	60	4
04860	FZ-020-025-010-060-000-06	W05			10	0	3	10	1,93	4	-	60	6
01465	FZ-020-025-015-060-000-06	W05			15	0	3	15	1,93	4	-	60	6
00436	FZ-020-025-020-060-000-06	W05			20	0	3	20	1,93	4	-	60	6
06334	F-020-030-020-060-004-06	W02			20	0,4	3	6	1,9	4	-	60	6
02212	F-020-030-020-060-009-06	W02				0,9	3	6	1,9	4	-	60	6
05583	F-020-030-030-070-004-06	W02			30	0,4	3	6	1,9	4	-	70	6
05585	F-020-030-030-070-009-06	W02				0,9	3	6	1,9	4	-	70	6
05584	F-020-030-040-080-004-06	W02			40	0,4	3	6	1,9	4	-	80	6
05586	F-020-030-040-080-009-06	W02				0,9	3	6	1,9	4	-	80	6
05587	F-025-025-015-060-004-06	W02			15	0,4	4	7	2,35	4	-	60	6
00850	F-025-025-015-060-009-06	W02				0,9	4	7	2,35	4	-	60	6
05591	F-025-025-015-060-015-06	W02				1,5	4	7	2,35	4	-	60	6
01343	F-025-025-030-075-004-06	W02			30	0,4	4	7	2,35	4	-	75	6
05589	F-025-025-030-075-009-06	W02				0,9	4	7	2,35	4	-	75	6
00665	F-025-025-030-075-015-06	W02				1,5	4	7	2,35	4	-	75	6
05590	F-025-025-040-080-009-06	W02			40	0,9	4	7	2,35	4	-	80	6
05592	F-025-025-040-080-015-06	W02				1,5	4	7	2,35	4	-	80	6
00664	F-025-025-050-100-015-06	W02			50	1,5	4	7	2,35	4	-	100	6
20051	FZ-025-040-010-060-000-06	W05	2,5	0,4	10	0	3,8	10	2,35	4	-	60	6
07236	F-025-040-015-060-009-06	W02			15	0,9	4	7	2,35	4	-	60	6
07235	F-025-040-030-075-009-06	W02			30	0,9	4	7	2,35	4	-	75	6
07317	F-025-040-040-075-009-06	W02			40	0,9	4	7	2,35	4	-	75	6
00666	F-025-040-050-100-015-06	W02			50	1,5	4	7	2,35	4	-	100	6
17277	F-025-040-055-100-012-06	W02			55	1,2	4	7	2,4	4	-	100	6

Code	Art. No.	WG	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
02238	FZ-100-025-035-075-000-10	W05	10	0,25	35	0	10	35	9,65	4	-	75	10
05551	FZ-100-050-035-075-000-10	W05		0,5	35	0	10	35	9,69	4	-	75	10
00835	FZ-100-050-055-100-000-10	W05			55	0	10	55	9,69	4	-	100	10
05552	FZ-100-100-035-075-000-10	W05			35	0	10	35	9,69	4	-	75	10
00546	FZ-100-100-055-100-000-10	W05			55	0	10	55	9,69	4	-	100	10
01183	F-100-100-060-100-009-12	W02			60	0,9	10	20	9,65	4	-	100	12
05608	F-100-100-070-150-004-12	W02				0,4	10	20	9,65	4	-	150	12
00335	F-100-100-070-150-008-12	W02		1	70	0,8	10	20	9,65	4	-	150	12
06822	FZ-100-200-035-075-000-10	W05		2	35	0	10	35	9,8	4	-	75	10
00837	FZ-100-200-055-100-000-10	W05			55	0	12	55	9,69	4	-	100	10
02239	FZ-120-025-045-100-000-12	W05	12	0,25	45	0	12	45	11,6	4	-	100	12
10870	FZ-120-025-055-100-000-12	W05			55	0	12	55	11,65	4	-	100	12
05553	FZ-120-050-045-100-000-12	W05		0,5	45	0	12	45	11,65	4	-	100	12
00472	F-120-100-070-150-015-16	W02				1,5	12	24	11,6	4	-	150	16
01048	F-120-100-070-170-016-16	W02				1,6	12	24	11,6	4	-	170	16



[cf]



Conical rib milling cutters with three flutes for roughing and finishing non-ferrous materials.

Areas of application

ALU Cu AISi

Tool variations

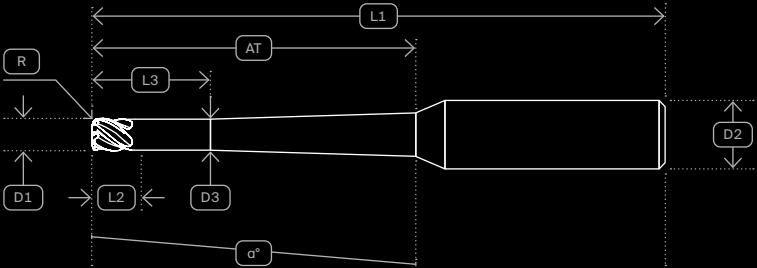
Z3 Conical

HA



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
06120	CF-012-010-019-075-009-06	1,2	0,1	19	0,9	2	8	1,1	3	-	75	6
06121	CF-012-010-025-075-009-06			25	0,9	2	8	1,1	3	-	75	6
02555	CF-015-010-020-060-004-06			20	0,4	2	8	1,4	3	-	60	6
02556	CF-015-010-025-060-004-06				0,4	2	8	1,4	3	-	60	6
02559	CF-015-010-025-075-009-06			25	0,9	2	8	1,4	3	-	75	6
02557	CF-015-010-030-075-004-06			30	0,4	2	8	1,4	3	-	75	6
02560	CF-015-010-035-080-009-06			35	0,9	2	8	1,4	3	-	80	6
02558	CF-015-010-040-085-004-06			40	0,4	2	8	1,4	3	-	85	6
02561	CF-015-010-055-100-009-06			55	0,9	2	8	1,4	3	-	100	6
02562	CF-015-010-075-120-009-06		0,1	75	0,9	2	8	1,4	3	-	120	6
06782	CF-015-020-053-100-005-06	1,5	0,2	53	0,5	2	8	1,4	3	-	100	6
01460	CF-018-010-030-075-009-06	1,8	0,1	30	0,9	2	8	1,7	3	-	75	6
01479	CF-018-010-050-100-009-06			50	0,9	2	8	1,7	3	-	100	6
00258	CF-020-010-025-060-009-06			25	0,9	3	8	1,9	3	-	60	6
01387	CF-020-010-040-080-004-06				0,4	3	8	1,9	3	-	80	6
00281	CF-020-010-040-100-009-06			40	0,9	3	8	1,9	3	-	100	6
01388	CF-020-010-055-100-004-06				0,4	3	8	1,9	3	-	100	6
00282	CF-020-010-055-120-009-06			55	0,9	3	8	1,9	3	-	120	6
01389	CF-020-010-070-120-004-06		0,1	70	0,4	3	8	1,9	3	-	120	6
01534	CF-020-050-070-120-004-06	2	0,5	70	0,4	3	8	1,9	3	-	120	6
01390	CF-024-010-040-080-004-06	2,4	0,1	40	0,4	3	8	2,3	3	-	80	6
01391	CF-024-010-055-100-004-06			55	0,4	3	8	2,3	3	-	100	6
01392	CF-024-010-070-120-004-06			70	0,4	3	8	2,3	3	-	120	6
09835	CF-025-030-030-075-014-06	2,5	0,3	30	1,4	3	8	2,4	3	-	75	6
01440	CF-030-010-040-075-004-06			40	0,4	4	8	2,9	3	-	75	6
01442	CF-030-010-055-100-004-06			55	0,4	4	8	2,9	3	-	100	6
01443	CF-030-010-070-120-004-06		0,1	70	0,4	4	8	2,9	3	-	120	6
07989	CF-030-020-028-060-009-06	3	0,2	28	0,9	4	8	2,9	3	-	60	6



Monolithic tools

Form cutter



Form cutter

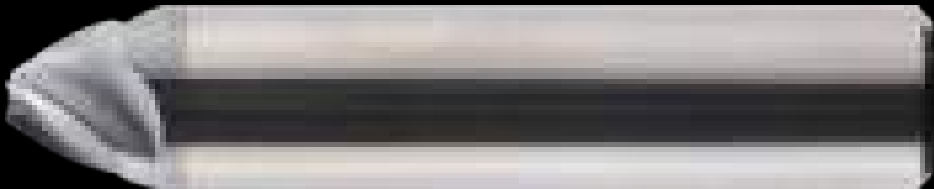
[ff]	Chamfer	Roughing (+) Finishing	H	P	K	M	S	N	-	166
[dsf]	Dovetail	Roughing (+) Finishing	H	P	K	M	-	-	-	168
[vkf]	Radius	Roughing (+) Finishing	H	P	K	M	S	N	-	170

This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.

All available tools and cutting data can be found online at iklick.aura.tools



[ff]



Chamfer cutter with three or four flutes to place chamfers.

Areas of application

≤ 58 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

ALU

AISI

Cu

Tool variations

Z3

Z4

HA

Ø

Ø

▶

Video

52 HRC

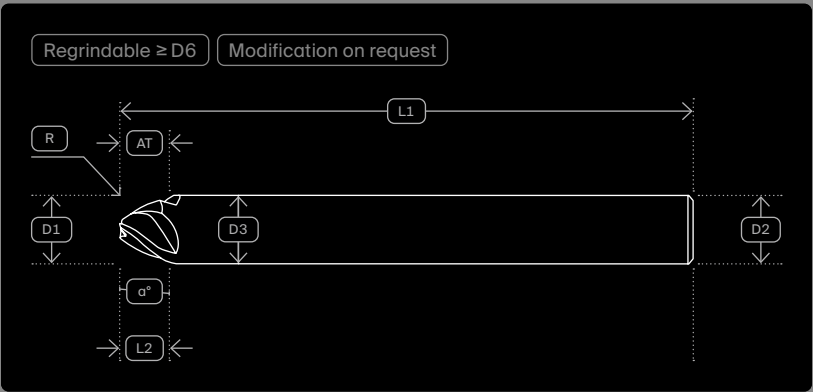
Finish.

[ff]

D16

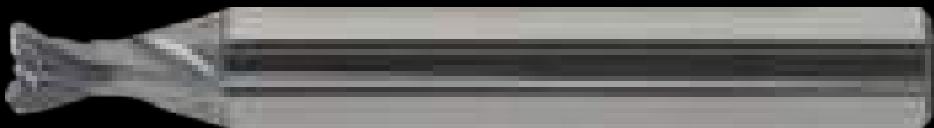
All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
06031	FF-037-000-002-051-300-06	3,7	0	2	30	2	-	6	4	-	51	6
06025	FF-040-000-001-051-450-06	4	0	1	45	1	-	6	3	-	51	6
06026	FF-040-000-002-059-450-08			2	45	2	-	8	3	-	59	8
06027	FF-040-000-003-067-450-10			3	45	3	-	10	3	-	67	10
06028	FF-040-000-004-074-450-12			4	45	4	-	12	3	-	74	12
06037	FF-044-000-003-051-150-06	4,4	0	3	15	3	-	6	4	-	51	6
06032	FF-045-000-003-059-300-08	4,5	0	3	30	3	-	8	4	-	59	8
06034	FF-050-000-006-074-300-12	5	0	6	30	6	-	12	4	-	74	12
06033	FF-054-000-004-067-300-10	5,4	0	4	30	4	-	10	4	-	67	10
06035	FF-056-000-009-083-300-16	5,6	0	9	30	9	-	16	4	-	83	16
06038	FF-059-000-004-059-150-08	5,85	0	4	15	4	-	8	4	-	59	8
06029	FF-060-000-005-083-450-16	6	0	5	45	5	-	16	3	-	83	16
06030	FF-060-000-007-100-450-20			7	45	7	-	20	3	-	100	20
06036	FF-062-000-012-100-300-20	6,15	0	12	30	12	-	20	4	-	100	20
06039	FF-068-000-006-067-150-10	6,8	0	6	15	6	-	10	4	-	67	10
06040	FF-077-000-008-074-150-12	7,7	0	8	15	8	-	12	4	-	74	12
06041	FF-107-000-010-083-150-16	10,65	0	10	15	10	-	16	4	-	83	16
06042	FF-120-000-015-100-150-20	12	0	15	15	15	-	20	4	-	100	20

[dsf]



Chamfer cutter with three or four flutes to place chamfers.

Areas of application

≤ 58 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

Tool variations

Z 3

Z 4

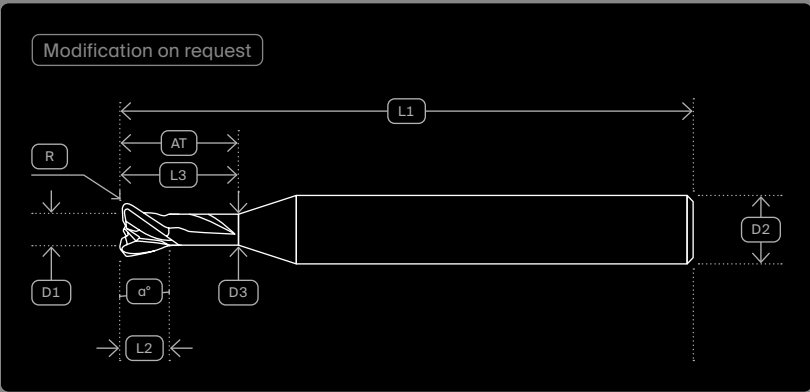
HA

Corner radius

Sharp-edged

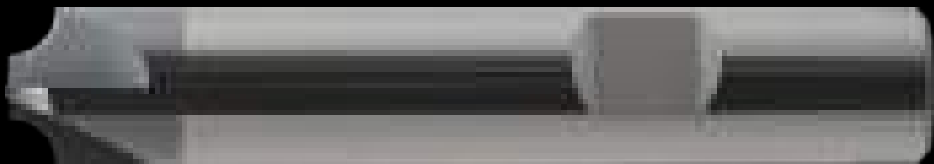
All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
10573	DSF-0504-050-003-060-30°	5,04	0,5	5	-30	2,49	5	2,9	4	-	60	6
18352	DSF-067-000-095-064-15-08	6,75	0	9,5	-15	4,5	9,5	4,338	3	-	60	8
11758	DSF-080-000-012-060/15°	8	0	12	-15	5,5	12	5,05	3	-	60	8
07635	DSF-080-000-012-065/14°				-14	4	12	6	3	-	65	8
01022	DSF-088-000-006-075/15°	8,87	0	12	-15	5,8	12	5,76	3	-	75	10
18289	DSF-091-100-007-075-40-10	8,284	1	7,5	-20	6	1,5	4,772	3	-	75	10
15842	DSF-088-080-012-075/25°	8,81	0,8	12	-25	5,06	12	5	3	-	75	10
03539	DSF-100-050-008-075-100-10	10	0,5	12	-10	8	12	7,18	3	-	75	10
01024	DSF-120-000-008-080/15°	12	0	20,5	-15	8	15	7,5	3	-	80	12
01023	DSF-120-000-015-080/10°				-10	8,5	15	9	3	-	80	12
07634	DSF-120-000-015-065/8°				-8	8	15	9,75	4	-	65	12
01021	DSF-120-000-020-080/10°				-10	7,5	20,5	9,35	3	-	80	12

[vkf]



Form cutter to place outer radii.

Areas of application

≤ 58 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

CrNi

INC

Titan

ALU

AISI

Cu

Tool variations

Z 4

HB

Ø

Ø

 All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
06394	VKF-R0.5-060-080-065	8	0,5	0,5	0	0,5	0,5	8	4	-	65	8
02779	VKF-R1-060-080-065		1	1	0	1	1	8	4	-	65	8
02780	VKF-R1.5-070-100-070	10	1,5	1,5	0	1,5	1,5	10	4	-	70	10
02781	VKF-R2-060-100-070		2	2	0	2	2	10	4	-	70	10
02782	VKF-R2.5-050-100-070	12	2,5	2,5	0	2,5	2,5	10	4	-	70	10
02783	VKF-R3-060-120-070	16	3	3	0	3	3	12	4	-	70	12
02786	VKF-R4-080-160-075		4	4	0	4	4	16	4	-	75	16
02787	VKF-R4.5-070-160-075	16	4,5	4,5	0	4,5	4,5	16	4	-	75	16
02788	VKF-R5-060-160-075		5	5	0	5	5	16	4	-	75	16



Monolithic tools

Special solutions

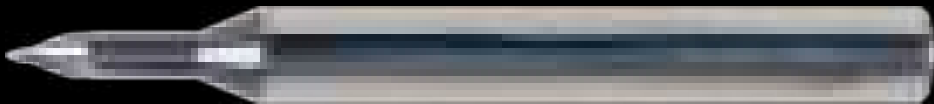


Special solutions

[peb]	≥ 44 HRC	Engraving	H	P	K	M	S	N	-	174
[gk]	≥ 44 HRC	Engraving	H	P	K	M	S	N	-	176
[pbn]	≥ 48 HRC	Polishing	H	-	-	M	-	-	-	178
[cbc]	Conical Barrel	Finishing	H	P	K	M	S	N	-	180

This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.

[peb]



Engraving ball for milling logos, engravings, writings and waffle patterns in hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

INC

Titan

ALU

AISI

Cu

S = 15.000+ (l/min)

ap = 2 × R

vf = 1000 × 2 × R

Tool variations

Z 2

HA

Video

50 HRC

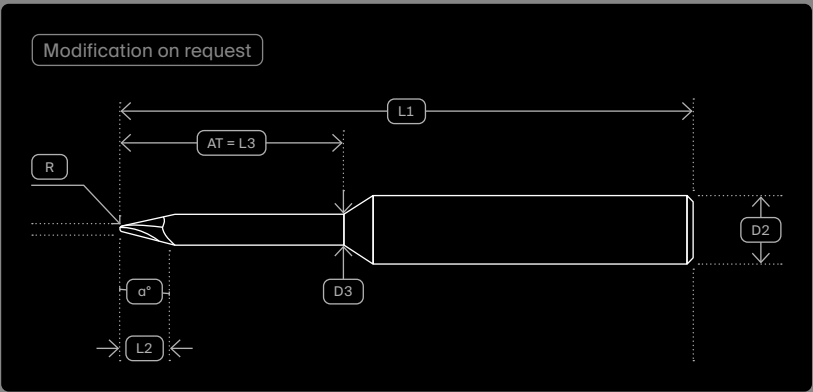
Engra.

[peb]

R 0,3

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
36511	PEB-010-012-058-100-06	0,1	12	10	8,031	12	3	2	-	58	6
36437	PEB-010-012-058-150-06			15	5,312	12	3	2	-	58	6
36438	PEB-010-012-058-300-06			30	2,498	12	3	2	-	58	6
36512	PEB-015-012-058-100-06	0,15	12	10	7,793	12	3	2	-	58	6
36439	PEB-015-012-058-150-06			15	5,169	12	3	2	-	58	6
36440	PEB-015-012-058-300-06			30	2,448	12	3	2	-	58	6
36513	PEB-025-012-058-100-06	0,25	12	10	7,317	12	3	2	-	58	6
36441	PEB-025-012-058-150-06			15	4,882	12	3	2	-	58	6
36442	PEB-025-012-058-300-06			30	2,348	12	3	2	-	58	6
36514	PEB-030-012-058-100-06	0,3	12	10	7,079	12	3	2	-	58	6
36443	PEB-030-012-058-150-06			15	4,739	12	3	2	-	58	6
36444	PEB-030-012-058-300-06			30	2,298	12	3	2	-	58	6
36515	PEB-040-012-058-100-06	0,4	12	10	6,603	12	3	2	-	58	6
36445	PEB-040-012-058-150-06			15	4,453	12	3	2	-	58	6
36446	PEB-040-012-058-300-06			30	2,198	12	3	2	-	58	6
36516	PEB-050-012-058-100-06	0,5	12	10	6,128	12	3	2	-	58	6
36447	PEB-050-012-058-150-06			15	4,166	12	3	2	-	58	6
36448	PEB-050-012-058-300-06			30	2,098	12	3	2	-	58	6

[gk]



Engraving ball for milling engravings and writings in hardened and unhardened steels ≤ 56 HRC.

Areas of application

≤56 HRC

1.400 N

≥ 1.000 N

≤ 1.000 N

Steel

GG

GjV

INC

Titan

ALU

AlSi

Cu

Tool variations

Z 2

HA

Video

55 HRC

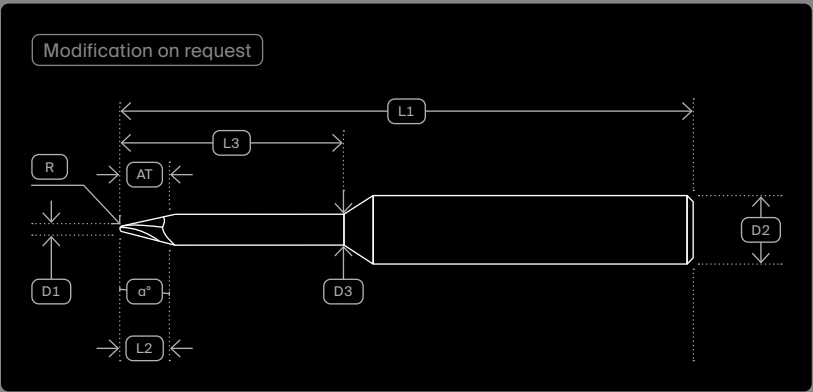
Engr.

