

InovaTools[®]
GERMAN TOOLS GROUP

2020/21

Exclusively Distributed by

FULLERTON
TOOL COMPANY



SINCE 1942



ABOUT FULLERTON

Fullerton Tool Company is a third-generation, family owned business that specializes in the design and production of solid carbide cutting tools for a wide variety of industries. Founded in 1942, the company manufactures high quality end mills, drills, reamers, burrs, saws, keyseat cutters and PCD tooling.

We combine our highly skilled operators with our top-of-the-line production machinery to design and manufacture special cutting tools for your most demanding applications. Our F.A.S.T. team will work closely with your company to help you obtain your goal of optimal process parameter and become lean, efficient and profitable manufacturers

Fullerton is an ISO 9001:2015 certified company.



WHAT IS F.A.S.T.?

Our Fullerton Advanced Solutions team (F.A.S.T.) is the foundation of our commitment to continuously improve, innovate, and provide product diversity. This includes helping our customers reduce cycle times, minimize cost per piece, combine multiple operations in a single tool, and provide a complete turnkey tooling process.



Our fully equipped Research & Development Lab along with our advanced engineers and application specialists enable our F.A.S.T. team to support our customers in maximizing benefits of using Fullerton tooling solutions, in obtaining manufacturer's goals of optimal process parameters, as well as becoming lean, efficient, and profitable manufacturers.

R & D / ENGINEERING SUPPORT

PROCESS & TOOLING DEVELOPMENT UTILIZING THE FULLERTON R & D LAB.

In-house support for machinability and tooling optimization.



Provide targeted and optimized parameters utilizing customer supplied materials.

Fully Six Sigma Staff



Assist in maximizing tool efficiency, as well as reducing cycle times and overall tool costs.

Programming support with Master Cam to identify and evaluate processing techniques for specified materials.



State of the Market Inspection Technology



24-Hour phone response goal.



In-house engineering only one call away.



Resolve machining problems quickly within the R&D Lab.



Our R&D Lab Allows Fullerton to:

- Develop New Tooling Solutions
- Improve Manufacturing Processes for Customers
- Solve Customer Manufacturing Problems
- Test Parts for Customers
- Define Tooling Geometries



Contact Fullerton To:

- Test a Fullerton Carbide Tooling Solution
- Design & Engineer a Turnkey Tooling Process
- Combine Multiple Operations into a Single Tool
- Reduce Cycle Times
- Minimize Cost Per Piece
- Improve Manufacturing Processes

FULLERTON

REGRIND PROGRAM



EXCEPTIONAL QUALITY



SAVE MONEY



QUICK TURNAROUND



WHY REGRIND?

Save money with Fullerton's complete regrind program.

Most standard and custom tooling can be reground to like-new condition while maintaining precise geometries, edge preps, and coatings at a fraction of the cost of new tooling.

- **Save 30%-50% with tooling reground to like-new condition.**
- **Reduce inventory on hand.**
- **Available for standard and custom tooling.**
- **Precise geometries and edge preps generate 100% performance compared to new tooling.**
- **Custom etching on regrinds ensures operator has correct tooling.**
- **Recoated in-house with Fullerton premium coatings.**
- **Free 1-3 day returned shipping via USPS.**
- **Fullerton grinds and finishes applied to tooling, regardless of manufacturer.**

* Tools 1/4" and smaller do not qualify for regrind.