[gk]

D0,5

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
10155	GK-0012-006-012-060-100-06	0,12	0,06	5,38	10	5,38	12	2	2	-	60	6
04853	GK-0015-0075-012-060-100-06	0,15	0,075	5,31	10	5,31	12	2	2	-	60	6
16309	GK-002-010-012-060-450-06	0,2	0,1	1,46	45	1,46	12	3	2	-	60	6
03894	GK-002-010-012-060-300-06			2,5	30	2,5	12	3	2	-	60	6
06390	GK-002-010-012-060-150-06			5,31	15	5,31	12	3	2	-	60	6
01115	GK-003-015-012-060-300-06			2,45	30	2,45	12	3	2	-	60	6
01258	GK-003-015-012-060-150-06	0,3	0,15	5,17	15	5,17	12	3	2	-	60	6
10960	GK-003-015-005-060-275-06			5,59	27,5	5,59	5,6	6	2	-	60	6
07672	GK-003-015-012-060-100-06			7,79	10	7,79	12	3	2	-	60	6
17109	GK-004-020-012-060-300-06	0,4	0,2	2,4	30	2,4	12	3	2	-	60	6
01114	GK-005-025-012-060-300-06	0,5	0,25	2,35	30	2,35	12	3	2	-	60	6
01259	GK-005-025-012-060-150-06			4,88	15	4,88	12	3	2	-	60	6
01116	GK-006-030-012-060-300-06			2,3	30	2,3	12	3	2	-	60	6
02137	GK-006-030-012-060-200-06			3,54	20	3,54	12	3	2	-	60	6
01260	GK-006-030-012-060-150-06	0,6	0,3	4,74	15	4,74	12	3	2	-	60	6
08805	GK-006-030-012-060-050-06			6,81	5	6,81	14	3	2	-	60	6
07671	GK-006-030-012-060-100-06			7,08	10	7,08	12	3	2	-	60	6
11300	GK-008-040-025-060-050-06	0,8	0,4	1,5	5	1,5	25	3	2	-	60	6
01523	GK-010-050-012-060-450-06	1	0,5	1,79	45	1,79	12	4	2	-	60	6
06393	GK-010-050-012-060-300-06			2,96	30	2,96	12	4	2	-	60	6
06392	GK-010-050-012-060-225-06			4,02	22,5	4,02	12	4	2	-	60	6
06391	GK-010-050-012-060-150-06			6,03	15	6,03	12	4	2	-	60	6

[pbn]



Polishing ball made of PCD for producing surface roughness in the nanometer range. *(Only to be used effectively on high-precision HSC machines, taking special process parameters into account. Please coordinate this with your Aura application engineer)*

Areas of application

≥ 48 HRC

HSC

Tool variations

Z1

HA

⌀

▶

Video

62 HRC

Polish.

[pbn]

D 1,5

All available dimensions and CAM export data can be found online at iklick.aura.tools

- D1

Cutter diameter

R

Radius

AT

Working depth

L3

Cylindrical free length

α°

Conic

D2

Shank diameter

L1

Total length

L2

Cutting length

Z

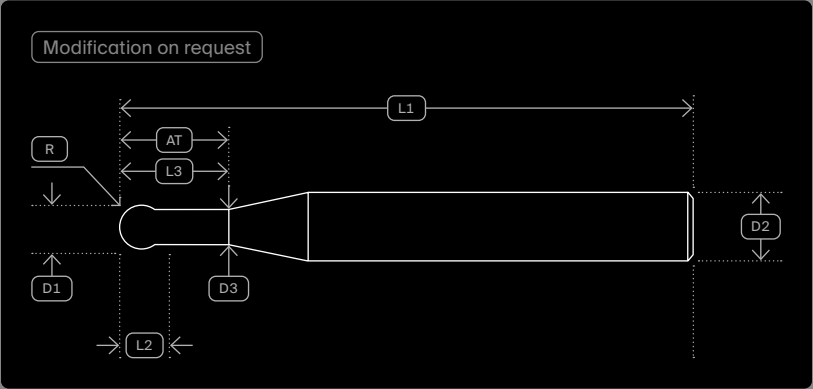
Number of teeth

D3

Neck diameter

IC

Internal coolant



Code	Art. No.	D1	R	AT	α°	L2	L3	D3	Z	IC	L1	D2
21744	PBN-010-050-0025-050-000-04	1	0,5	2,5	0	0,5	2,5	0,96	1	-	50	4
23110	PBN-015-075-0037-050-000-04	1,5	0,75	3,75	0	0,75	3,75	1,45	1	-	50	4
21743	PBN-020-100-0050-050-000-04	2	1	5	0	1	5	1,95	1	-	50	4

[cbc]



Conical barrel cutters with four flutes for finishing contours in hardened and unhardened steels ≤ 56 HRC.

Areas of application

- 58 – 48 HRC
- 1.400 N ≥ 1.000 N ≤ 1.000 N Steel
- GG GJV
- CrNi
- INC Titan
- ALU

Tool variations

Z 4

HA  



Video

48 HRC

Finish.

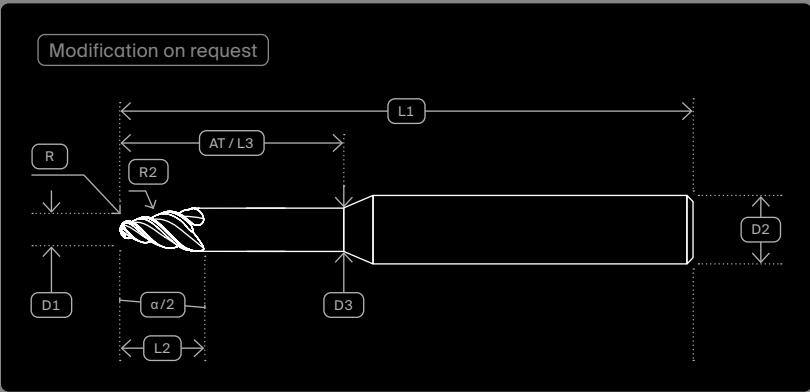
[cbc]

D 2



All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Radius
AT	Working depth	F	Chamfer
α°	Conic	L3	Cylindrical free length
L1	Total length	D2	Shank diameter
Z	Number of teeth	L2	Cutting length
IC	Internal coolant	D3	Neck diameter



Code	Art. No.	D1	R	R2	AT	α°	L2	L3	D3	Z	IC	L1	D2
27089	CBC-020-30-005-052-360-08	2	1	360	12	30	4,77	12	6	4	-	52	8
27088	CBC-020-25-006-054-360-08			360	14	25	5,58	14	6	4	-	54	8
27087	CBC-020-20-007-058-360-08			360	18	20	6,81	18	6	4	-	58	8
27085	CBC-020-15-009-064-360-08			360	23	15	8,93	23	6	4	-	64	8
29067	CBC-020-10-013-076-500-08			500			13,3	35	6	4	-	76	8
27084	CBC-020-10-014-076-360-08	3	1,5	360	35	10	13,73	35	6	4	-	76	8
27094	CBC-030-30-006-067-280-10			280	16	30	6,05	16	8	4	-	67	10
27093	CBC-030-25-007-067-280-10			280	18	25	7,12	18	8	4	-	67	10
27092	CBC-030-20-009-073-280-10			280	22	20	8,75	22	8	4	-	73	10
27091	CBC-030-15-012-081-280-10			280	30	15	11,63	30	8	4	-	81	10
29068	CBC-030-10-017-101-500-10	4	2	500			17,16	48	8	4	-	101	10
27090	CBC-030-10-019-101-280-10			280	48	10	18,89	48	8	4	-	101	10
27099	CBC-040-30-007-084-200-12			200									
29073	CBC-040-30-007-084-360-12			360	19	30	7,39	19	10	4	-	84	12
27098	CBC-040-25-009-084-200-12			200									
29072	CBC-040-25-009-084-360-12			360	22	25	8,76	22	10	4	-	84	12
27097	CBC-040-20-011-084-200-12			200									
29071	CBC-040-20-011-084-360-12			360	28	20	10,89	28	10	4	-	84	12
29070	CBC-040-15-014-094-360-12			360			14,02	38	10	4	-	94	12
27096	CBC-040-15-015-094-200-12			200	38	15	14,91	38	10	4	-	94	12
29069	CBC-040-10-021-110-500-12			500	52	10	21,19	52	10	4	-	110	12

AURA®



Tool & Mold Making
Modular Tools

Modular Systems

186

Standards



RD-System	188
RB-System	194
PT-System	198
TK-System	200
VA -System	204
V-RB -System	212

214

Application specialists



TRIHf-System	216
ZS-System	220
MSF-System	222

224

High-Feed



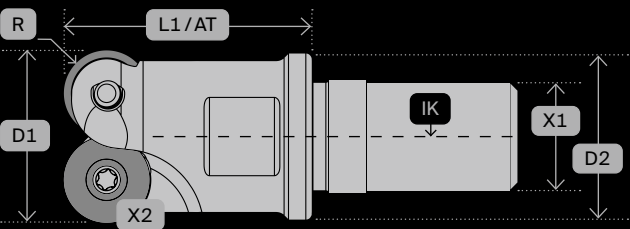
PHF-System	226
DHF-System	228
NTF-System	230
BTF-System	232

Symbols

Dimensional sketch

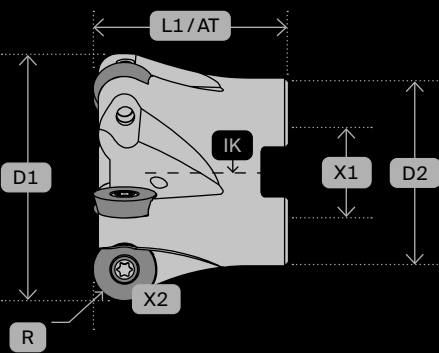
Carbide Shank

Thread



Dimensional sketch

Shell



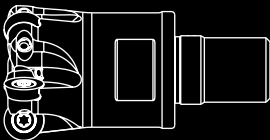
Technical designation

D1	Cutter diameter	Z	Number of teeth	X1	Interface holder	IC	Internal cooling supply
AT	Working depth	R	Programming-Radius	X2	Interface plate	☸	Dry machining
α°	Conic	RE	Corner radius	M (Nm)	Torque	💧	Wet machining possible
L1	Total length	D2	Flange diameter	V	Position of the insert		

Carbide Shank



Thread



Shell



Applications

- Roughing
- Finishing

Material class

H	Hardened steel	S	Superalloys
P	Steel	N	Non-ferrous
K	Cast iron	Graph	Graphite
M	Stainless steel		



Modular tools Bodies Inserts

Standards

188

RD-System

ESR ESR 5° ASR ASR 5°



H P K M S N Graph

R 2,5-8



194

RB-System

EST EST HQC



H P K - - N Graph

R 1



198

PT-System

AS 5K16



- P K - - - -

R 7



200

TK-System

EK ET



H - - - - -

R 1-16



204

VA-System

VA-BODY-BA VA-BODY-BU



H - - - - - Graph

R 0,5-6



212

V-RB-System

AAL EAL



- - - - - N -

R 1-3



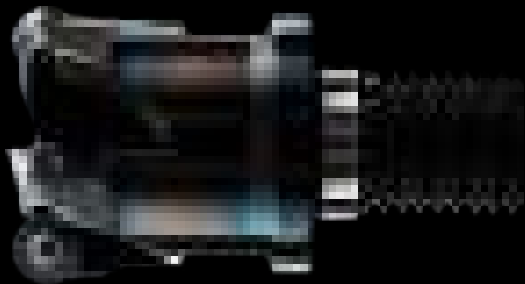
This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.

All available tools and cutting data can be found online at iklick.aura.tools



RD-System

ESR ESR 5° ASR ASR 5°



Modular screw-in and shell milling cutters for round indexable inserts for roughing and finishing. Variants with 0° neutral and 5° positive installation position of the indexable insert.

Areas of application

P

K

H

M

S

N

Graph

Inserts

Tool variations

Thread

D1 10 – 42

Z 2–5

Shell

D1 52 – 125

Z 4–8

With 0° installation position (γ)

With 5° pos. Installation position (γ)

▶

Video

1.100N

Roug.

ESR

D16 R3,5

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

R

Programming-Radius

V

Position of the insert

D2

Flange diameter

X1

Interface holder

X2

Interface insert

M (Nm)

Torque

Thread

Shell

IC

R

AT / L1

D1

X2

Additional clamping

X1

D2

RD-Bodies

Code	Art. No.	WG	D1	R	AT	Z	D2	V	IC	X1	Type	X2
03883	21025-M6-020-RD05	W500	10	2,5	20	2	9,8	0°	IC	M6	Thread	SF05
03885	31225-M7-023-RD05	W500		2,5	23	3	11,5	0°	IC	M7	Thread	SF05
20577	21230-M7-023-RD06-HQC	W509		3	23	2	11,5	0°	IC	M7	Thread	SF06
03882	21235-M7-023-RD07-199	W500	12	3,5	23	2	11,5	0°	IC	M7	Thread	SF07199
20578	21330-M8k-023-RD06-HQC	W509		3	23	2	12,5	0°	IC	M8K	Thread	SF06
03162	21335-M8k-023-RD07-199	W500	13	3,5	23	2	12,5	0°	IC	M8K	Thread	SF07199
20579	21430-M8-023-RD06-HQC	W509	14	3	23	2	13,5	0°	IC	M8	Thread	SF06
20580	31530-M8-023-RD06-HQC	W509		3	23	3	13,5	0°	IC		Thread	SF06
02438	21535-M8-023-RD07-238	W500				2	13,5	0°	IC			SF07
00601	31535-M8-023-RD07-238	W500			23	3	13,5	0°	IC			SF07
03880	31535-M8-028-RD07-199	W500	15	3,5	28	3	13,5	0°	IC	M8	Thread	SF07199
20581	31630-M10k-023-RD06-HQC	W509		3	23	3	15,4	0°	IC	M10k	Thread	SF06
02656	31635-M10k-023-RD07-238	W500		3,5	23	3	15,4	0°	IC	M10k	Thread	SF07
07137	21640-M8-023-RD08	W500					13,5	0°	IC	M8		SF08
02805	21640-M10k-023-RD08	W500	16	4	23	2	15,4	0°	IC	M10k	Thread	SF08
20582	42030-M10-028-RD06-HQC	W509		3	28	4	18	0°	IC	M10	Thread	SF06
01186	42035-M10-028-RD07-238	W500						0°	IC	M10		SF07
03881	42035-M10-028-RD07-199	W500		3,5	28	4	18	0°	IC	M10	Thread	SF07199
02806	32040-M10-025-RD08	W500						0°	IC	M10		
10623	32040-M10-025-RD08-5°	W500.2		4	25	3	18	5°	IC	M10	Thread	SF08
03166	22050-M10-030-RD10	W500	20	5	30	2	18	0°	IC	M10	Thread	SF10
03169	22460-M12-035-RD12	W500	24	6	35	2	21	0°	IC	M12	Thread	SF12
20583	52530-M12-035-RD06-HQC	W509		3	35	5	23	0°	IC	M12	Thread	SF06
20609	52535-M12-035-RD07-238 HQC	W509		3,5	35	5	21	0°	IC	M12	Thread	SF07
02807	42540-M12-029-RD08	W500					21	0°	IC	M12		SF08
07246	42540-M12-029-RD08-HQC	W509		4	29	4	23	0°	IC	M12	Thread	SF08
01497	32550-M12-035-RD10	W500						0°	IC			
10625	32550-M12-035-RD10-5°	W500.2	25	5	35	3	21	5°	IC	M12	Thread	SF10
20584	63030-M16-043-RD06-HQC	W509		3	43	6	29	0°	IC	M16	Thread	SF06
20455	53035-M16-043-RD07-238 HQC	W509		3,5	43	5	29	0°	IC	M16	Thread	SF07
01498	43050-M16-043-RD10	W500	30	5	43	4	29	0°	IC	M16	Thread	SF10
02808	53240-M16-033-RD08	W500		4	33	5	29	0°	IC	M16	Thread	SF08
01664	23280-M16-042-RD16	W500	32	8	42	2	29	0°	IC	M16	Thread	SF16

RD-Bodies

Code	Art. No.	WG	D1	R	AT	Z	D2	V	IC	X1	Type	X2
20585	73530-M16-043-RD06-HQC	W509		3	43	7	29	0°	IC	M16	Thread	SF06
20554	63535-M16-043-RD07-238 HQC	W509		3,5	43	6	29	0°	IC	M16	Thread	SF07
05142	53540-M16-043-RD08-HQC	W509		4	43	5	29	0°	IC	M16	Thread	SF08
01569	43550-M16-043-RD10	W500				4	29	0°	IC	M16	Thread	SF10
01499	53550-M16-043-RD10	W500						0°	IC			
04482	53550-M16-043-RD10-HQC	W509						0°	IC			
10626	53550-M16-043-RD10-5°	W500.2		5	43	5	29	5°	IC	M16	Thread	SF10
01500	33560-M16-043-RD12	W500		6	43	3	29	0°	IC			SF12
02123	43560-M16-043-RD12	W500				4	29	0°	IC	M16	Thread	SF12
01225	33580-M16-042-RD16	W500	35	8	42	3	29	0°	IC	M16	Thread	SF12
01292	54250-M16-042-RD10	W500						0°	IC			
10627	54250-M16-042-RD10-5°	W500.2						5°	IC			
05141	54250-M16-043-RD10-HQC	W509		5	43	5	29	0°	IC	M16	Thread	SF10
00606	44260-M16-042-RD12	W500		6	42	4	29	0°	IC	M16	Thread	SF12
01694	65250-AST22-050-RD10	W550.3		5	50	6	40	0°	IC	AST22	Shell	SF10
01464	75250-AST22-050-RD10	W550				7	40	0°	IC			
00608	55260-AST22-050-RD12	W550.3						0°	IC			
10629	55260-AST22-050-RD12-5°	W550.1						5°	IC	AST22	Shell	SF12
00609	45280-AST22-050-RD16	W550.3				4	40	0°	IC			
04483	55280-AST22-050-RD16-HQC	W513	52			5	40	0°	IC	AST22	Shell	SF16
02427	66660-AST27-050-RD12	W550.3		6	50	6	48	0°	IC	AST27	Shell	SF12
05917	66660-AST27-050-RD12-HQC	W513						0°	IC			
00610	56680-AST27-050-RD16	W550						0°	IC			
10630	56680-AST27-050-RD16-5°	W550.1		8	50	5	48	5°	IC	AST27	Shell	SF16
02296	78060-AST27-052-RD12	W550.3		6	52	7	60	0°	IC	AST27	Shell	SF12
00611	68080-AST27-052-RD16	W550						0°	IC			
10631	68080-AST27-052-RD16-5°	W550.1						5°	IC	AST27	Shell	SF16
01385	710080-AST32-052-RD16	W550		8	52	7	70	0°	IC	AST32	Shell	SF16
01386	812580-AST40-052-RD16	W550	125	8	52	8	90	0°	IC	AST40	Shell	SF16

RD-Inserts

Roughing

Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P	P25U	17186	S08P25U	W850.2	RDMW	4	SF08
		15801	S10P25U	W850.2	RDMW	5	SF10
		15802	S12P25U	W850.2	RDMW	6	SF12
		16391	S16P25U	W850.2	RDMW	8	SF16
	P40	07518	S0740	W850	RDMW	3,5	SF07
		04954	S0840	W850	RDMW	4	SF08
		01062	S1040	W850	RDMW	5	SF10
		01063	S1240	W850	RDMW	6	SF12
		01064	S1640	W850	RDMW	8	SF16
	P50	29326	S08P50	W850	RDMW	4	SF08
		09793	S10P50	W850	RDMW	5	SF10
		29327	S12P50	W850	RDMW	6	SF12
		10360	S16P50	W850	RDMW	8	SF16
K	K10G	11845	S0810G	W866	RDMW	4	SF08
		07536	S1010G	W866	RDMW	5	SF10
		07297	S1210G	W866	RDMW	6	SF12
		07861	S1610G	W866	RDMW	8	SF16
H	NANO	10086	S07NA	S07NA	RDMW	3,5	SF07
		05848	S07NA.1	S07NA.1	RDMW		SF07199
		29330	S08NA	S08NA	RDMW	4	SF08
		03942	S10NA	S10NA	RDMW	5	SF10
		03943	S12NA	S12NA	RDMW	6	SF12
		03888	S16NA	S16NA	RDMW	8	SF16
M	M50	11823	SH08M50	W850.3	RDMT	4	SF08
		10361	SH10M50	W850.3	RDMT	5	SF10
		10362	SH12M50	W850.3	RDMT	6	SF12
		09991	SH16M50	W850.3	RDMT	8	SF16
S	INC35	17237	SH08INC35	W862.2	RDMT	4	SF08
		17238	SH10INC35	W862.2	RDMT	5	SF10
		17239	SH12INC35	W862.2	RDMT	6	SF12
		17240	SH16INC35	W862.2	RDMT	8	SF16

RD-Inserts

Roughing+Finishing

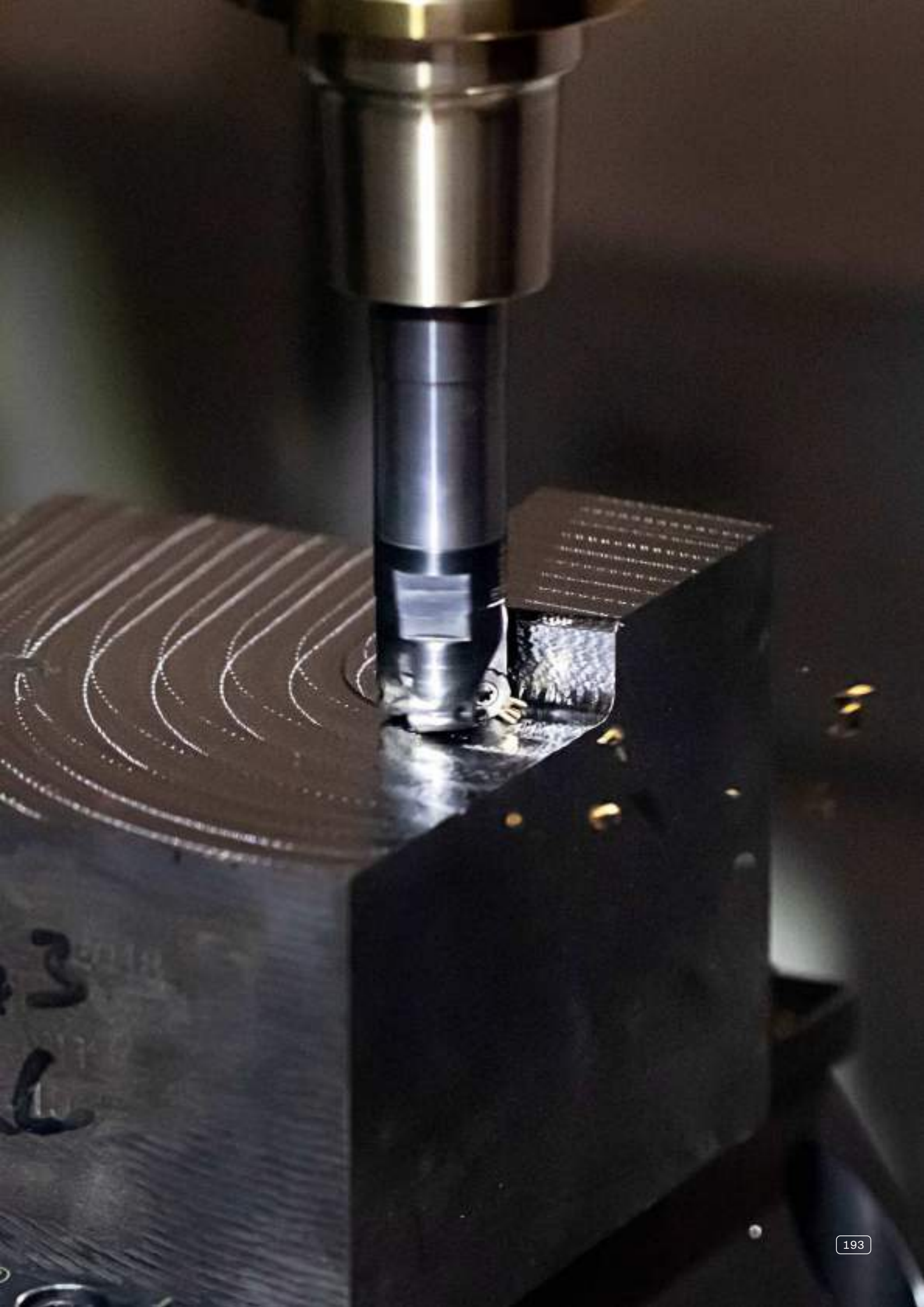
Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P	P25C	24539	F06P25C	W851.4	RDHW	3	SF06∅
		24540	F07P25C	W851.4	RDHW	3,5	SF07∅
N	AL	26092	F06AL	W862.1	RDHT	3	SF06∅
		26094	F07AL	W862.1	RDHT	3,5	SF07∅
		26093	F07AL.1	W862.1	RDHT		SF07199∅
		17056	F08AL	W862.1	RDHT	4	SF08∅
		17057	F10AL	W862.1	RDHT	5	SF10∅
		17058	F12AL	W862.1	RDHT	6	SF12∅
		26091	F16AL	W862.1	RDHT	8	SF16∅
Graph	DIA	02127	F07DI	W851.2	RDHT	3,5	SF07∅

Finishing

Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	NANO	03887	F05NA	W856	RDHW	2,5	SF05∅
		20595	F06NA	W856	RDHW	3	SF06∅
		02665	F07NA	W856	RDHW	3,5	SF07∅
		03886	F07NA.1	W856	RDHW		SF07199∅
		03732	F08NA	W856	RDHW	4	SF08∅
		02817	F10NA	W856	RDHW	5	SF10∅
	K03	26973	F0603S	W851.6	RDHW	3	SF06∅
		27078	F0703S	W851.6	RDHW	3,5	SF07∅

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
SF05	03889	KS-R25-M2.0	03891	TX-R25-06	0,7
SF06Kurz	20596	KS-R30-M2.2	03891	TX-R25/30-06	0,7
SF06Lang	22460	KS-R30-M2.2-L	01366	TX-R35-07	0,7
SF07	01363	KS-R35-M2.5	01366	TX-R35-07	0,9
SF07199	03890	KS-R35-M2.5-K	01366	TX-R35-07	0,9
SF08	03929	KS-R40-M2.5	02395	TX-R40-08	1,7
SF10	01364	KS-R50-M3.5	01367	TX-R50-15	3,4
SF12	01364	KS-R50-M3.5	01367	TX-R50-15	3,4
SF16	01365	KS-R80-M4.5	01368	TX-R80-20	5,5



RB-System



Modular screw-in milling cutters for rhombic indexable inserts. Universal for roughing and finishing.

Areas of application

H

P

K

N

Graph

Inserts

Tool variations

Thread

D1 15 – 42

Z 2 – 4

▶

Video

48 HRC

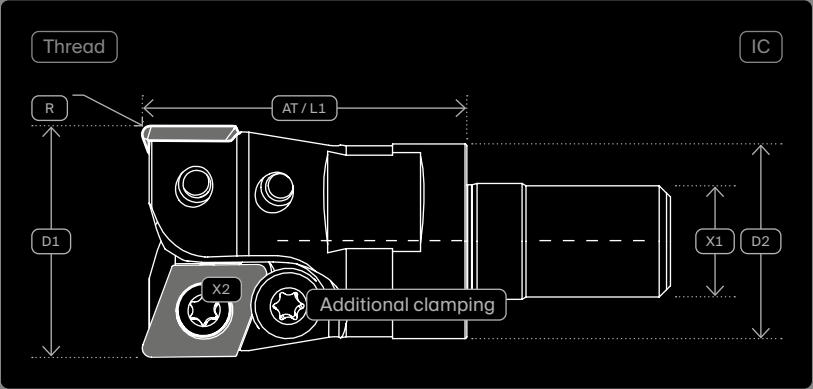
Finish.

EST

D25 R1

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	V	Position of the insert
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



RB-Bodies

90°

90° variant, for light shoulder milling work

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
17096	21610-M8-023-RB06 HQC	W503.1	16	1	23	2	13,5	IC	M8	Thread	R06
20487	21610-M10k-023-RB06-HQC	W503.1					15,4	IC	M10k		
20490	32010-M10-030-RB06-HQC	W503.1	20	1	30	3	18	IC	M10	Thread	R06
01296	22510-M12-035-RB10	W503.1	25	1	35	2	21	IC	M12	Thread	R10
20495	32510-M12-035-RB06 HQC	W503.1				3	21	IC	M12	Thread	R06
01297	33510-M16-043-RB10	W503.1	35	1	43	3	29	IC	M16	Thread	R10
01298	44210-M16-043-RB10	W503	42	1	43	4	29	IC	M16	Thread	R10

95°

95° variant for large overhang lengths and high vertical walls.

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
20983	2151090-M8-023-RB06-HQC	W503.1	15	1	23	2	13,5	IC	M8	Thread	R06
20489	3201090-M10-030-RB06-HQC	W503.1	20	1	30	3	18	IC	M10	Thread	R06
02437	2251090-M12-035-RB10	W503	25	1	35	2	21	IC	M12	Thread	R10
20491	3251090-M12-035-RB06-HQC	W503.1				3	21	IC	M12		R06
02405	3351090-M16-043-RB10	W503	35	1	43	3	29	IC	M16	Thread	R10

RB-Inserts

Roughing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P	P25	Ø1373	R0625	W852	XDHW	1	R06 Ø
		Ø1375	R1025	W852	XDHW	1	R10 Ø
	P40	Ø1374	R0640	W852	XDHW	1	R06 Ø
		Ø1274	R1040	W852	XDHW	1	R10 Ø
K	K10	Ø1239	R0610	W852	XDHW	1	R06 Ø
		Ø1193	R1010	W852	XDHW	1	R10 Ø

Roughing + Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	NANO	Ø3792	R06NA	W859.1	XDHW	1	R06 Ø
		Ø3793	R10NA	W859.1	XDHW	1	R10 Ø
N	AL	26095	R06AL	W862.8	XDHT	1	R06 Ø
		26096	R10AL	W862.8	XDHT	1	R10 Ø
Graph	DIA	Ø3872	R06DI	W852.1	XDHT	1	R06 Ø
		Ø6990	R10DI	W852.1	XDHT	1	R10 Ø

Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	K03	Ø1372	R0603	W852	XDHW	1	R06 Ø
		Ø1275	R1003	W852	XDHW	1	R10 Ø

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
R06	Ø1363	KS-R35-M2.5	Ø1366	TX-R35-07	0,9
R10	Ø1364	KS-R50-M3.5	Ø1367	TX-R50-15	3,4



PT-System

AS 5K16



Modular shell milling cutter for pentagonal indexable inserts for roughing flat surfaces and contours. The programming radius is 7 mm.

Areas of application

P

K

M

Inserts

Tool variations

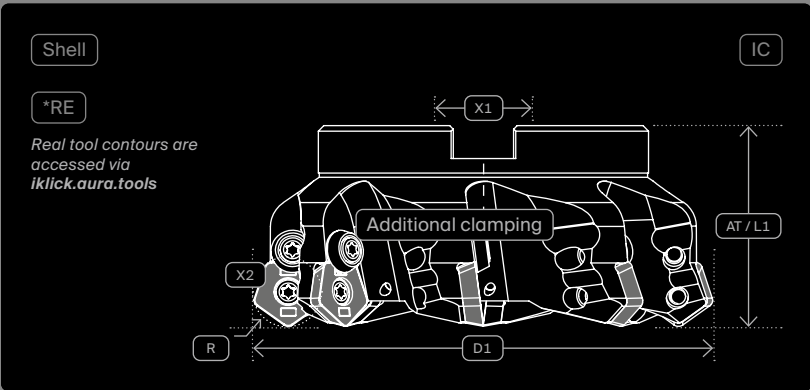
Shell

D1 52 - 250

Z 4 - 15

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	*RE	Corner radius
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



PT-Bodies

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
06840	45270-AST22-055-5K16	W517	52	7	55	4	40	IC	AST22	Shell	5K16
06619	56670-AST27-055-5K16	W517	66			5	48	IC	AST27		
06885	68070-AST27-055-5K16	W517	80			6	60	IC	AST27		
06841	710070-AST32-055-5K16	W517	100			7	70	IC	AST32		
06856	812570-AST40-055-5K16	W517	125			8	90	IC	AST40		
06761	916070-AST40-055-5K16	W517.8	160			9	120	-	AST40		
07860	1118070-AST60-055-5K16-FL	W517.8	180			11	160	-	AST60		
06778	1220070-AST60-055-5K16-FL	W517.8	200			12	160	-	AST60		
07189	1525070-AST60-055-5K16-FL	W517	250			15	160	-	AST60		

PT-Inserts

Roughing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P	P25	09877	5K16P25	W865.4	PDMW	7	5K16
	P25U	21282	5K16P25U	W865	PDMW	7	5K16
	P40	07028	5K16P40	W865.4	PDMW	7	5K16
	P50	08711	5K16P50	W865.4	PDMW	7	5K16
K	K10G	07002	5K16K10G	W867.3	PDMW	7	5K16
M	M40	08712	5K16M40	W865	PDMW	7	5K16

Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P	P40	26333	5K16PM40-BSS	W806	PDHW	7	5K16

* This insert is designed for finishing planar surfaces and can be used in all PT carriers.

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
5K16	01365	KS-R80-M4.5	01368	TX-R80-20	5,5

TK-System

EK



Modular screw-in milling cutter for one-piece radius indexable inserts. Can be used universally for roughing and finishing.

Areas of application

H

Inserts

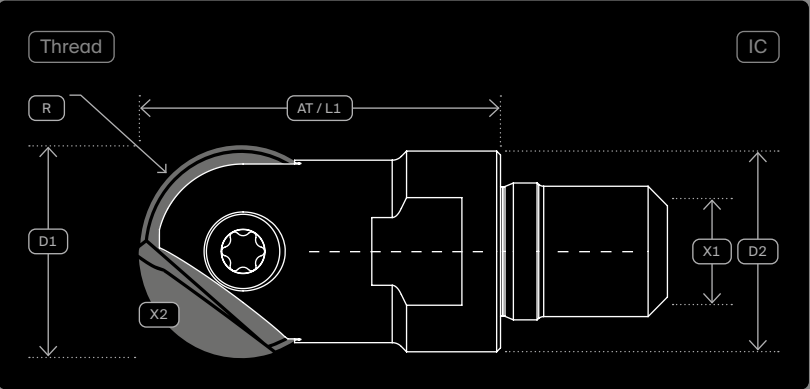


Tool variations

Thread D1 10 – 32 Z 2

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	V	Position of the insert
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



EK

EK-Bodies

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
02108	EK-10-M6-023	W507	10	5	23	2	9,8	IC	M6		K10
03981	EK-12-M7-023	W507	12	6	23	2	11,5	IC	M7		K12
03820	EK-16-M8-028	W507	16	8	28	2	13,6	IC	M8		K16
03982	EK-16-M10k-028	W507					15,4	IC	M10k		K16
03317	EK-20-M10-028	W507	20	10	28	2	18	IC	M10		K20
10175	EK-32-M16-049	W507	32	16	49	2	26	IC	M16	Thread	K32

H

EK-Inserts

Roughing + Finishing



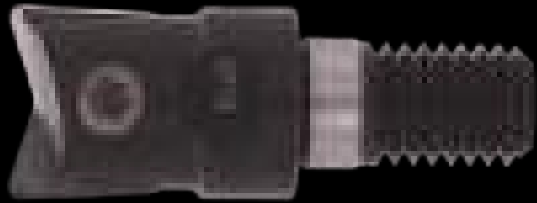
Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	NANO	03983	D10NA	W512.3	–	5	K10
		03984	D12NA	W512.2	–	6	K12
		03985	D16NA	W512.3	–	8	K16
		03986	D20NA	W512.3	–	10	K20
		10180	D32NA	W512	–	16	K32

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
K10	02114	KPS-R50-M3	02395	TX-R40-08	2
K12	02115	KPS-R60-M3.5	02396	TX-R60-10	3
K16	02116	KPS-R80-M4	01367	TX-R50-15	4,5
K20	02117	KPS-R10-M5	01368	TX-R80-20	7,5
K32	12377	KPS-R160-M8	12380	TX-R160-30	-

TK-System

ET



Modular screw-in milling cutter for one-piece toric indexable inserts. Can be used universally for roughing and finishing.

Areas of application

H

Inserts

Tool variations

Thread

D1 10 – 20

Z 2

Video

48 HRC

Finish.

ET

D20 R1,6

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

R

Programming-Radius

V

Position of the insert

D2

Flange diameter

X1

Interface holder

X2

Interface insert

M (Nm)

Torque

ET

ET-Bodies

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	X1	IC	Type	X2
01506	ET-10-M6-020	W506	10	–	20	2	9,8	M6	IC		T10
02232	ET-12-M6-020	W506	12	–	20	2	10	M6	IC		T12
01507	ET-12-M7-020	W506					11,5	M7	IC		T12
01509	ET-16-M10k-023	W506	16	–	23	2	15,4	M10k	IC		T16
02233	ET-20-M10-028	W506	20	–	28	2	18	M10	IC	Thread	T20

H

ET-Inserts

Roughing + Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	NANO	03839	T1010NA	W8570	–	1	T10
		03838	T1210NA	W8570	–	1	T12
		04699	T1220NA	W8570	–	2	T12
		03837	T1610NA	W8570	–	1	T16
		03836	T1620NA	W8570	–	2	T16
		12140	T2016NA	W8570	–	1,6	T20

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
T10	02114	KPS-R50-M3	02395	TX-R40-08	2
T12	02115	KPS-R60-M3.5	02396	TX-R60-10	3
T16	02116	KPS-R80-M4	01367	TX-R50-15	4,5
T20	02117	KPS-R10-M5	01368	TX-R80-20	7,5

VA-System

VA-BODY-BU



VA-System for roughing and finishing in 2D and 3D as well as manual post-processing of remaining material areas.

Areas of application

H

Graph

Inserts

Tool variations

Carbide Shank

D1 6 - 8

Z 2

Thread

D1 10 - 20

Z 2

Z 2

Conical

Z 2

Cylindrical

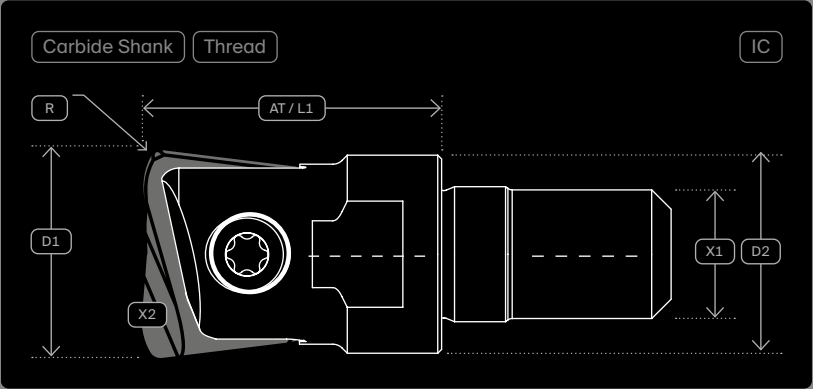
Video

TTK-50

DIA

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	V	Position of the insert
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



VA-Bullnose-Bodies

Code	Art. No.	WG	D1	R	α°	AT	L1	Z	D2	X1	IC	X2
27657	ET-06-SC-041-080-06-VA	W540.100				41	80	2	6	S6	IC	
27659	ET-06-SC-041-080-08-VA	W540.100							8	S8	IC	
27658	ET-06-SC-061-100-06-VA	W540.100				61	100	2	6	S6	IC	
27660	ET-06-SC-061-100-08-VA	W540.100							8	S8	IC	
27661	ET-06-SC-101-140-08-040-VA	W540.100	6	-	0,4	101	140	2	8	S8	IC	T06-VA
27982	ET-08-SC-041-085-08-VA	W540.100				41	85	2	8	S8	IC	
27980	ET-08-SC-041-085-10-VA	W540.100							10	S10	IC	
27983	ET-08-SC-061-105-08-VA	W540.100				61	105	2	8	S8	IC	
27981	ET-08-SC-061-105-10-VA	W540.100							10	S10	IC	
27662	ET-08-SC-101-140-08-VA	W540.100				101	140	2	8	S8	IC	
27665	ET-08-SC-101-145-10-VA	W540.100							10	S10	IC	
27666	ET-08-SC-101-145-10-040-VA	W540.100	8	-	0,4	101	145	2	10	S10	IC	T08-VA
32303	ET-10-M6-20-VA	W540.100	10	-	0	20	20	2	9,8	M6	IC	T10-VA
32304	ET-12-M7-23-VA	W540.100	12	-	0	23	23	2	11,5	M7	IC	T12-VA
32305	ET-16-M10k-25-VA	W540.100	16	-	0	25	25	2	15,4	M10k	IC	T16-VA
32306	ET-20-M10-28-VA	W540.100	20	-	0	28	28	2	18	M10	IC	T20-VA

VA-Bullnose-Inserts

Roughing

+

Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	H	31294	T0605H-VA	W540.202		0,5	
		31295	T0610H-VA	W540.202	-	1	T06-VA
		31296	T0805H-VA	W540.202		0,5	
		31297	T0810H-VA	W540.202	-	1	T08-VA
		31298	T1005H-VA	W540.202		0,5	
		31299	T1010H-VA	W540.202	-	1	T10-VA
		31300	T1205H-VA	W540.202		0,5	
		31301	T1210H-VA	W540.202	-	1	T12-VA
		31303	T1610H-VA	W540.202		1	
		31304	T1620H-VA	W540.202	-	2	T16-VA
		31305	T2010H-VA	W540.202		1	
		31306	T2020H-VA	W540.202	-	2	T20-VA
Graph	DIA	29155	T0605DIA-VA	W540.200		0,5	
		29156	T0610DIA-VA	W540.200	-	1	T06-VA
		29158	T0805DIA-VA	W540.200		0,5	
		29159	T0810DIA-VA	W540.200	-	1	T08-VA
		32296	T1005DIA-VA	W540.200		0,5	
		32297	T1010DIA-VA	W540.200	-	1	T10-VA
		32298	T1205DIA-VA	W540.200		0,5	
		32299	T1210DIA-VA	W540.200	-	1	T12-VA
		33764	T1610DIA-VA	W540.200	-	1	T16-VA

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
T06-VA	30069	KS-VA06	01366	TX-R35-07	0,9
T08-VA	34063	KS-VA08	01366	TX-R35-07	1
T10-VA	34064	KS-VA10	02395	TX-R40-08	1,8
T12-VA	34065	KS-VA12	02396	TX-10	2,8
T16-VA	34066	KS-VA16	01368	TX-R80-20	4
T20-VA	34067	KS-VA20	01368	TX-R80-20	4



VA-System

VA-BODY-BA



VA-System for roughing and finishing in 2D and 3D as well as manual post-processing of remaining material areas.