FULLERTON TOOL CAPABILITIES

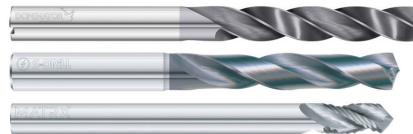
END MILLS | SPECIAL END MILLS
ADVANCED PERFORMANCE

.005" - 1.50"



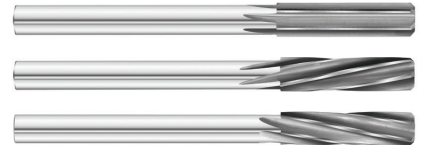
DRILLS | SPECIAL DRILLS
ADVANCED PERFORMANCE

.046" - 1.0"



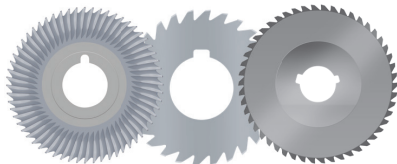
REAMERS
SPECIAL REAMERS

.028" - 1.00"



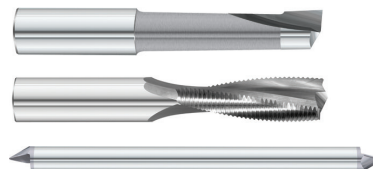
SAWS
SPECIAL SAWS

.250" - 6.00"



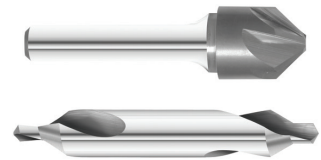
BORING TOOLS
ENGRAVING TOOLS
UNIQUE TOOLS

.060" - .360"

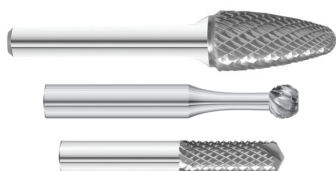


COUNTERSINKS
SPECIAL COUNTERSINKS
COMBINED DRILL COUNTERSINKS

.025" - .750"



ROTARY BURRS
BURR ROUTERS
SPECIAL BURRS



KEYSEAT CUTTERS
SPECIAL KEYSEAT CUTTERS

.375" - 1.50"



CUSTOM TOOLING



CUSTOM TOOLING SOLUTIONS

Complex machining often requires custom tooling. We provide custom tooling solutions that increase efficiency and reduce costs, specific to your complex machining applications.

Fullerton can assess your machining needs through a collaboration with your machinists and product development teams and our engineering and technical support teams. This allows us to better understand your struggles and overall goals, which helps us design and manufacture the right tooling for you. Sometimes that means making a slight alteration to one of our standard tools, while at other times we create innovative, custom tooling specific for your application.

Regardless of how simple or complex your machining needs are, we manufacture every tool with precision and concise perimeters that produces tooling with exceptional performance.

COMPOSITE ROUTER



MULTI-STEP COOLANT DRILL



MULTI-STEP POLY DRILL



AEROSPACE DRILL



6-FLUTE STEP FORM END MILL



FULL RADIUS KEYSEAT CUTTER



DRILL / BACK CHAMFER TOOL



MULTI-STEP COOLANT REAMER



WHAT WE DO

Precision Industrial Wear Parts

CARBIDE PUNCHES / DIES / BUSHINGS
GAGES / RINGS AND PLUGS

PRECISION GRINDING QUILLS

BLUEPRINT SPECIALS

GRINDING & MACHINE SERVICES

Wire EDM | OD Grinding | ID Grinding | Surface Grinding | RAM EDM,
CNC Machining CNC Turning | Polishing | Lapping | ID Honing.

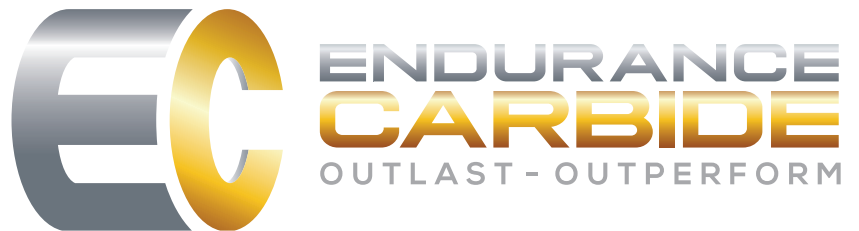
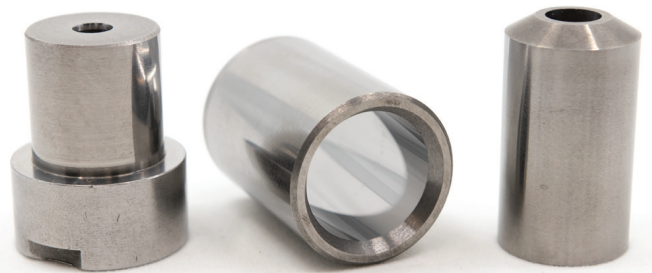
The Benefits Of Tungsten Carbide Wear Parts