Areas of application

H

Graph

Inserts

Tool variations

Carbide Shank

D1 6 - 8

Z 2

Thread

D1 10 - 20

Z 2

Z 2

Conical

Z 2

Cylindrical

Video

TTK-50

DIA

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

R

Programming-Radius

V

Position of the insert

D2

Flange diameter

X1

Interface holder

X2

Interface insert

M (Nm)

Torque

Carbide Shank

Thread

IC

VA-Ballnose-Bodies

Code	Art. No.	WG	D1	R	α°	AT	L1	Z	D2	X1	IC	X2
27645	EK-06-SC-041-080-06-VA	W540.101				41	80	2	6	S6	IC	
27647	EK-06-SC-041-080-08-VA	W540.101							8	S8	IC	
27646	EK-06-SC-061-100-06-VA	W540.101				61	100	2	6	S6	IC	
27648	EK-06-SC-061-100-08-VA	W540.101							8	S8	IC	
27649	EK-06-SC-101-140-08-040-VA	W540.101	6	-	0,4	101	140	2	8	S8	IC	K06-VA
27650	EK-08-SC-041-085-08-VA	W540.101				41	85	2	8	S8	IC	
27653	EK-08-SC-041-085-10-VA	W540.101							10	S10	IC	
27651	EK-08-SC-061-105-08-VA	W540.101				61	105	2	8	S8	IC	
27654	EK-08-SC-061-105-10-VA	W540.101							10	S10	IC	
27652	EK-08-SC-101-140-08-VA	W540.101				101	145	2	8	S8	IC	
27655	EK-08-SC-101-145-10-VA	W540.101							10	S10	IC	
27656	EK-08-SC-101-145-10-040-VA	W540.101				101	145	2	10	S10	IC	
32308	EK-10-M6-20-VA	W540.101							10	S10	IC	
32309	EK-12-M7-23-VA	W540.101	10	-	0	20	20	2	9,8	M6	IC	K10-VA
32310	EK-12-M7-23-VA	W540.101	12	-	0	23	23	2	11,5	M7	IC	K12-VA
32310	EK-16-M10k-25-VA	W540.101	16	-	0	25	25	2	15,4	M10k	IC	K16-VA
32311	EK-20-M10-28-VA	W540.101	20	-	0	28	28	2	18	M10	IC	K20-VA

VA-Ballnose-Inserts

Roughing+Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2	
H	H	31287	D06H-VA	W540.203		3	K06-VA	Ø
		31288	D08H-VA	W540.203		4	K08-VA	Ø
		31289	D10H-VA	W540.203		5	K10-VA	Ø
		31290	D12H-VA	W540.203		6	K12-VA	Ø
		31291	D16H-VA	W540.203		8	K16-VA	Ø
		31292	D20H-VA	W540.203	-	10	K20-VA	Ø
Graph	DIA	29157	D06DIA-VA	W540.201	-	3	K06-VA	Ø
		29160	D08DIA-VA	W540.201		4	K08-VA	Ø

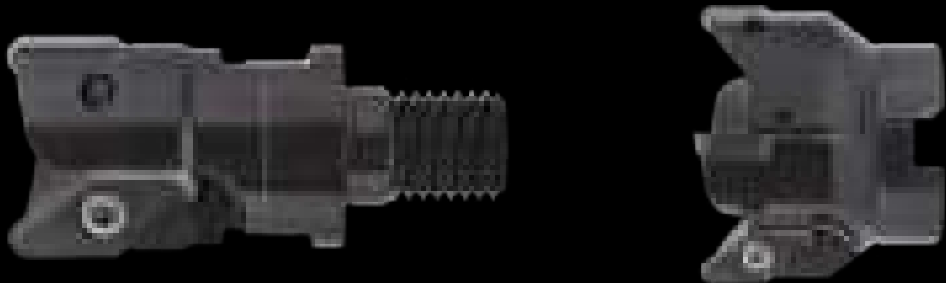
Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
K06-VA	30069	KS-VA06	01366	TX-R35-07	0,9
K08-VA	34063	KS-VA08	01366	TX-R35-07	1
K10-VA	34064	KS-VA10	02395	TX-R40-08	1,8
K12-VA	34065	KS-VA12	02396	TX-10	2,8
K16-VA	34066	KS-VA16	01368	TX-R80-20	4
K20-VA	34067	KS-VA20	01368	TX-R80-20	4



V-RB-System

AAL EAL



Modular screw-in and shell milling cutters for rhombic indexable inserts. Universally applicable for roughing and finishing in aluminum alloys.

Areas of application

N

Inserts

Tool variations

Thread

D1 16 – 42

Z 2–5

Shell

D1 42 – 80

Z 3–4

Video

ALU

Roug.

V-RB

D42 R3

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

R

Programming-Radius

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

X1

Interface holder

X2

Interface insert

M (Nm)

Torque

Thread

Shell

IC

R

AT / L1

D1

X1

D2

X2

V-RB-Bodies

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	X1	IC	Type	X2
06720	21610-M8-036-VDGT1	W504	16	1	36	2	13,5	M8	IC	Thread	
06217	22010-M10-036-VDGT1	W504	20	1	36	2	18	M10	IC		
01253	32510-M12-041-VDGT1	W504	25	1	41	3	21	M12	IC		VCGT1
00069	23230-M16-048-VCGT3	W504	32	3	48	2	29	M16	IC		VCGT3
11700	54210-M16-045-VDGT1	W504	42	1	45	5	29	M16	IC		VCGT1
00072	34230-M16-048-VCGT3	W504		3	48	3	29	M16	IC	Shell	VCGT3
10971	34230-AST16-057-VCGT3	W505	42	3	57	3	35	AST16	IC		
00006	35230-AST22-057-VCGT3	W505	52	3	57	3	40	AST22	IC		
00007	46630-AST27-057-VCGT3	W505	66	3	57	4	48	AST27	IC		
00803	48030-AST27-057-VCGT3	W505	80	3	57	4	60	AST27	IC		VCGT3

V-RB-Inserts

Roughing Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
N	AL	32243	VDGT1110AL	W853	VDGT	1	VCGT1
		32279	VCGT2230AL	W853	VCGT	3	VCGT3
	AS	32244	VDGT1110AS	W853	VDGT	1	VCGT1
		32280	VCGT2230AS	W853	VCGT	3	VCGT3

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
VCGT1	03890	KS-R35-M2.5-K	01366	TX-R35-07	0,9
VCGT3	01365	KS-R80-M4.5	01368	TX-R80-20	5,5



Modular tools Bodies Inserts

Application specialists

216

TRIHF-System

TRIHF



H P K - S - -

R 1,1-2,2



220

ZS-System

ZS



H P K - - N Graph

R 1



222

MSF-System

MSF



H P - - - - -

R 0,5



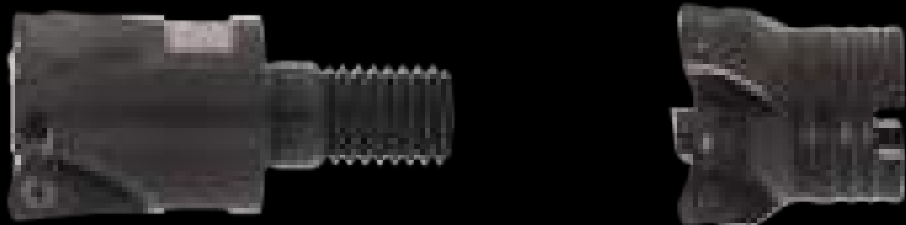
This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.

All available tools and cutting data can be found online at iklick.aura.tools



TRIHF-System

TRIHF11 TRIHF16 TRIHF22



Problem solver in die and mold making for reliable milling in deep cavities.

Areas of application

H

P

K

S

Inserts

Tool variations

Thread

D1 16 - 42

Z 2-7

Shell

D1 52 - 100

Z 5-7

Video

1.2311

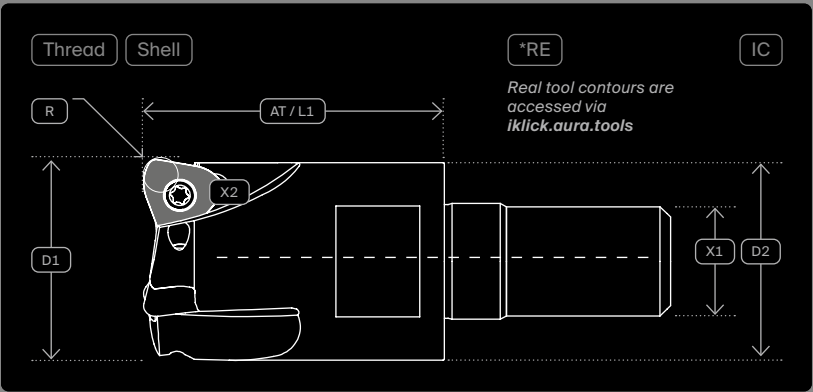
Roug.

TRIHF

D35 R1,1

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	*RE	Corner radius
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



TRIHF-Bodies

Code	Art. No.	WG	D1	R	AT	Z	D2	IC	X1	Type	X2
11105	21611-M10k-023-TRI11	W521	16	1,1	23	2	15,4	IC	M10k	Thread	TRI11
11125	32011-M10-025-TRI11	W521	20	1,1	25	3	18	IC	M10	Thread	TRI11
11126	32511-M12-029-TRI11	W521	25	1,1	29	3	23	IC	M12	Thread	TRI11
31971	42511-M12-029-TRI11	W521				4	21	IC	M12		
11128	43011-M16-043-TRI11	W521	30	1,1	43	4	29	IC	M16	Thread	TRI11
31972	53011-M16-043-TRI11	W521				5	29	IC	M16		
12243	33211-M16-043-TRI11	W521	32	1,1	43	3	29	IC	M16	Thread	TRI11
31973	53211-M16-043-TRI11	W521				5	29	IC	M16		
11129	53511-M16-043-TRI11	W521	35	1,1	43	5	29	IC	M16	Thread	TRI11
31974	63511-M16-043-TRI11	W521				6	29	IC	M16		TRI11
20509	43516-M16-043-TRI16	W521.1		1,6	43	4	29	IC	M16		TRI16
11603	33522-M16-043-TRI22	W520.1		2,2	43	3	29	IC	M16		TRI22
11130	54211-M16-043-TRI11	W521	42	1,1	43	5	29	IC	M16	Thread	TRI11
31975	74211-M16-043-TRI11	W521				7	29	IC	M16		TRI11
20508	54216-M16-043-TRI16	W521.1		1,6	43	5	29	IC	M16		TRI16
10860	44222-M16-043-TRI22	W520.1		2,2	43	4	29	IC	M16		TRI22
20507	55216-AST22-050-TRI16	W521.1	52	1,6	50	5	40	IC	AST22	Shell	TRI16
20506	65216-AST22-050-TRI16	W521.1				6	40	IC	AST22		TRI16
10862	55222-AST22-050-TRI22	W520.3		2,2	50	5	40	IC	AST22	Shell	TRI22
10863	56622-AST27-050-TRI22	W520.3	66	2,2	50	5	48	IC	AST27	Shell	TRI22
10864	68022-AST27-050-TRI22	W520.3	80	2,2	50	6	60	IC	AST27	Shell	TRI22
11412	710022-AST32-050-TRI22	W520.3	100	2,2	50	7	70	IC	AST32	Shell	TRI22

TRIHF-Inserts

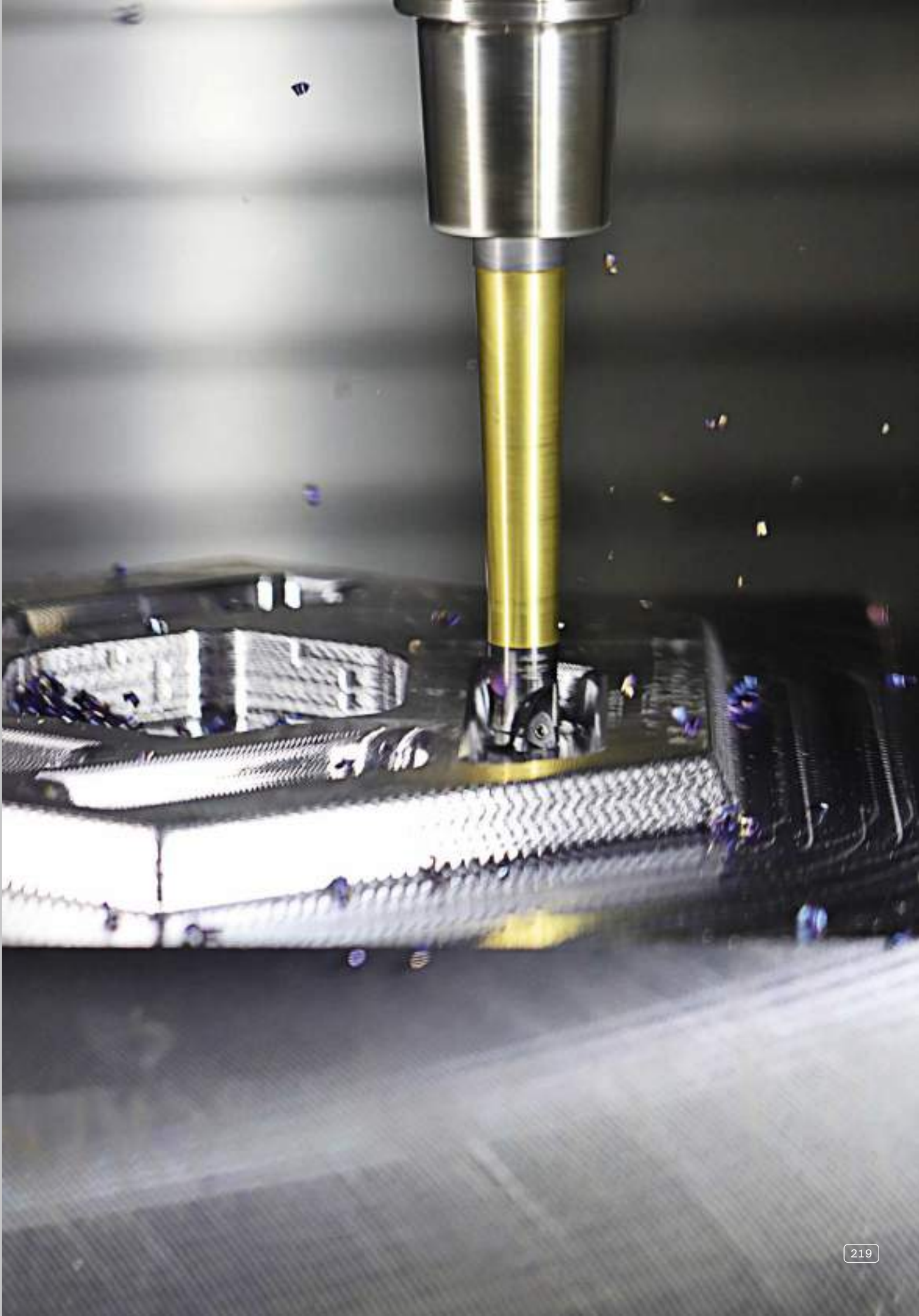
Roughing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2	
H	NANO	11500	Tri11NA	W867.7	TriHF11	1,1	TRI11	Ø
		20484	Tri16NA	W867.7	TriHF16	1,6	TRI16	Ø
		29371	Tri22NA	W867.7	TriHF22	2,2	TRI22	Ø
P	P25U	17250	Tri11P25U	W867.3	TriHF11	1,1	TRI11	Ø
		20485	Tri16P25U	W867.3	TriHF16	1,6	TRI16	Ø
		17251	Tri22P25U	W867.3	TriHF22	2,2	TRI22	Ø
	P50	10880	Tri11P50	W867.6	TriHF11	1,1	TRI11	Ø
		29367	Tri16P50	W867.6	TriHF16	1,6	TRI16	Ø
		10867	Tri22P50	W867.6	TriHF22	2,2	TRI22	Ø
K	K10G	11121	Tri11K10G	W868	TriHF11	1,1	TRI11	Ø
		11122	Tri22K10G	W868	TriHF22	2,2	TRI22	Ø
S	INC35	17870	Tri11INC35	W862.3	TriHF11	1,1	TRI11	Ø
		19537	Tri16INC35	W862.3	TriHF16	1,6	TRI16	Ø

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
TRI11	03929	KS-R40-M2.5	02395	TX-R40-08	1,7
TRI16	04002	KS-R1.3-M3	02396	TX-R1.3-10	1,7
TRI22	10869	KS-T22-M4	01367	TX-R50-15	5,5



ZS-System

ZS



Modular plunge-pull-milling system for rhombic indexable inserts.
Can be used for finishing vertical walls.

Areas of application

H

Inserts

Tool variations

Thread

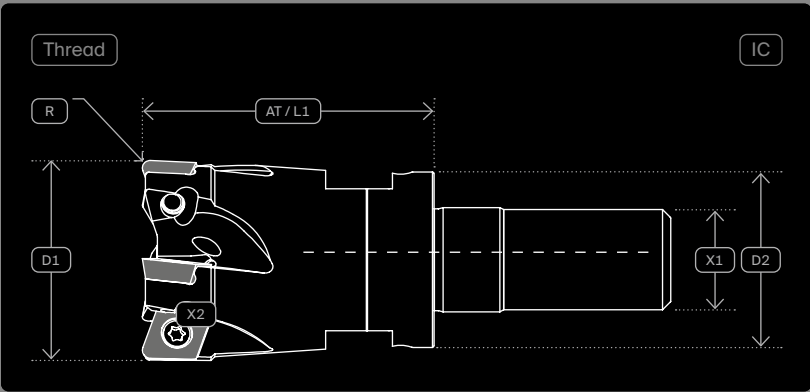
D1 16 – 35

Z 3 – 7



All available dimensions and
CAM export data can be found
online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	*RE	Corner radius
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



ZS-Bodies

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
27173	3161091-M10k-023-RB06-HQC	W503.2	16	1	23	3	15,4	IC	M10k		R06
27174	4201091-M10-030-RB06-HQC	W503.2	20	1	30	4	18	IC	M10		R06
27175	5251091-M12-035-RB06-HQC	W503.2	25	1	35	5	21	IC	M12		R06
27176	7351091-M16-043-RB06-HQC	W503.2	35	1	43	7	29	IC	M16		R06

ZS-Inserts

Finishing



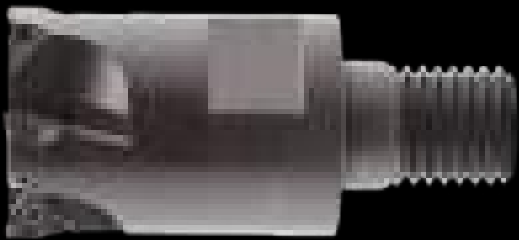
Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	NANO	03792	R06NA	W859,1	XDHW	1	R06

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
R06	01363	KS-R35-M2.5	01366	TX-R35-07	0,9

MSF-System

MSF



Modular screw-in milling cutter for finishing 0° surfaces of hardened and unhardened steels. It can be used on walls.

Areas of application

H P

Inserts

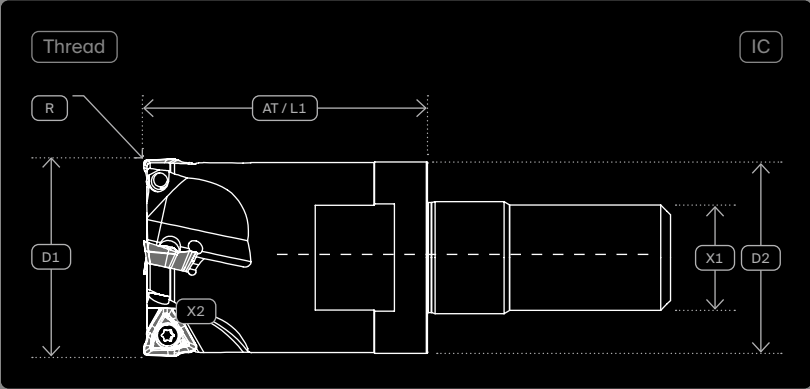


Tool variations

Thread D1 16 – 42 Z 2 – 6

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	*RE	Corner radius
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



Aura Tools GmbH
Raiffeisenstraße 8
35236 Breidenbach
+49 6465 911 194 0
kontakt@aura-tools.de
aura-tools.de

MSF-Bodies

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
21687	21605-M10k-023-MSF	W524	16		23	2	15,4	IC	M10k		
21688	32005-M10-028-MSF	W524	20		28	3	18	IC	M10		
21689	42505-M12-035-MSF	W524	25		35	4	23	IC	M12		
21690	43005-M16-043-MSF	W524	30		43	4	29	IC	M16		
21691	53505-M16-043-MSF	W524	35		43	5	29	IC	M16		
21692	64205-M16-042-MSF	W524	42	0,5	43	6	29	IC	M16	Thread	MSF07

MSF-Inserts

Finishing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
H	K05	23498	MSF07K05	W862.6	MSF	0,5	MSF07
P	P25	23497	MSF07P25	W862.6	MSF	0,5	MSF07

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
MSF07	01363	KS-R35-M2.5	01366	TX-R35-07	0,9



Modular tools Bodies Inserts

High-Feed

226

PHF-System

PHF



- P K - - - -

R 2,2 - 3,3



228

DHF-System

DHF



- P K - - - -

R 2 - 5



230

NTF-System

NTF



H P K M - - -

R 2



232

BTF-System

BTF



H P K M - - -

R 1,367



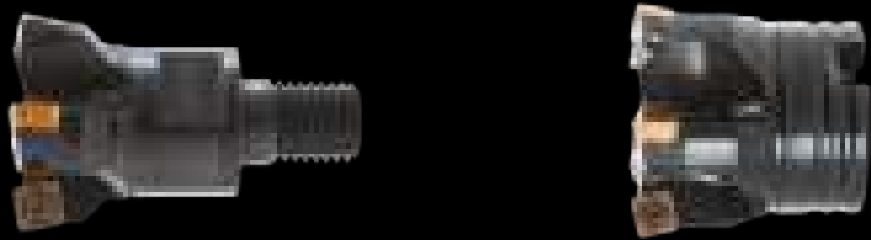
This overview serves as a guide. The performance of many tools is often more extensive. Your contact person in technical sales will be able to provide you with information.

All available tools and cutting data can be found online at iklick.aura.tools



PHF-System

PHF



Modular screw-in and shell milling cutter for four-teeth high-feed indexable inserts. Roughing at high removal rates under stable conditions.

Areas of application

P

K

Inserts

Tool variations

Thread

D1 35 – 42

Z 4 – 5

Shell

D1 52 – 100

Z 5 – 6

High-Feed

Video

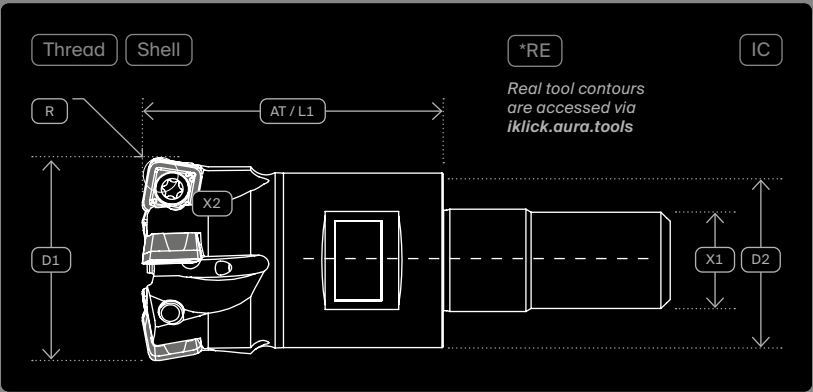
1.2311

Roug.

PHF

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming-Radius
AT	Working depth	*RE	Corner radius
α°	Conic	D2	Flange diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal coolant	M (Nm)	Torque



PHF-Bodies

Code	Art. No.	WG	D1	R	AT	Z	D2	IC	X1	Type	X2
33276	53520-M16-043-PHF09	W523	35		43	5	29	IC	M16	Thread	
21670	44220-M16-043-PHF09	W523	42		43	4	29	IC	M16	Thread	
21671	55220-AST22-050-PHF09	W523.2	52		50	5	40	IC	AST22	Shell	
21672	66620-AST27-050-PHF09	W523.2	66	6		48	IC	AST27			
21673	56630-AST27-050-PHF14	W523.2	66	2,2	50	5	48	IC	AST27	Shell	PHF14
21674	68030-AST27-050-PHF14	W523.2	80			6	60	IC	AST27		
21675	610030-AST32-052-PHF14	W523.2	100		3,1	52	6	70	IC		

PHF-Inserts

Roughing



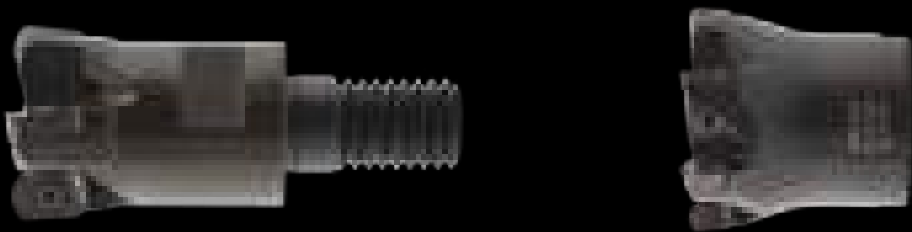
Materialbereich	Schneidstoff	Code	Art. Nr.	WG	Geomet.	R	X2
P	P25U	22295	PHF09P25U	W867.4	PHF09	2,2	PHF09
		22296	PHF14P25U	W867.4	PHF14	3,1	PHF14
	P50	23350	PHF09P50	W867.4	PHF09	2,2	PHF09
K	K15	21745	PHF09K15	W867.4	PHF09	2,2	PHF09
		21746	PHF14K15	W867.4	PHF14	3,1	PHF14

Accessories

X2	Screw Code	Screw Art. Nr.	Wrench Code	Wrench Art. Nr.	Torque (Nm)
PHF09	21677	KS-PHF09	22497	TX-IP-R22-15	3,0
PHF14	21678	KS-PHF14	22498	TX-IP-R31-20	5,0

DHF-System

DHF



Modular screw-in and shell milling cutter for roughing and semi-finishing machining with high metal removal rates.

Areas of application

P

K

Inserts

Tool variations

Thread

D1 20 - 42

Z 3 - 6

Shell

D1 42 - 52

Z 6 - 7

High-Feed

Video

Roug.

DHF

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1

Cutter diameter

AT

Working depth

α°

Conic

L1

Total length

Z

Number of teeth

IC

Internal coolant

R

Programming-Radius

*RE

Corner radius

D2

Flange diameter

X1

Interface holder

X2

Interface insert

M (Nm)

Torque

Thread

Shell

*RE

IC

R

AT / L1

D1

X1

D2

X2

Real tool contours are accessed via iklick.aura.tools

DHF-Bodies

Code	Art. No.	WG	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
26030	32020-M10-030-DHF10	W530	20		30	3	18	IC	M10	Thread	
26031	42520-M12-035-DHF10	W530	25		35	4	21	IC	M12		
28984	53020-M16-043-DHF10	W530	30		43	5	29	IC	M16		
26033	53220-M16-043-DHF10	W530	32		43	5	29	IC	M16		
26034	53520-M16-043-DHF10	W530	35		43	5	29	IC	M16		
26036	64220-M16-043-DHF10	W530	42		43	6	29	IC	M16		
30187	64220-AST16-043-DHF10	W530					35	IC	AST16		
30188	75220-AST22-050-DHF10	W530	52	2	50	7	40	IC	AST22	Shell	DHF10

DHF-Inserts

Roughing



Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P	P25U	26958	DHF10P25U	W805	DHF	2	DHF10
K	K10	27958	DHF10K10	W805	DHF	2	DHF10

Accessories

X2	Screw Code	Screw Art. No.	Wrench Code	Wrench Art. No.	Torque (Nm)
DHF10	31078	KS-DHF10-M2.5	02395	TX-R40-08	1,3

NTF-System

NTF



The double-edged high-feed system is ideal for medium roughing and residual roughing operations. The system is designed for high tooth feeds and thus high metal removal rates. Stable machining even with AT/D > 5×D. Programming radius 2 mm.

Areas of application

P

K

H

M

Inserts

Tool variations

Thread

D1 35 – 42

Z 5 – 6

Shell

D1 52 – 80

Z 7 – 10

High-Feed

Video

48 HRC

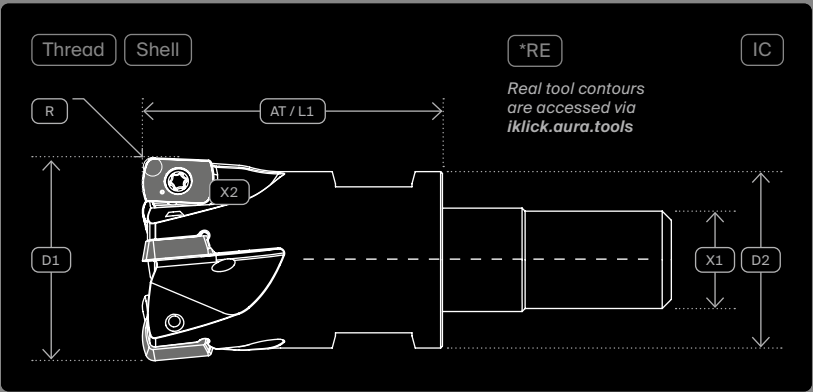
Roug.

NTF

D35

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming radius
AT	Working depth	*RE	Corner radius
°a	Conical	D2	Shoulder diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal cooling	M (Nm)	Torque



NTF-Bodies

Code	Art. No.	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
37106	035-NTF-05-043-M16	35	2	43	5	29	IC	M16	Thread	NTF
37107	042-NTF-06-043-M16	42		43	6	29	IC	M16		
37108	052-NTF-07-050-AST22	52		50	7	40	IC	AST22	Shell	
37109	066-NTF-09-050-AST27	66		50	9	48	IC	AST27		
37110	080-NTF-10-052-AST27	80		52	10	60	IC	AST27		

NTF-Inserts

Roughing

Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P K	A100	37266	NTF A100	W560.210	High-Feed	2	NTF
	A100P	37267	NTF A100P	W560.210	High-Feed	2	NTF
	A120	37268	NTF A120	W560.211	High-Feed	2	NTF
H	A200	37100	NTF A200	W560.220	High-Feed	2	NTF
	A200P	37101	NTF A200P	W560.220	High-Feed	2	NTF
M	A350	37269	NTF A350	W560.231	High-Feed	2	NTF

BTF-System

BTF



The high feed system with double-edged inserts is ideal for light roughing on less powerful machines (e.g. HSK40). The system is designed for high tooth feeds and thus high metal removal rates. Stable machining even with AT/D > 5×D. Programming radius 1 mm.

Areas of application

P K H M

Inserts



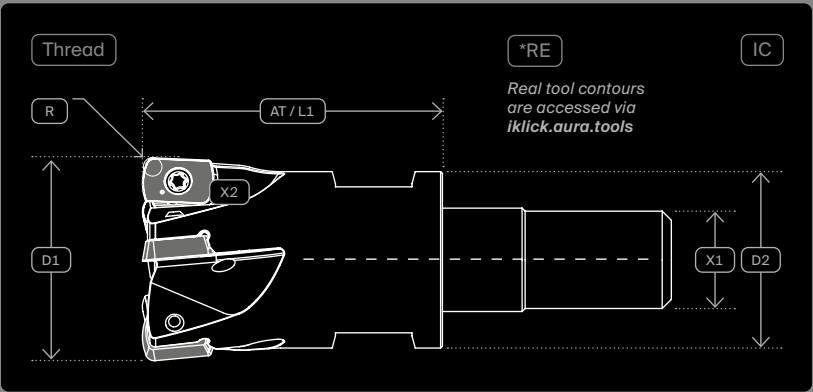
Tool variations

Thread D1 16 – 25 Z 4 – 6

High-Feed

All available dimensions and CAM export data can be found online at iklick.aura.tools

D1	Cutter diameter	R	Programming radius
AT	Working depth	*RE	Corner radius
°α	Conical	D2	Shoulder diameter
L1	Total length	X1	Interface holder
Z	Number of teeth	X2	Interface insert
IC	Internal cooling	M (Nm)	Torque



BTF-Bodies

Code	Art. No.	D1	R	AT / L1	Z	D2	IC	X1	Type	X2
37703	016-BTF-04-023-M8	16	1,367	23	4	13,5	IC	M8	Thread	BTF
37704	020-BTF-05-030-M10	20		30	5	18	IC	M10		
37705	025-BTF-06-035-M12	25		35	6	21	IC	M12		

BTF-Inserts

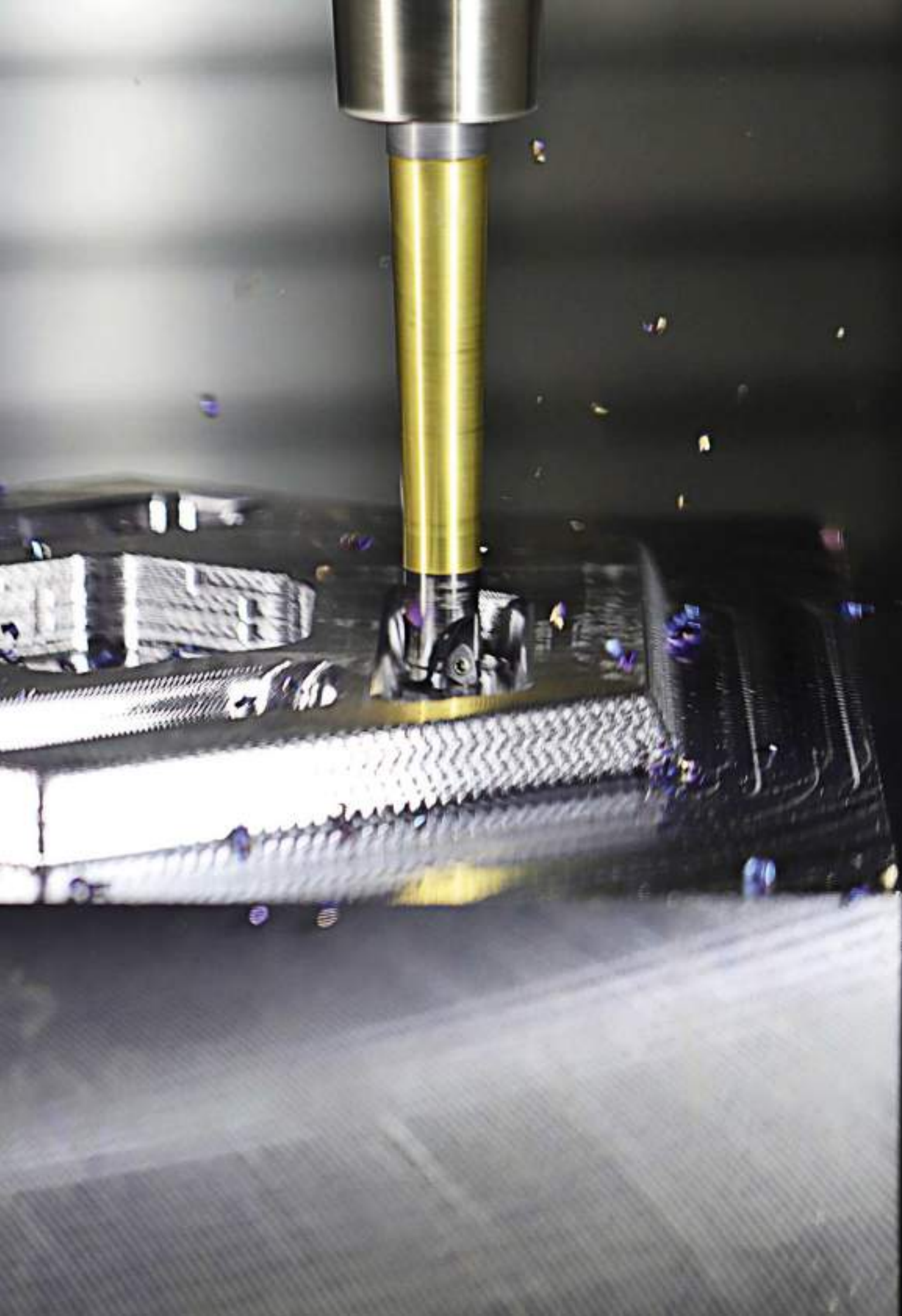
Roughing

Material	Substrate	Code	Art. No.	WG	Geomet.	R	X2
P K	A100	37052	BTF A100	W580.210	High-Feed	1,367	BTF
	A100P	37053	BTF A100P	W580.210	High-Feed	1,367	BTF
	A120	37054	BTF A120	W580.211	High-Feed	1,367	BTF

AURA®

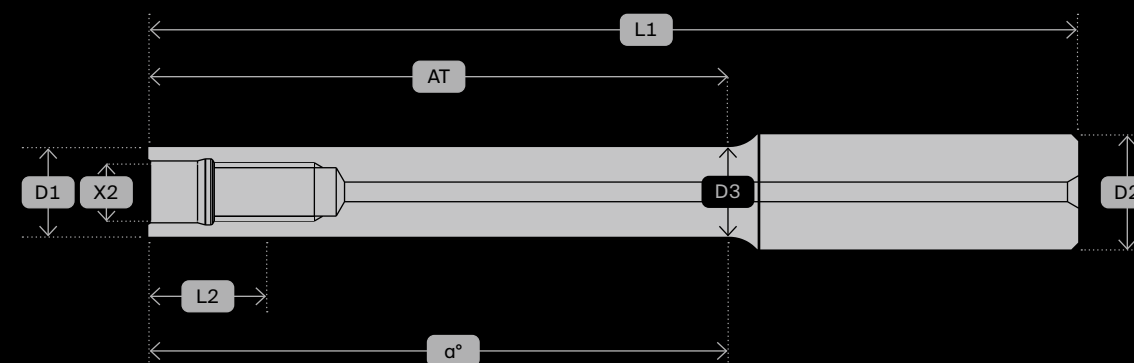
Tool & Mold Making
Extensions



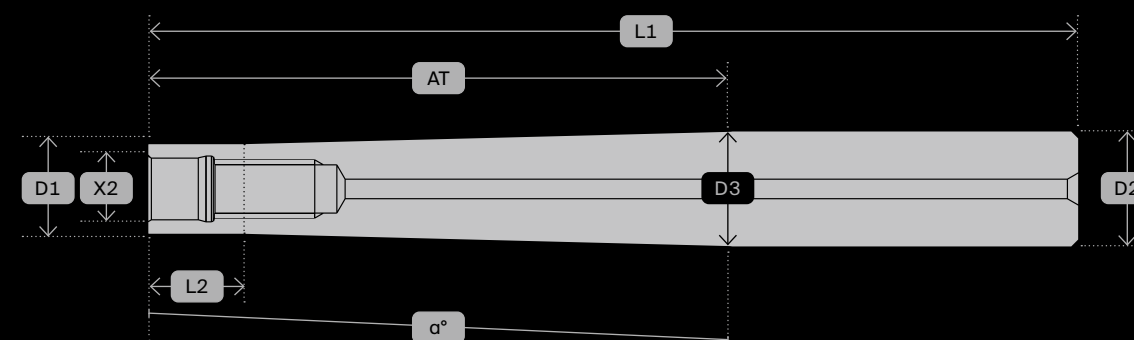


Symbols

Dimensional sketch Cylindrical



Dimensional sketch Conical



Technical designation

D1	Cutter diameter	L2	Cylindrical free length	HA	Cylindrical shank	IC	Internal cooling supply
AT	Working depth	D2	Shank diameter	X2	Interface		
α°	Conic	D3	Neck diameter				
L1	Total length	SH	Shank type				

Conical extensions

VLK

AURA®



Conical solid carbide extension with internal coolant supply for screw-in tools.