Tungsten carbide grinding quills deliver more desirable results than their steel counterparts – but how exactly do these improvements manifest? Tungsten carbide parts offer significantly more rigidity and strength than is afforded by steel. The upgrade in strength offers very clear benefits: tungsten carbide parts are typically replaced much less frequently than steel parts, which helps reduce maintenance costs while minimizing time spent servicing your machinery. The resulting increase in productivity easily helps offset the higher up-front costs of tungsten carbide tools. The rigidity of the material is most notably beneficial in precision-grinding applications. Stiffer quills experience less deflection during operation, which in turn allows machinists to exhibit greater control over the quill's movements.



ISO 9001:2015 Certified **EnduranceCarbide.com** (989) 777-7950
Sales@EnduranceCarbide.com

Your Reputation Depends on it, Demands it, Deserves it.

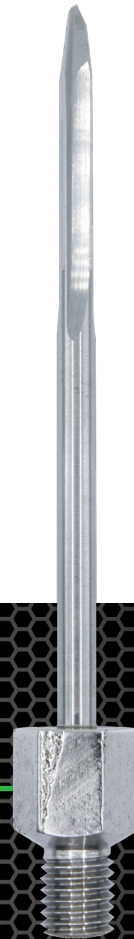


American Made | American Proud



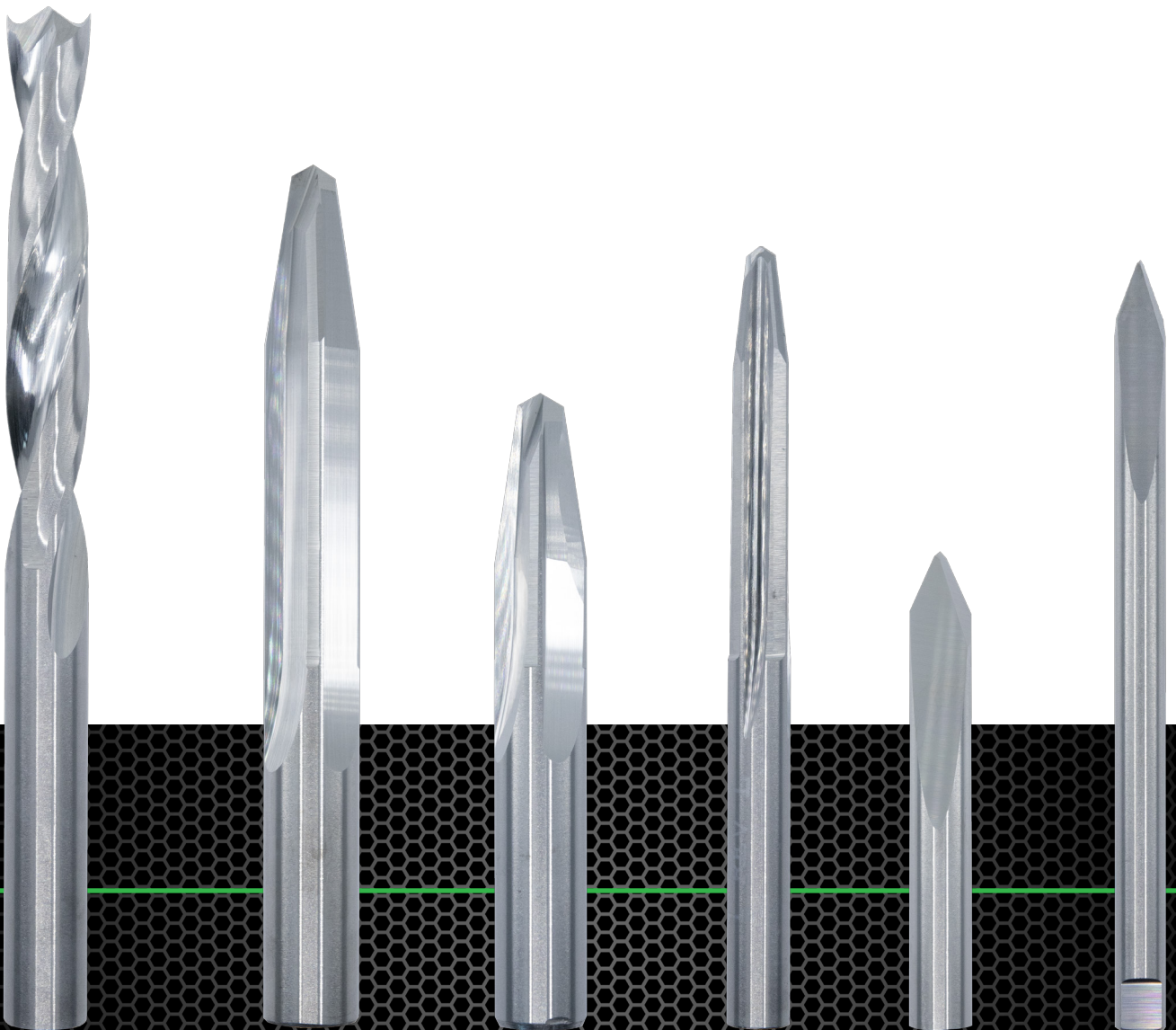
Carbro

YOUR AEROSPACE TOOLING SPECIALISTS.



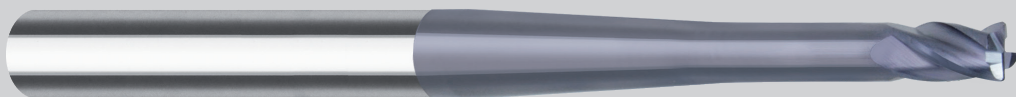
**COMPOSITE ROUTERS • JOBBER DRILLS
THREADED TOOLS**

310.643.8400



**DAGGER DRILLS • DRILL REAMERS
REAMERS • STRAIGHT FLUTE DRILLS**

CARBROUSA.COM





17

Solid carbide mills

1



59

Inoscrew - Modular milling system

2



75

Diamond coated mills

3



89

Special mills

4



97

Solid carbide drills

5



129

Pictogram descriptions

6



Art.-no.	Page	Coating
040	25	TIALN
060	52	Naco Blue
60	72	-
61	73	-
62	72	-
63	73	-
206	112	VAROCON
207	114	VAROCON
218	56	ALTIN
220	56	ALTIN
221	57	ALTIN
251	54	Ta-C
308	53	ALTIN
309	53	ALTIN
310	54	ALTIN
312	55	Naco Blue
313	42	ALTIN
315	43	TIALN
332	49	ALTIN
333	49	ALTIN
336	50	ALTIN
337	50	ALTIN
338	51	Naco Blue
339	51	ALTIN
506	100	BLANK
507	101	NANOSIT
508	108	BLANK
525	28	VAROCON
532	27	NanoCon
551	40	ALTIN
552	40	ALTIN
560	81	Diamond
561	78	Diamond
562	85	Diamond
563	86	Diamond
564	87	Diamond
570	28	NanoCon
571	36	ALTIN
639	41	Naco Blue
640	44	TIALN
641	45	TIALN
642	46	TIALN