Characteristics

- Clamping area rough grounded
- System and precision bore precision ground

Tool variations

- Conical
- HA

All available dimensions and CAM export data can be found online at iklick.aura.tools

- D1

Cutter diameter
- AT

Working depth
- α°

Conic
- IC

Internal coolant
- L1

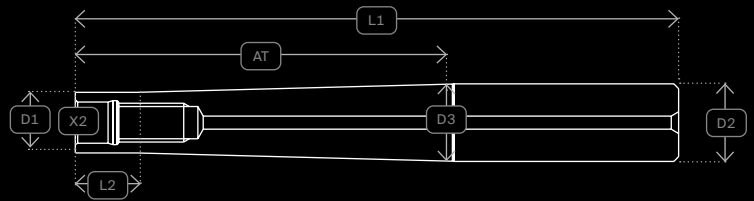
Total length
- D2

Shank diameter
- X2

Interface

Conical

IC



Conical extensions

VLK

Code	Art. No.	X2	D1	AT	α°	L2	D3	IC	L1	D2
24101	VLK-06-040-085-10-12-NG	M6	9,8	40	1,22	0	11,5	IC	85	12
24102	VLK-06-060-104-07-12-NG			60	0,7	0	11,27	IC	104	12
24103	VLK-06-080-125-08-12-NG			80	0,59	0	11,45	IC	125	12
22785	VLK-07-040-088-09-16-NG		11,4	40	1,79	10	13,9	IC	88	16
22787	VLK-07-060-108-09-16-NG			60	1,53	10	14,61	IC	108	16
22789	VLK-07-080-128-09-16-NG			80	1,36	13	15,2	IC	128	16
22786	VLK-07-040-088-15-16-NG	M7	11,5	40	2,39	0	14,84	IC	88	16
22788	VLK-07-060-108-15-16-NG			60	2,15	0	16	IC	108	16
22791	VLK-07-100-150-09-16-NG			100	1,29	0	16	IC	150	16
22795	VLK-08-040-088-09-16-k-NG	M8K	12,5	40	1,72	10	14,9	IC	88	16
22796	VLK-08-060-108-09-16-k-NG			60	1,67	10	15,6	IC	108	16
22797	VLK-08-080-128-09-16-k-NG			80	1,22	13	15,91	IC	128	16
24104	VLK-08-040-088-13-16-NG		13,6	40	1,3	0	15,42	IC	88	16
24105	VLK-08-060-108-09-16-NG			60	0,9	0	15,5	IC	108	16
24106	VLK-08-080-128-07-16-NG			80	0,65	0	15,42	IC	128	16
24107	VLK-08-100-148-05-16-NG	M8	13,6	100	0,54	0	15,49	IC	148	16
24108	VLK-08-120-168-05-16-NG			120	0,45	0	15,48	IC	168	16
22798	VLK-10-040-090-09-20-k-NG			40	1,79	10	17,9	IC	90	20
22799	VLK-10-060-110-09-20-k-NG			60	1,53	10	18,61	IC	110	20
22801	VLK-10-080-130-10-20-k-NG				1,36	10	19,2	IC	130	20
22800	VLK-10-080-130-15-20-k-NG			80	1,5	0	19,5	IC	130	20
22802	VLK-10-100-150-09-20-k-NG			100	1,17	0	19,5	IC	150	20
22803	VLK-10-120-170-10-20-k-NG			120	0,96	0	19,42	IC	170	20
22804	VLK-10-150-200-08-20-k-NG	M10K	15,4	150	0,78	10	20	IC	200	20
22805	VLK-10-200-260-19-32-k-NG			200	1,9	0	28,67	IC	260	32
24109	VLK-10-040-090-10-20-NG			40	1	0	19,4	IC	90	20
24110	VLK-10-060-110-07-20-NG			60	0,71	0	19,47	IC	110	20
24111	VLK-10-080-130-05-20-NG			80	0,5	0	19,4	IC	130	20
24113	VLK-10-100-150-03-20-NG			100	0,43	0	19,5	IC	150	20
24115	VLK-10-120-170-02-20-NG	M10	18	120	0,36	0	19,51	IC	170	20
30084	VLK-10-200-260-19-32-NG			200	1,9	0	31,27	IC	260	32
24116	VLK-12-125-181-08-25-NG			125	0,8	0	24,49	IC	181	25
24117	VLK-12-150-206-07-25-NG	M12	21	150	0,65	0	24,4	IC	206	25
24118	VLK-12-175-231-06-25-NG			175	0,55	0	24,36	IC	231	25
24119	VLK-16-100-160-07-32-NG			100	0,7	0	31,44	IC	160	32
24120	VLK-16-150-210-05-32-NG	M16	29	150	0,46	0	31,41	IC	210	32
24121	VLK-16-200-260-04-32-NG			200	0,35	0	31,44	IC	260	32

Cylindrical extensions

VLZ

AURA®



Cylindrical solid carbide extension with internal coolant supply for screw-in tools.

Characteristics

- Clamping area rough grounded
- System and precision bore precision ground

Tool variations

Under necked

HA

All available dimensions and CAM export data can be found online at iklick.aura.tools

- D1

Cutter diameter
- AT

Working depth
- α°

Conic
- IC

Internal coolant
- L1

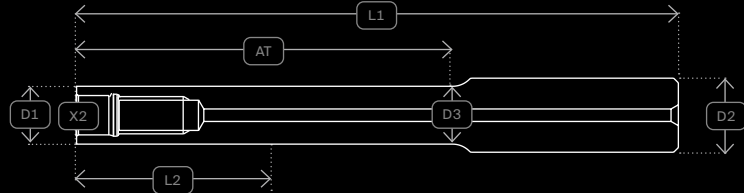
Total length
- D2

Shank diameter
- X2

Interface

Under necked

IC



Cylindrical extensions

VLZ

Code	Art. No.	X2	D1	AT	α°	IC	L1	D2
24122	VLZ-06-020-065-12-NG	M6	9,8	20	0	IC	65	12
24124	VLZ-06-040-085-12-NG			40	0	IC	85	12
24125	VLZ-06-060-105-12-NG			60	0	IC	105	12
24126	VLZ-06-080-125-12-NG			80	0	IC	125	12
22770	VLZ-07-020-065-12-NG	M7	11,5	20	0	IC	65	12
22771	VLZ-07-040-085-12-NG			40	0	IC	85	12
22772	VLZ-07-060-105-12-NG			60	0	IC	105	12
22773	VLZ-07-080-125-12-NG			80	0	IC	125	12
22774	VLZ-08-020-068-16-k-NG	M8K	12,5	20	0	IC	68	16
22775	VLZ-08-040-088-16-k-NG			40	0	IC	88	16
22776	VLZ-08-060-108-16-k-NG			60	0	IC	108	16
24132	VLZ-08-080-128-16-k-NG			80	0	IC	128	16
24129	VLZ-08-040-088-16-NG	M8	13,6	40	0	IC	88	16
24130	VLZ-08-060-108-16-NG			60	0	IC	108	16
24131	VLZ-08-080-128-16-NG			80	0	IC	128	16
24133	VLZ-08-100-148-16-NG			100	0	IC	148	16
24128	VLZ-08-020-068-16-NG		14	20	0	IC	68	16
24134	VLZ-08-135-200-16-NG		14,4	135	0	IC	200	16
22778	VLZ-10-020-070-16-k-NG		15,4	20	0	IC	70	16
22779	VLZ-10-040-090-16-k-NG			40	0	IC	90	16
22780	VLZ-10-060-110-16-k-NG			60	0	IC	110	16
22781	VLZ-10-080-130-16-k-NG			80	0	IC	130	16
22782	VLZ-10-100-150-16-k-NG							16
22784	VLZ-10-100-150-20-k-NG			100	0	IC	150	20
22783	VLZ-10-120-170-16-k-NG	M10K		120	0	IC	170	16
24135	VLZ-10-040-200-20-NG	M10	18	40	0	IC	200	20
24136	VLZ-10-135-200-20-NG			135	0	IC	200	20
24140	VLZ-12-157-250-25-NG		22,5	157	0	IC	250	25
24141	VLZ-12-207-300-25-NG			207	0	IC	300	25
24137	VLZ-12-040-097-25-NG			40	0	IC	97	25
24138	VLZ-12-075-131-25-NG		23	75	0	IC	131	25
24139	VLZ-12-100-156-25-NG	M12		100	0	IC	156	25
24142	VLZ-16-050-300-32-NG	M16	28,6	50	0	IC	300	32





Download
Digitaler Katalog
Deutsch (PDF)



Download
Digital Catalogue
English (PDF)

G1E.UEUT

with
edge protection chamfer



You will find all available
tools and further information
at: iklick.aura.tools

with edge protection chamfer

Product overview

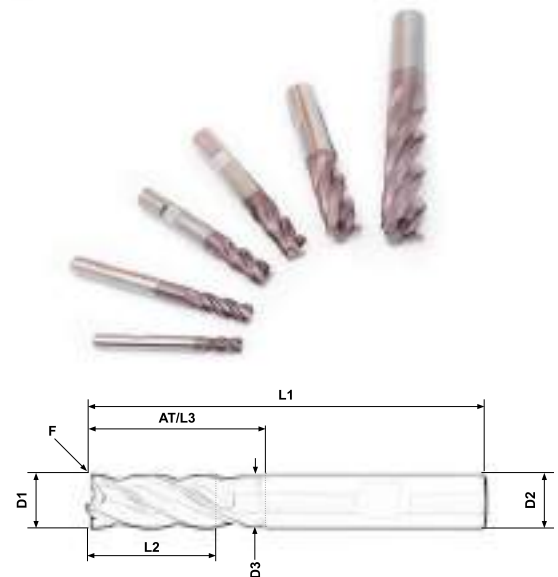
HPC end mills „Made in Germany“, four teeth, with edge protection chamfer and great depths enables a high performance cutting. The economy series unites good holding times with fair prices. The end mills are suitable for slot milling, finish milling, rough milling, trochoidal milling, peripheral milling and ramp milling up to 2,5°. High metal removal capabilities as well as high cutting and feed rates mark this tool. Suitable for steels up to 52 HRC.

Technical features

Cylindrical stepped version.

Attention: Only use with Weldon clamping chuck or other clamping chucks with high clamping force.

Available in the following dimensions:



<65HRC	<58HRC	<56HRC	<52HRC	<48HRC	1.400N	1.000N	Steel	CrNi	Titan	INC	GG	GjV	ALU	AlSi	Cu	GRAPH	GFK
-	-	-	+	+	+	+	+	+	-	-	+	-	-	-	-	-	-

D1	F	L2	L3	D3	D2	AT	°α	L1	z	IKZ	Order -Code	Article N°
3	0.1	8	10	2.9	6	10	0	57	4	-	27122	G1E.UEUT.030-000-06-27122
3	0.1	9	15	2.9	6	15	0	57	4	-	27819	G1E.UEUT.030-000-06-27819
4	0.1	11	13	3.9	6	13	0	57	4	-	27123	G1E.UEUT.040-000-06-27123
4	0.1	12	20	3.9	6	20	0	60	4	-	27820	G1E.UEUT.040-000-06-27820
5	0.1	13	18	4.9	6	18	0	57	4	-	27113	G1E.UEUT.050-000-06-27113
5	0.1	15	25	4.9	6	25	0	65	4	-	27821	G1E.UEUT.050-000-06-27821
6	0.1	13	18	5.9	6	18	0	57	4	-	27124	G1E.UEUT.060-000-06-27124
6	0.1	18	30	5.9	6	30	0	70	4	-	27822	G1E.UEUT.060-000-06-27822
8	0.2	21	25	7.8	8	25	0	63	4	-	27128	G1E.UEUT.080-000-08-27128
8	0.2	24	40	7.8	8	40	0	80	4	-	27823	G1E.UEUT.080-000-08-27823
10	0.2	22	30	9.7	10	30	0	72	4	-	27129	G1E.UEUT.100-000-10-27129
10	0.2	30	50	9.7	10	50	0	90	4	-	27824	G1E.UEUT.100-000-10-27824
12	0.3	26	36	11.7	12	36	0	83	4	-	27130	G1E.UEUT.120-000-12-27130
12	0.3	36	60	11.7	12	60	0	105	4	-	30143	G1E.UEUT.120-000-12-30143
16	0.3	36	42	15.5	16	42	0	92	4	-	27131	G1E.UEUT.160-000-16-27131
16	0.3	64	80	15.5	16	80	0	130	4	-	29202	G1E.UEUT.160-000-16-29202
20	0.3	41	52	19.5	20	52	0	103	4	-	27132	G1E.UEUT.200-000-20-27132
20	0.3	80	100	19.5	20	100	0	150	4	-	29205	G1E.UEUT.200-000-20-29205



*Technical modifications reserved.

„xy“ HRC=Processing of hardened material up to the specified value; 1.400N=materials like 1.2714HH; 1.000N=materials like 1.2311, 1.2379; Steel=materials like 1.1730; CrNi=Nickel-chromium alloys; Titanium=Titanium alloys; INC=Nickel-base alloys; GG=Casting alloys; GjV= Alloyed cast steel; ALU=Aluminium alloys; AlSi=Aluminium silicon alloys; Cu=copper; GRAPH=Graphite; GFK= fiberglass-reinforced plastics

Have a look at iklick.aura.tools to find all available tools and further information.

AURA® Frästechnik GmbH
Raiffeisenstraße 8
35236 Breidenbach
Germany

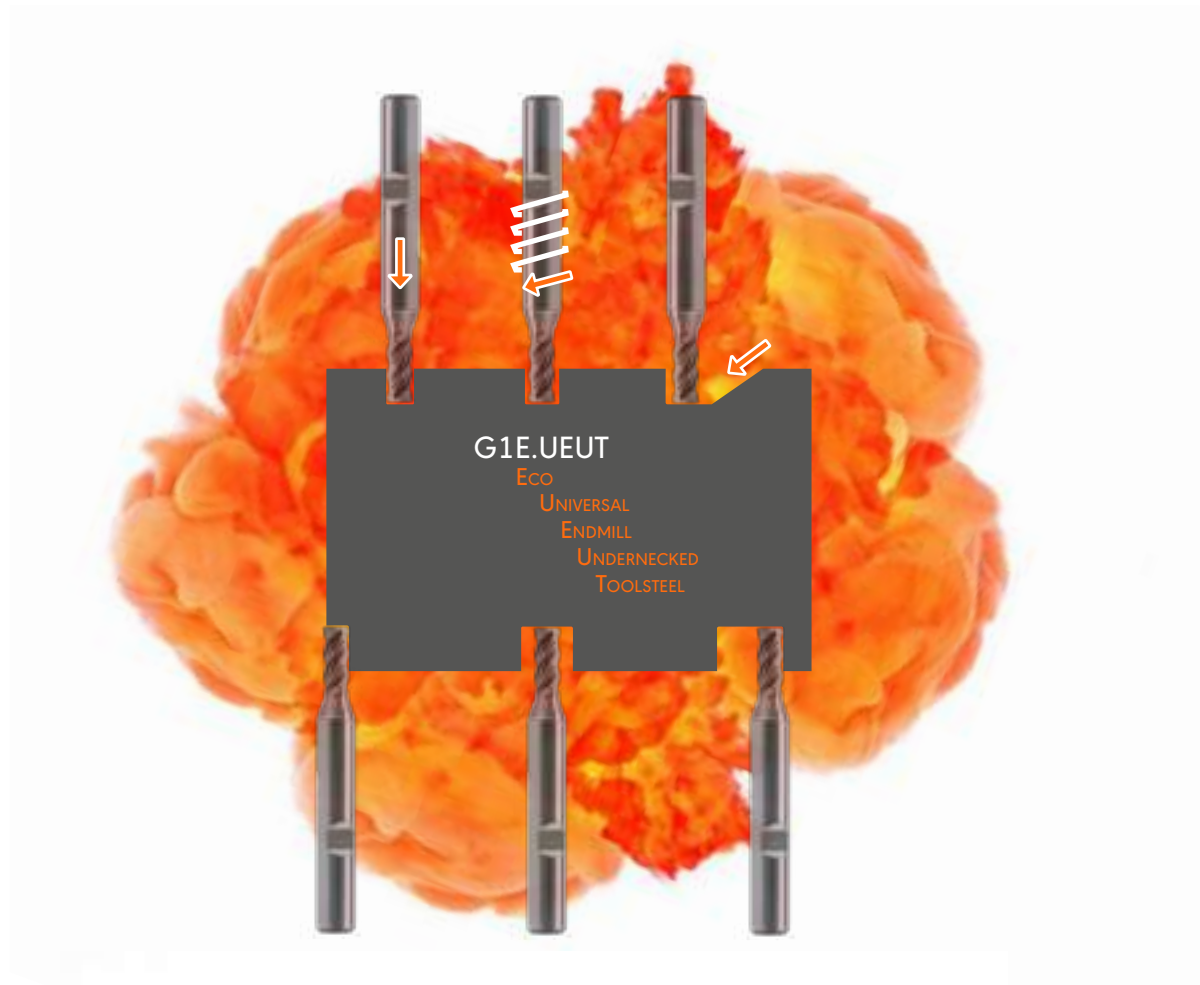
Phone +49 64 65 91 11 94 - 0
Fax +49 64 65 91 11 94 - 113

E-Mail kontakt@aura-tools.de

G'one:1® is a brand of AURA® Frästechnik GmbH

G1E.UEUT

with edge radius



You will find all available
tools and further information
at: iklick.aura.tools

with edge radius

Product overview

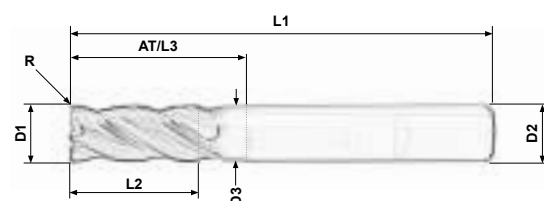
HPC end mills „Made in Germany“, four teeth, with edge radius and great depths enables a high performance cutting. The economy series unites good holding times with fair prices. The end mills are suitable for slot milling, finish milling, rough milling, trochoidal milling, peripheral milling and ramp milling up to 2,5°. High metal removal capabilities as well as high cutting and feed rates mark this tool. Suitable for steels up to 52 HRC.

Technical features

Cylindrical stepped version.

Attention: Only use with Weldon clamping chuck or other clamping chucks with high clamping force.

Available in the following dimensions:



<65HRC	<58HRC	<56HRC	<52HRC	<48HRC	1.400N	1.000N	Steel	CrNi	Titan	INC	GG	GjV	ALU	AlSi	Cu	GRAPH	GFK
-	-	-	+	+	+	+	+	+	-	-	+	-	-	-	-	-	-

D1	R	L2	L3	D3	D2	AT	°α	L1	z	IKZ	Order -Code	Article N°
3	0.2	8	10	2.9	6	10	0	57	4	-	29254	G1E.UEUT.030-002-06-29254
3	0.2	9	15	2.9	6	15	0	57	4	-	29255	G1E.UEUT.030-002-06-29255
4	0.2	11	13	3.9	6	13	0	57	4	-	29256	G1E.UEUT.040-002-06-29256
4	0.2	12	20	3.9	6	20	0	60	4	-	29258	G1E.UEUT.040-002-06-29258
4	0.5	11	13	3.9	6	13	0	57	4	-	29257	G1E.UEUT.040-005-06-29257
4	0.5	12	20	3.9	6	20	0	60	4	-	29259	G1E.UEUT.040-005-06-29259
5	0.2	13	18	4.9	6	18	0	57	4	-	29260	G1E.UEUT.050-002-06-29260
5	0.5	13	18	4.9	6	18	0	57	4	-	29261	G1E.UEUT.050-005-06-29261
6	0.2	13	18	5.9	6	18	0	57	4	-	29262	G1E.UEUT.060-002-06-29262
6	0.2	18	30	5.9	6	30	0	70	4	-	29265	G1E.UEUT.060-002-06-29265
6	0.5	13	18	5.9	6	18	0	57	4	-	29263	G1E.UEUT.060-005-06-29263
6	0.5	18	30	5.9	6	30	0	70	4	-	29266	G1E.UEUT.060-005-06-29266
6	1	13	18	5.9	6	18	0	57	4	-	29264	G1E.UEUT.060-010-06-29264
6	1	18	30	5.9	6	30	0	70	4	-	29267	G1E.UEUT.060-010-06-29267
8	0.5	21	25	7.8	8	25	0	63	4	-	29268	G1E.UEUT.080-005-08-29268
8	0.5	24	40	7.8	8	40	0	80	4	-	29270	G1E.UEUT.080-005-08-29270
8	1	21	25	7.8	8	25	0	63	4	-	29269	G1E.UEUT.080-010-08-29269
8	1	24	40	7.8	8	40	0	80	4	-	29271	G1E.UEUT.080-010-08-29271
10	0.5	22	30	9.7	10	30	0	72	4	-	29272	G1E.UEUT.100-005-10-29272
10	1	22	30	9.7	10	30	0	72	4	-	29273	G1E.UEUT.100-010-10-29273
10	2	22	30	9.7	10	30	0	72	4	-	29274	G1E.UEUT.100-020-10-29274
12	0.5	26	36	11.7	12	36	0	83	4	-	29275	G1E.UEUT.120-005-12-29275
12	1	26	36	11.7	12	36	0	83	4	-	29276	G1E.UEUT.120-010-12-29276
12	2	26	36	11.7	12	36	0	83	4	-	29277	G1E.UEUT.120-020-12-29277
16	1	36	42	15.5	16	42	0	92	4	-	29278	G1E.UEUT.160-010-16-29278
16	2	36	42	15.5	16	42	0	92	4	-	29279	G1E.UEUT.160-020-16-29279
20	2	41	52	19.5	20	52	0	103	4	-	29280	G1E.UEUT.200-020-20-29280



*Technical modifications reserved.