Art.-no.	Page	Coating
643	47	ALTIN
644	48	ALTIN
661	52	TIALN
662	25	ALTIN
663	26	TIALN
664	26	ALTIN
665	27	TIALN
708	116	TIALN
710	118	TIALN
711	127	TIALN
740	91	BLANK
745	91	TIALN
760	92	TIALN
780	94	TIALN
790	92	TIALN
818	125	TIALN
900	93	TIALN
901	95	TIALN
903	93	TIALN
904	94	TIALN
908	120	VAROCON
909	122	VAROCON
910	123	VAROCON
911	124	VAROCON
38.102	64	TIALN
38.208	65	TIALN
38.213	64	TIALN
38.214	65	TIALN
38.244	68	ZrN
38.313	66	Naco Blue
38.332	66	ALTIN
38.344	69	ALTIN
38.347	70	ALTIN
38.514	68	TIALN
38.520	67	Naco Blue
38.671	67	ALTIN
38.690	70	TIALN
38.733	69	TIALN
38.780	71	TIALN
38.790	71	TIALN

Find your tool simply and fast - with the help of the apps by Inovatools

Available for your
smartphone



App Store



INOQR



INOCUT



Play Store



INOQR



INOCUT



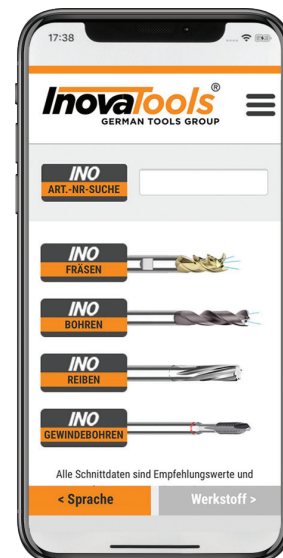
The INOQR – Code Reader app builds a digital bridge from the tool catalog to the online shop “INOSHOP”. After scanning the desired tool, necessary selection windows lead you to the correct item number. The scanned item numbers are collected and sent to the online shop at the touch of a button.

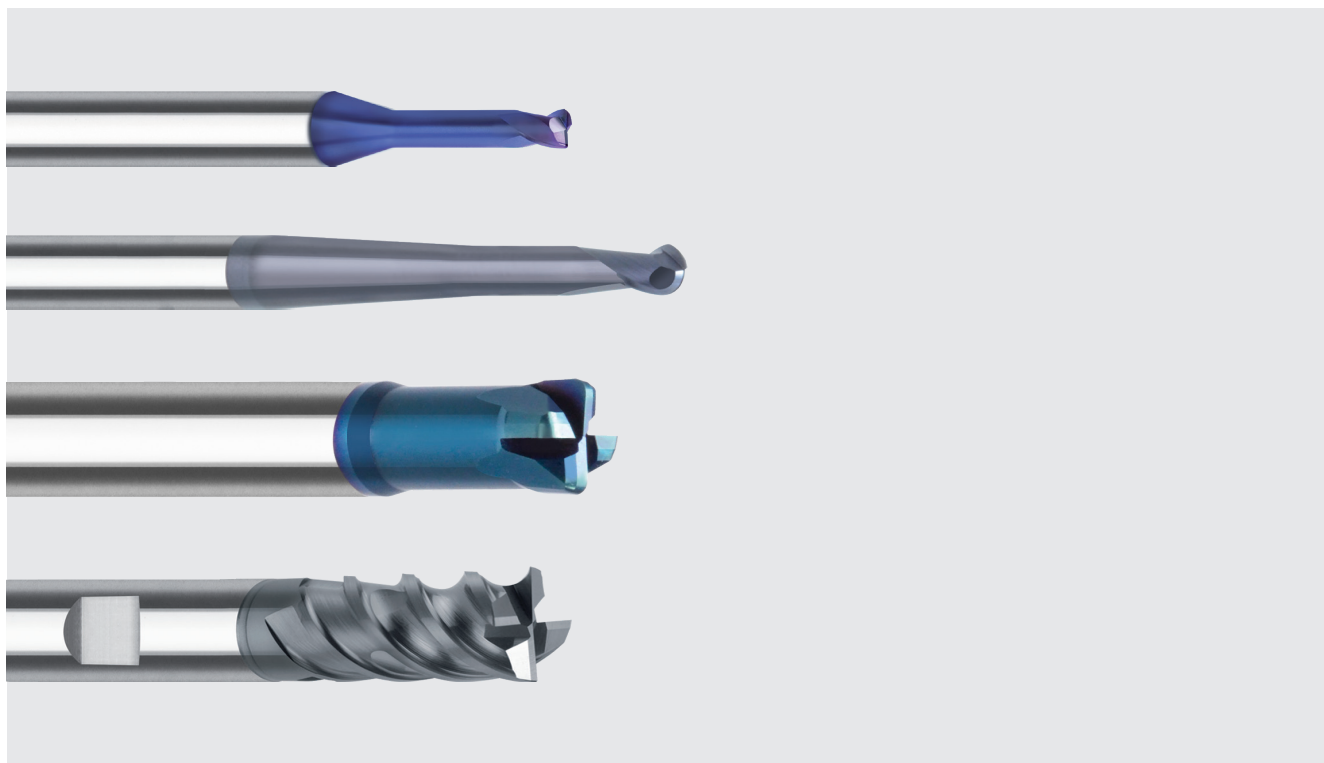
This app requires a registration. As a result you are given the advantage that you can order quickly and conveniently, see the price with your discount and the current stock. The following values are available depending on the article: cutting edge diameter, radii, cutting width, toothing, coating, clamping surface, total length, ...