„xy“ HRC=Processing of hardened material up to the specified value; 1.400N=materials like 1.2714HH; 1.000N=materials like 1.2311, 1.2379; Steel=materials like 1.1730; CrNi=Nickel-chromium alloys; Titanium=Titanium alloys; INC=Nickel-base alloys; GG=Casting alloys; GjV= Alloyed cast steel; ALU=Aluminium alloys; AlSi=Aluminium silicon alloys; Cu=copper; GRAPH=Graphite; GFK= fiberglass-reinforced plastics
Have a look at iklick.aura.tools to find all available tools and further information.

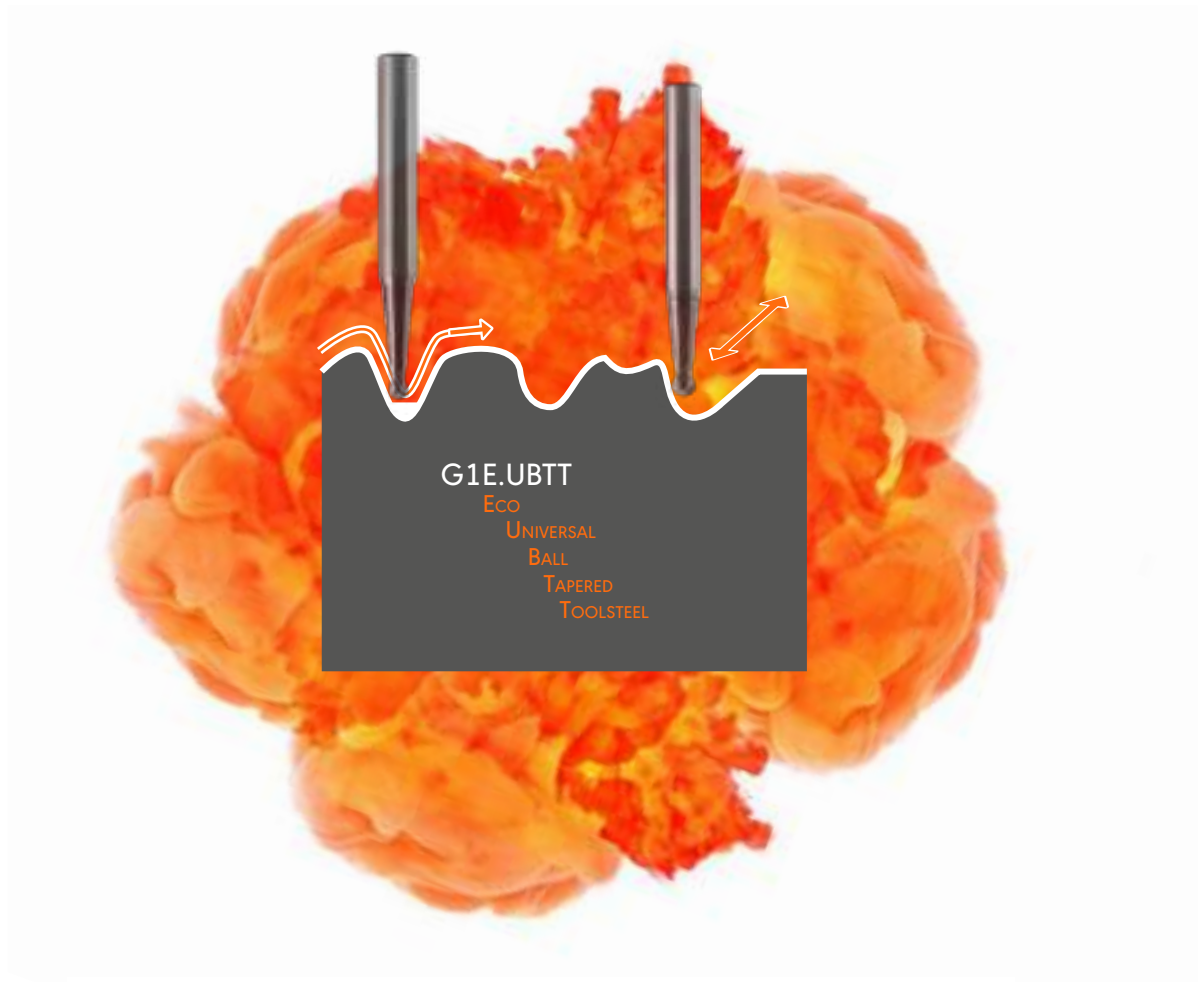
AURA® Frästechnik GmbH
Raiffeisenstraße 8
35236 Breidenbach
Germany

Phone +49 64 65 91 11 94 - 0
Fax +49 64 65 91 11 94 - 113

E-Mail kontakt@aura-tools.de

Gone:1® is a brand of AURA® Frästechnik GmbH

G1E.UBTT

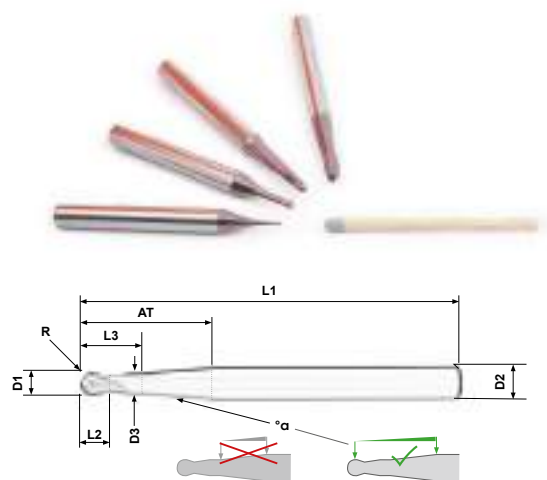


You will find all available
tools and further information
at: iklick.aura.tools

Product overview

This eco ballnose cutter is a versatile precision tool. The areas of application are profile milling, pre-finishing and finishing of 3-D contours and rest machining. The surfaces left behind are in a high dimensional accuracy. Suitable for unalloyed steels, tempered tool steels and hardened steels <56 HRC.

By using this tool many applications and adaptations can be optimized and standardized.



Available in the following dimensions:

<65HRC	<58HRC	<56HRC	<52HRC	<48HRC	1.400N	1.000N	Steel	CrNi	Titan	INC	GG	GjV	ALU	AlSi	Cu	GRAPH	GFK
-	-	+	+	+	+	+	+	+	-	-	+	-	-	-	-	-	-

D1	R	L2	L3	D3	D2	AT	°α	L1	z	IKZ	Order -Code	Article N°
1	0.5	1	2.5	0.9	6	5	0.9	51	2	-	29005	G1E.UBTT.010-005-06-29005
1	0.5	1	2.5	0.9	6	5	1.4	51	2	-	29006	G1E.UBTT.010-005-06-29006
1	0.5	1	2.5	0.9	6	5	2.9	51	2	-	29007	G1E.UBTT.010-005-06-29007
1	0.5	1	2.5	0.9	6	7	0.9	57	2	-	29008	G1E.UBTT.010-005-06-29008
1	0.5	1	2.5	0.9	6	7	1.4	57	2	-	29009	G1E.UBTT.010-005-06-29009
1	0.5	1	2.5	0.9	6	7	2.9	57	2	-	29010	G1E.UBTT.010-005-06-29010
1	0.5	1	2.5	0.9	6	9	0.9	57	2	-	29011	G1E.UBTT.010-005-06-29011
1	0.5	1	2.5	0.9	6	9	1.4	57	2	-	29012	G1E.UBTT.010-005-06-29012
1	0.5	1	2.5	0.9	6	9	2.9	57	2	-	29013	G1E.UBTT.010-005-06-29013
1.5	0.75	1.5	3.7	1.4	6	7.5	0.9	57	2	-	29455	G1E.UBTT.015-0075-06-29455
1.5	0.75	1.5	3.7	1.4	6	7.5	1.4	57	2	-	29458	G1E.UBTT.015-0075-06-29458
1.5	0.75	1.5	3.7	1.4	6	7.5	2.9	51	2	-	29459	G1E.UBTT.015-0075-06-29459
1.5	0.75	1.5	3.7	1.4	6	10.5	0.9	57	2	-	29461	G1E.UBTT.015-0075-06-29461
1.5	0.75	1.5	3.7	1.4	6	10.5	1.4	57	2	-	29462	G1E.UBTT.015-0075-06-29462
1.5	0.75	1.5	3.7	1.4	6	10.5	2.9	57	2	-	29463	G1E.UBTT.015-0075-06-29463
1.5	0.75	1.5	3.7	1.4	6	13.5	0.9	64	2	-	29464	G1E.UBTT.015-0075-06-29464
1.5	0.75	1.5	3.7	1.4	6	13.5	1.4	57	2	-	29465	G1E.UBTT.015-0075-06-29465
2	1	2	5	1.9	6	10	0.9	57	2	-	29014	G1E.UBTT.020-010-06-29014
2	1	2	5	1.9	6	10	1.4	57	2	-	29015	G1E.UBTT.020-010-06-29015
2	1	2	5	1.9	6	10	2.9	57	2	-	29016	G1E.UBTT.020-010-06-29016
2	1	2	5	1.9	6	14	0.9	57	2	-	29017	G1E.UBTT.020-010-06-29017
2	1	2	5	1.9	6	14	1.4	57	2	-	29018	G1E.UBTT.020-010-06-29018
2	1	2	5	1.9	6	14	2.9	57	2	-	29019	G1E.UBTT.020-010-06-29019
2	1	2	5	1.9	6	18	0.9	64	2	-	29020	G1E.UBTT.020-010-06-29020
2	1	2	5	1.9	6	18	1.4	64	2	-	29021	G1E.UBTT.020-010-06-29021
2	1	2	5	1.9	6	18	2.9	64	2	-	29022	G1E.UBTT.020-010-06-29022

*Technical modifications reserved.

„xy“ HRC=Processing of hardened material up to the specified value; 1.400N=materials like 1.2714HH; 1.000N=materials like 1.2311, 1.2379; Steel=materials like 1.1730; CrNi=Nickel-chromium alloys; Titanium=Titanium alloys; INC=Nickel-base alloys; GG=Casting alloys; GjV= Alloyed cast steel; ALU=Aluminium alloys; AlSi=Aluminium silicon alloys; Cu=copper; GRAPH=Graphite; GFK= fiberglass-reinforced plastics

Have a look at iklick.aura.tools to find all available tools and further information.

AURA® Frästechnik GmbH
Raiffeisenstraße 8
35236 Breidenbach
Germany

Phone +49 64 65 91 11 94 - 0
Fax +49 64 65 91 11 94 - 113

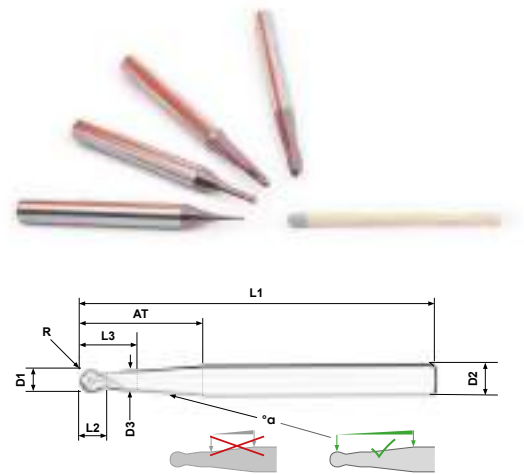
E-Mail kontakt@aura-tools.de

Gone:1® is a brand of AURA® Frästechnik GmbH

Product overview

This eco ballnose cutter is a versatile precision tool. The areas of application are profile milling, pre-finishing and finishing of 3-D contours and rest machining. The surfaces left behind are in a high dimensional accuracy. Suitable for unalloyed steels, tempered tool steels and hardened steels <56 HRC.

By using this tool many applications and adaptations can be optimized and standardized.



Available in the following dimensions:

<65HRC	<58HRC	<56HRC	<52HRC	<48HRC	1.400N	1.000N	Steel	CrNi	Titan	INC	GG	GjV	ALU	AlSi	Cu	GRAPH	GFK
-	-	+	+	+	+	+	+	+	-	-	+	-	-	-	-	-	-

D1	R	L2	L3	D3	D2	AT	°α	L1	z	IKZ	Order -Code	Article N°
3	1.5	3	7.5	2.9	6	15	0.9	57	2	-	29023	G1E.UBTT.030-015-06-29023
3	1.5	3	7.5	2.9	6	15	1.4	57	2	-	29024	G1E.UBTT.030-015-06-29024
3	1.5	3	7.5	2.9	6	15	2.9	57	2	-	29025	G1E.UBTT.030-015-06-29025
3	1.5	3	7.5	2.9	6	21	0.9	64	2	-	29026	G1E.UBTT.030-015-06-29026
3	1.5	3	7.5	2.9	6	21	1.4	64	2	-	29027	G1E.UBTT.030-015-06-29027
3	1.5	3	7.5	2.9	6	21	2.9	64	2	-	29028	G1E.UBTT.030-015-06-29028
3	1.5	3	7.5	2.9	6	27	0.9	76	2	-	29029	G1E.UBTT.030-015-06-29029
3	1.5	3	7.5	2.9	6	27	1.4	76	2	-	29030	G1E.UBTT.030-015-06-29030
3	1.5	3	7.5	2.9	6	31.11	2.9	76	2	-	29031	G1E.UBTT.030-015-06-29031
4	2	4	10	3.8	6	20	0.9	64	2	-	29032	G1E.UBTT.040-020-06-29032
4	2	4	10	3.8	6	20	1.4	64	2	-	29033	G1E.UBTT.040-020-06-29033
4	2	4	10	3.8	6	21.74	2.9	64	2	-	29034	G1E.UBTT.040-020-06-29034
4	2	4	10	3.8	6	28	0.9	76	2	-	29035	G1E.UBTT.040-020-06-29035
4	2	4	10	3.8	6	28	1.4	76	2	-	29036	G1E.UBTT.040-020-06-29036
4	2	4	10	3.8	6	36	0.9	76	2	-	29038	G1E.UBTT.040-020-06-29038
4	2	4	10	3.8	6	42.92	1.4	88	2	-	29039	G1E.UBTT.040-020-06-29039
4	2	4	10	3.8	8	28	2.9	76	2	-	29037	G1E.UBTT.040-020-08-29037
5	2.5	5	12.5	4.8	6	25	0.9	64	2	-	29040	G1E.UBTT.050-025-06-29040
5	2.5	5	12.5	4.8	8	25	1.4	76	2	-	29041	G1E.UBTT.050-025-08-29041
5	2.5	5	12.5	4.8	8	32.11	2.9	76	2	-	29042	G1E.UBTT.050-025-08-29042
5	2.5	5	12.5	4.8	8	35	0.9	76	2	-	29043	G1E.UBTT.050-025-08-29043
5	2.5	5	12.5	4.8	8	35	1.4	76	2	-	29044	G1E.UBTT.050-025-08-29044
5	2.5	5	12.5	4.8	8	45	0.9	88	2	-	29045	G1E.UBTT.050-025-08-29045
5	2.5	5	12.5	4.8	8	45	1.4	88	2	-	29046	G1E.UBTT.050-025-08-29046
6	3	6	15	5.8	8	30	0.9	76	2	-	29047	G1E.UBTT.060-030-08-29047
6	3	6	15	5.8	8	30	1.4	76	2	-	29048	G1E.UBTT.060-030-08-29048
6	3	6	15	5.8	8	42	0.9	88	2	-	29050	G1E.UBTT.060-030-08-29050

*Technical modifications reserved.

„xy“ HRC=Processing of hardened material up to the specified value; 1.400N=materials like 1.2714HH;
1.000N=materials like 1.2311, 1.2379; Steel=materials like 1.1730; CrNi=Nickel-chromium alloys; Titanium=Titanium alloys;
INC=Nickel-base alloys; GG=Casting alloys; GjV= Alloyed cast steel; ALU=Aluminium alloys;
AlSi=Aluminium silicon alloys; Cu=copper; GRAPH=Graphite; GFK= fiberglass-reinforced plastics
Have a look at iklick.aura.tools to find all available tools and further information.

AURA® Frästechnik GmbH
Raiffeisenstraße 8
35236 Breidenbach
Germany

Phone +49 64 65 91 11 94 - 0
Fax +49 64 65 91 11 94 - 113

E-Mail kontakt@aura-tools.de

Gone:1® is a brand of AURA® Frästechnik GmbH

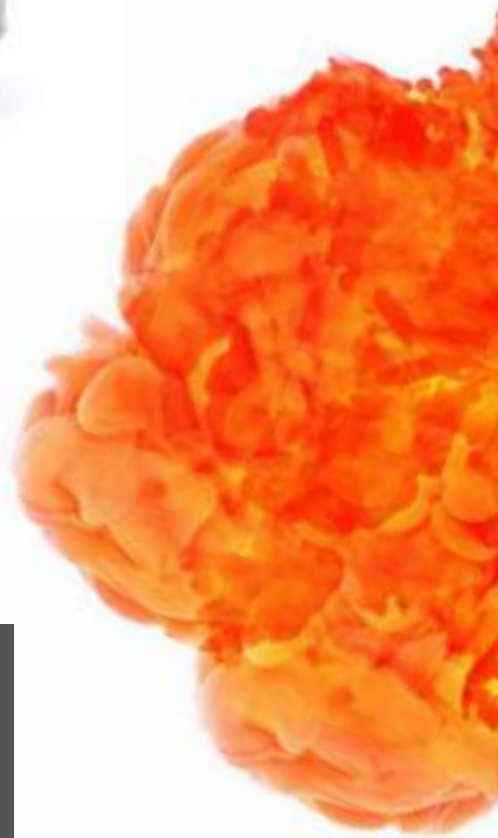
G2P.TTRM



G2P.TTRM
 PREMIUM
 TSC
 TRiHF
 METRIC (THREAD)

PREMIUM

Screw-in milling cutter for TriHF- indexable inserts, highest quality for roughing, useable for large working depth, also on cylindrical walls.
 With inner coolant supply and quality control report.

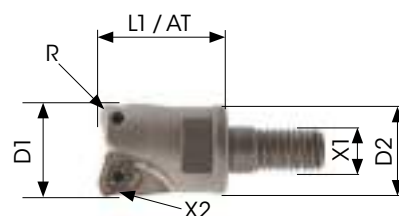


You will find all available tools and further information at: iklick.aura.tools

G2P.TTRM



D1 = Tool diameter
 R = Radius
 D2 = Connector collar-diameter
 X1 = Interface to holder
 AT = Working depth
 L1 = Total length
 Z = Number of cutting edges
 X2 = Type of indexable insert



Technical Features

Cutter for large working depth and soft cutting. The polygonal cutting edge ensures optimal load distribution under adverse conditions. The AURA® TriHF-system enables manless work and high process safety also at adverse clamping, interrupted cuts and thin walled bars. Even machining a vertical wall directly generates hardly any vibration.

Available in the following dimensions:



Order -Code	Articel N°	D1	Radius	L1/AT	Z	X1	fitting insert	fitting screw	fitting wrench	screw in	shell type	Asia Style
26864	G2P.TTRM.016-011-10-26864	16	1.1	23	2	M10k	TRI11	03929	02395	x		
23543	G2P.TTRM.017-011-08-23543	17	1.1	23	2	M8	TRI11	03929	02395	x		x
26865	G2P.TTRM.020-011-10-26865	20	1.1	25	3	M10	TRI11	03929	02395	x		
26866	G2P.TTRM.025-011-12-26866	25	1.1	29	3	M12	TRI11	03929	02395	x		
26867	G2P.TTRM.026-011-12-26867	26	1.1	29	3	M12	TRI11	03929	02395	x		
26871	G2P.TTRM.035-011-16-26871	35	1.1	43	5	M16	TRI11	03929	02395	x		



AURA® Frästechnik GmbH
 Raiffeisenstraße 8
 35236 Breidenbach
 Germany

Phone +49 64 65 91 11 94 - 0
 Fax +49 64 65 91 11 94 - 113

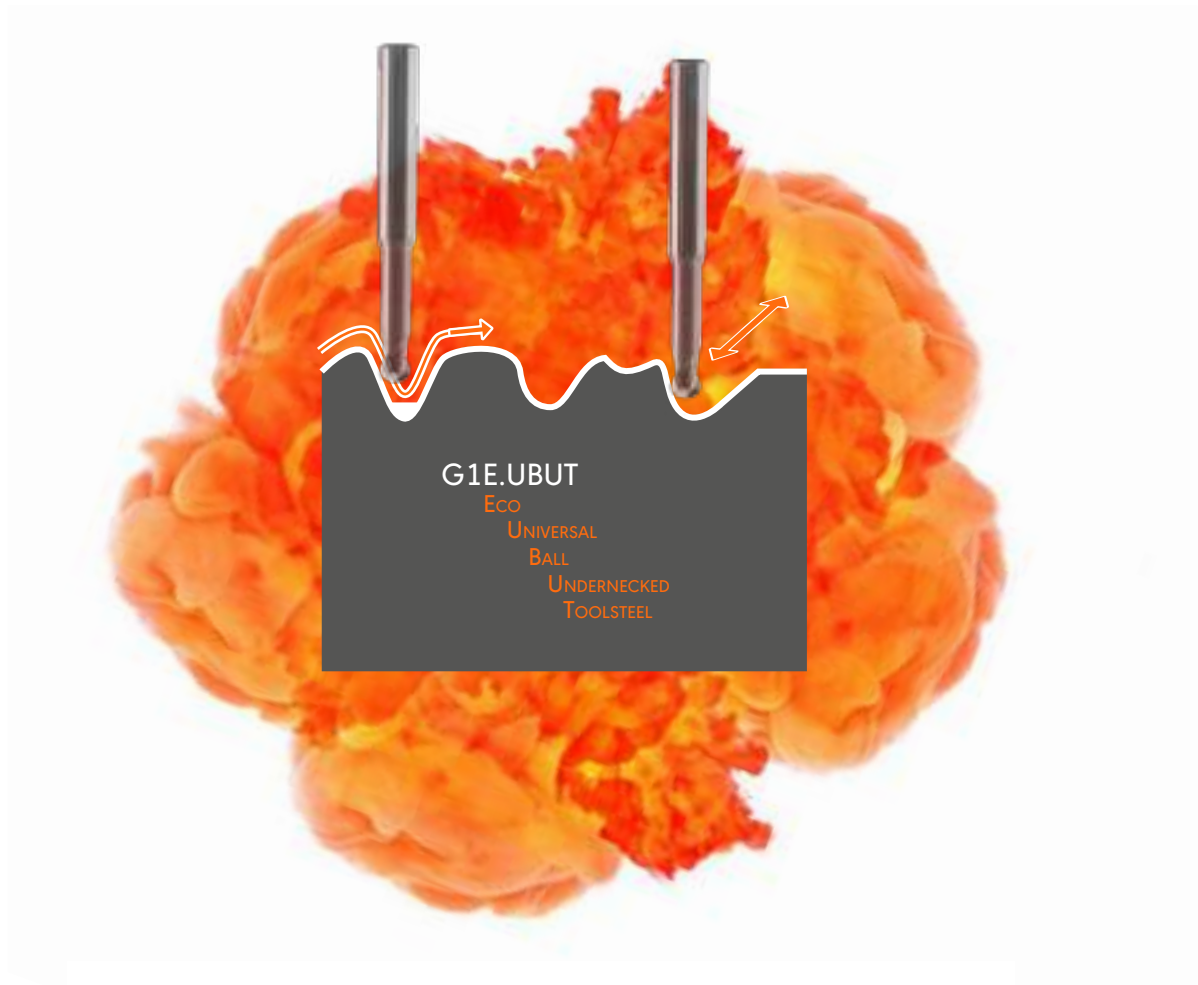
E-Mail kontakt@aura-tools.de

*Technical modifications reserved.

Have a look at iklick.aura.tools to find all available tools and further information.

G'one:1® is a brand of AURA® Frästechnik GmbH

G1E.UBUT

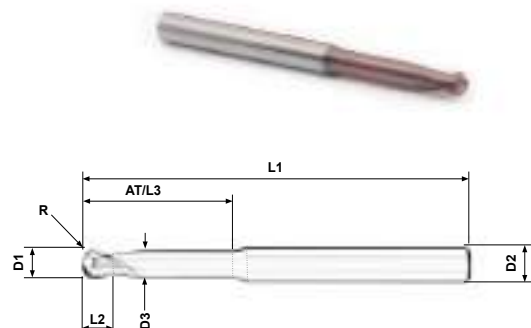


You will find all available
tools and further information
at: iklick.aura.tools

Product overview

This eco ballnose cutter is a versatile precision tool. The areas of application are profile milling, pre-finishing and finishing of 3-D contours and rest machining. The surfaces left behind are in a high dimensional accuracy. Suitable for unalloyed steels, tempered tool steels and hardened steels <56 HRC.

By using this tool many applications and adaptations can be optimized and standardized.



Available in the following dimensions:

<65HRC	<58HRC	<56HRC	<52HRC	<48HRC	1.400N	1.000N	Steel	CrNi	Titan	INC	GG	GjV	ALU	AlSi	Cu	GRAPH	GFK
-	-	+	+	+	+	+	+	+	-	-	+	-	-	-	-	-	-

D1	R	L2	L3	D3	D2	AT	°α	L1	z	IKZ	Order -Code	Articel N°
1	0.5	1	3	0.9	6	3	0	51	2	-	28987	G1E.UBUT.010-005-06-28987
1	0.5	1	5	0.9	6	5	0	51	2	-	28988	G1E.UBUT.010-005-06-28988
1.5	0.75	1.5	4.5	1.4	6	4.5	0	51	2	-	29449	G1E.UBUT.015-0075-06-29449
2	1	2	6	1.9	6	6	0	51	2	-	28989	G1E.UBUT.020-010-06-28989
2	1	2	10	1.9	6	10	0	57	2	-	28990	G1E.UBUT.020-010-06-28990
3	1.5	3	9	2.9	6	9	0	51	2	-	28991	G1E.UBUT.030-015-06-28991
3	1.5	3	15	2.9	6	15	0	57	2	-	28992	G1E.UBUT.030-015-06-28992
4	2	4	12	3.8	6	12	0	57	2	-	28993	G1E.UBUT.040-020-06-28993
4	2	4	20	3.8	6	20	0	64	2	-	28994	G1E.UBUT.040-020-06-28994
5	2.5	5	15	4.8	6	15	0	57	2	-	28995	G1E.UBUT.050-025-06-28995
5	2.5	5	25	4.8	6	25	0	64	2	-	28996	G1E.UBUT.050-025-06-28996
6	3	6	18	5.8	6	18	0	57	2	-	28997	G1E.UBUT.060-030-06-28997
6	3	6	30	5.8	6	30	0	76	2	-	28998	G1E.UBUT.060-030-06-28998
6	3	6	42	5.8	6	42	0	100	2	-	29468	G1E.UBUT.060-030-06-29468
8	4	8	24	7.7	8	24	0	64	2	-	28999	G1E.UBUT.080-040-08-28999
8	4	8	40	7.7	8	40	0	76	2	-	29000	G1E.UBUT.080-040-08-29000
8	4	8	56	7.7	8	56	0	100	2	-	29469	G1E.UBUT.080-040-08-29469
10	5	10	30	9.7	10	30	0	76	2	-	29001	G1E.UBUT.100-050-10-29001
10	5	10	50	9.7	10	50	0	100	2	-	29002	G1E.UBUT.100-050-10-29002
12	6	12	36	11.6	12	36	0	76	2	-	29003	G1E.UBUT.120-060-12-29003
12	6	12	60	11.6	12	60	0	100	2	-	29004	G1E.UBUT.120-060-12-29004



*Technical modifications reserved.

„xy“ HRC=Processing of hardened material up to the specified value; 1.400N=materials like 1.2714HH; 1.000N=materials like 1.2311, 1.2379; Steel=materials like 1.1730; CrNi=Nickel-chromium alloys; Titanium=Titanium alloys; INC=Nickel-base alloys; GG=Casting alloys; GjV= Alloyed cast steel; ALU=Aluminium alloys; AlSi=Aluminium silicon alloys; Cu=copper; GRAPH=Graphite; GFK= fiberglass-reinforced plastics

Have a look at iklick.aura.tools to find all available tools and further information.

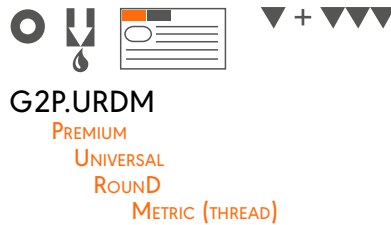
AURA® Frästechnik GmbH
Raiffeisenstraße 8
35236 Breidenbach
Germany

Phone +49 64 65 91 11 94 - 0
 Fax +49 64 65 91 11 94 - 113

E-Mail kontakt@aura-tools.de

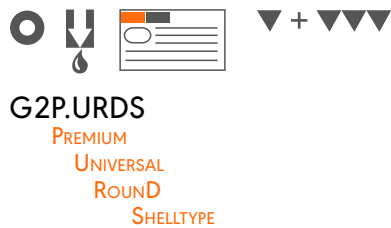
G'one:1® is a brand of AURA® Frästechnik GmbH

G2P.URDM & G2P.URDS



PREMIUM

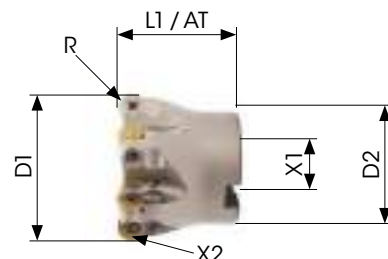
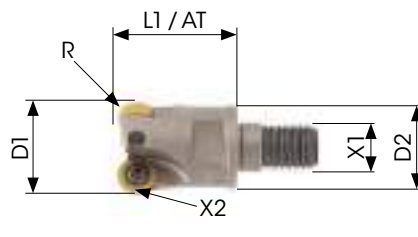
Screw-in milling cutter and shell-type milling cutter for round indexable inserts, highest quality for roughing and finishing, 3-D contouring and multiples milling. With inner coolant supply and quality control report.



You will find all available tools and further information at: iklick.aura.tools

G2P.URDM & G2P.URDS

- D1 = Tool diameter
 R = Radius
 D2 = Connector collar-diameter
 X1 = Interface to holder
 AT = Working depth
 L1 = Total length
 Z = Number of cutting edges
 X2 = Type of indexable insert



Technical features

Screw-in milling cutter and shell-type milling cutter for roughing and finishing, 3-D contouring, copying processes and line-by-line milling walls. The high production requirements ensure long lifetimes and smooth running with high surface quality.

Available in the following dimensions:

Order -Code	Articel N°	D1	Radius	L1/AT	Z	X1	fitting insert	fitting screw	fitting wrench	screw in	shell type	Asia Style
24306	G2P.URDM.012-030-07-24306	12	3	23	2	M7	SF06	20596	03891	x		
24307	G2P.URDM.012-035-07-24307	12	3.5	23	2	M7	SF07199	03890	01366	x		
23426	G2P.URDM.013-035-07-23426	13	3.5	23	2	M7	SF07199	03890	01366	x		x
24308	G2P.URDM.013-035-08-24308	13	3.5	23	2	M8K	SF07199	03890	01366	x		
24309	G2P.URDM.015-035-08-24309	15	3.5	23	3	M8	SF07	01363	01366	x		
27243	G2P.URDM.015-035-08-27243	15	3.5	23	2	M8	SF07	01363	01366	x		
24310	G2P.URDM.016-030-10-24310	16	3	23	3	M10k	SF06	22460	01366	x		
24311	G2P.URDM.016-040-10-24311	16	4	23	2	M10k	SF08	03929	02395	x		
26370	G2P.URDM.016-035-10-26370	16	3.5	23	3	M10k	SF07	01363	01366	x		
23425	G2P.URDM.017-040-08-23425	17	4	23	2	M8	SF08	03929	02395	x		x
24270	G2P.URDM.020-050-10-24270	20	5	30	2	M10	SF10	01364	01367	x		
24312	G2P.URDM.020-035-10-24312	20	3.5	28	4	M10	SF07	01363	01366	x		
24313	G2P.URDM.020-040-10-24313	20	4	25	3	M10	SF08	03929	02395	x		
27513	G2P.URDM.020-030-10-27513	20	3	28	4	M10	SF06	22460	01366	x		
23628	G2P.URDM.025-040-12-23628	25	4	30	4	M12	SF08	03929	02395	x		
24314	G2P.URDM.025-035-12-24314	25	3.5	35	5	M12	SF07	01363	01366	x		
24315	G2P.URDM.025-050-12-24315	25	5	35	3	M12	SF10	01364	01367	x		
23423	G2P.URDM.026-050-12-23423	26	5	30	3	M12	SF10	01364	01367	x		x
23424	G2P.URDM.026-040-12-23424	26	4	30	4	M12	SF08	03929	02395	x		x
24317	G2P.URDM.035-050-16-24317	35	5	43	5	M16	SF10	01364	01367	x		
24318	G2P.URDM.035-060-16-24318	35	6	42	3	M16	SF12	01364	01367	x		
25602	G2P.URDM.035-080-16-25602	35	8	42	3	M16	SF16	01365	01368	x		
26897	G2P.URDM.035-040-16-26897	35	4	43	5	M16	SF08	03929	02395	x		x
27065	G2P.URDM.035-050-16-27065	35	5	43	4	M16	SF10	01364	01367	x		x
23537	G2P.URDM.040-060-16-23537	40	6	42	3	M16	SF12	01364	01367	x		
26364	G2P.URDM.042-050-16-26364	42	5	42	5	M16	SF10	01364	01367	x		
23422	G2P.URDS.050-060-22-23422	50	6	48	5	AST22	SF12	01364	01367		x	
24236	G2P.URDS.052-060-22-24236	52	6	50	5	AST22	SF12	01364	01367		x	
24319	G2P.URDS.052-080-22-24319	52	8	50	4	AST22	SF16	01365	01368		x	
26678	G2P.URDS.052-050-22-26678	52	5	50	6	AST22	SF10	01364	01367		x	
23421	G2P.URDS.063-060-22-23421	63	6	50	6	AST22	SF12	01364	01367		x	
24320	G2P.URDS.066-060-27-24320	66	6	50	6	AST27	SF12	01364	01367		x	
24321	G2P.URDS.066-080-27-24321	66	8	50	5	AST27	SF16	01365	01368		x	
24322	G2P.URDS.080-060-27-24322	80	6	50	7	AST27	SF12	01367	01368		x	
24323	G2P.URDS.080-080-27-24323	80	8	50	6	AST27	SF16	01365	01368		x	
26677	G2P.URDS.160-080-40-26677	160	8	50	9	AST40	SF16	01365	01368		x	



AURA® Frästechnik GmbH
 Raiffeisenstraße 8
 35236 Breidenbach
 Germany

Phone +49 64 65 91 11 94 - 0
 Fax +49 64 65 91 11 94 - 113

E-Mail kontakt@aura-tools.de

*Technical modifications reserved.

Have a look at iklick.aura.tools to find all available tools and further information.

Gone:1® is a brand of AURA® Frästechnik GmbH

G2P.URDM & G2P.URDS



G2P.URDM

PREMIUM
UNIVERSAL
ROUND
METRIC (THREAD)

PREMIUM

Screw-in milling cutter and shell-type milling cutter for round indexable inserts, highest quality for roughing and finishing, 3-D contouring and multiples milling. With inner coolant supply and quality control report.



G2P.URDS

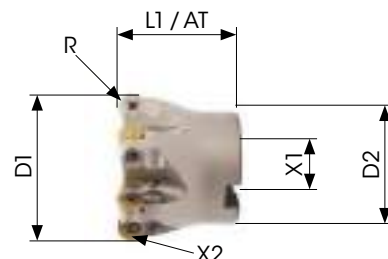
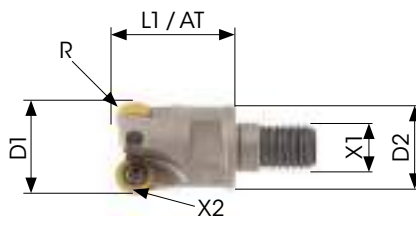
PREMIUM
UNIVERSAL
ROUND
SHELLTYPE



You will find all available tools and further information at: iklick.aura.tools

G2P.URDM & G2P.URDS

- D1 = Tool diameter
- R = Radius
- D2 = Connector collar-diameter
- X1 = Interface to holder
- AT = Working depth
- L1 = Total length
- Z = Number of cutting edges
- X2 = Type of indexable insert



Technical features

Screw-in milling cutter and shell-type milling cutter for roughing and finishing, 3-D contouring, copying processes and line-by-line milling walls. The high production requirements ensure long lifetimes and smooth running with high surface quality.

Available in the following dimensions:

Order -Code	Articel N°	D1	Radius	L1/AT	Z	X1	fitting insert	fitting screw	fitting wrench	screw in	shell type	Asia Style
24306	G2P.URDM.012-030-07-24306	12	3	23	2	M7	SF06	20596	03891	x		
24307	G2P.URDM.012-035-07-24307	12	3.5	23	2	M7	SF07199	03890	01366	x		
23426	G2P.URDM.013-035-07-23426	13	3.5	23	2	M7	SF07199	03890	01366	x		x
24308	G2P.URDM.013-035-08-24308	13	3.5	23	2	M8K	SF07199	03890	01366	x		
24309	G2P.URDM.015-035-08-24309	15	3.5	23	3	M8	SF07	01363	01366	x		
27243	G2P.URDM.015-035-08-27243	15	3.5	23	2	M8	SF07	01363	01366	x		
24310	G2P.URDM.016-030-10-24310	16	3	23	3	M10k	SF06	22460	01366	x		
24311	G2P.URDM.016-040-10-24311	16	4	23	2	M10k	SF08	03929	02395	x		
26370	G2P.URDM.016-035-10-26370	16	3.5	23	3	M10k	SF07	01363	01366	x		
23425	G2P.URDM.017-040-08-23425	17	4	23	2	M8	SF08	03929	02395	x		x
24270	G2P.URDM.020-050-10-24270	20	5	30	2	M10	SF10	01364	01367	x		
24312	G2P.URDM.020-035-10-24312	20	3.5	28	4	M10	SF07	01363	01366	x		
24313	G2P.URDM.020-040-10-24313	20	4	25	3	M10	SF08	03929	02395	x		
27513	G2P.URDM.020-030-10-27513	20	3	28	4	M10	SF06	22460	01366	x		
23628	G2P.URDM.025-040-12-23628	25	4	30	4	M12	SF08	03929	02395	x		
24314	G2P.URDM.025-035-12-24314	25	3.5	35	5	M12	SF07	01363	01366	x		
24315	G2P.URDM.025-050-12-24315	25	5	35	3	M12	SF10	01364	01367	x		
23423	G2P.URDM.026-050-12-23423	26	5	30	3	M12	SF10	01364	01367	x		x
23424	G2P.URDM.026-040-12-23424	26	4	30	4	M12	SF08	03929	02395	x		x
24317	G2P.URDM.035-050-16-24317	35	5	43	5	M16	SF10	01364	01367	x		
24318	G2P.URDM.035-060-16-24318	35	6	42	3	M16	SF12	01364	01367	x		
25602	G2P.URDM.035-080-16-25602	35	8	42	3	M16	SF16	01365	01368	x		
26897	G2P.URDM.035-040-16-26897	35	4	43	5	M16	SF08	03929	02395	x		x
27065	G2P.URDM.035-050-16-27065	35	5	43	4	M16	SF10	01364	01367	x		x
23537	G2P.URDM.040-060-16-23537	40	6	42	3	M16	SF12	01364	01367	x		
26364	G2P.URDM.042-050-16-26364	42	5	42	5	M16	SF10	01364	01367	x		
23422	G2P.URDS.050-060-22-23422	50	6	48	5	AST22	SF12	01364	01367		x	
24236	G2P.URDS.052-060-22-24236	52	6	50	5	AST22	SF12	01364	01367		x	
24319	G2P.URDS.052-080-22-24319	52	8	50	4	AST22	SF16	01365	01368		x	
26678	G2P.URDS.052-050-22-26678	52	5	50	6	AST22	SF10	01364	01367		x	
23421	G2P.URDS.063-060-22-23421	63	6	50	6	AST22	SF12	01364	01367		x	
24320	G2P.URDS.066-060-27-24320	66	6	50	6	AST27	SF12	01364	01367		x	
24321	G2P.URDS.066-080-27-24321	66	8	50	5	AST27	SF16	01365	01368		x	
24322	G2P.URDS.080-060-27-24322	80	6	50	7	AST27	SF12	01367	01368		x	
24323	G2P.URDS.080-080-27-24323	80	8	50	6	AST27	SF16	01365	01368		x	
26677	G2P.URDS.160-080-40-26677	160	8	50	9	AST40	SF16	01365	01368		x	



AURA® Frästechnik GmbH
Raiffeisenstraße 8
35236 Breidenbach
Germany

Phone +49 64 65 91 11 94 - 0
 Fax +49 64 65 91 11 94 - 113

E-Mail kontakt@aura-tools.de

*Technical modifications reserved.
 Have a look at iklick.aura.tools to find all available tools and further information.

Gone:1® is a brand of AURA® Frästechnik GmbH