The INOCUT – CuttingData app is a specific recommendation of cutting data depending on cross section, material and tool. After the selection of the technologies milling, drilling, reaming or tapping, there are 6 material groups with a total of 24 materials to choose from. Afterwards, tools are offered on the basis of a tool category or end form search and sorted according to the highest cutting speed. Depending on the technology, a checkbox can be used to calculate a specific cross section, copy milling, or the maximum machine speed. The efficiency (Q: material removal rate) is displayed in a diagram and can be compared with specific tools via a calculator function.

The offline version is available on a USB memory stick by request. This is conveniently updated automatically with an open internet access.





	Page
Overview, Field of application	18
Solid carbide mills	20



Solid carbide mills



Z (no. of teeth)	2	2	2	2	2	2	2	2	2	2	2	4	4	3-4	4	4	4	4	4
Coating	VAROCON	ALTIN	naco blue	TIALN	TIALN	ALTIN	TIALN	NanoCon	NanoCon	ALTIN	ALTIN	ALTIN	naco blue	ALTIN	TIALN	TIALN	TIALN	ALTIN	ALTIN
Technology	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HPC	HSC	HSC	HSC	HSC	HSC
Page	20	25	25	26	26	27	27	28	36	40	40	41	42	43	44	45	45	47	48
Article-No.	525	662	040	663	664	665	532	570	571	551	552	639	313	315	640	641	642	643	644
Stahl steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
HRC 45-55	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
HRC 55-60	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●
HRC 60-65	●	●	●	●	●	●		●	●	●	●	●	○	○	○	○	○	○	○
GG(G)							●							●	●	●	●	●	●
ALU NE							○												
Kunststoff plastic							○												
GFK/CFK Graphit																			
stainless steel							○												
INCONEL TITAN																			
IK																			
TYP	H	H	H	H	H	H	N	H	H	H	H	H	H	H	H	H	H	H	H

Solid carbide mills

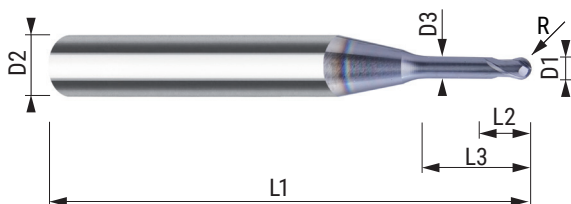


Z (no. of teeth)	2	2	4	4	4	6	4/6	6	6/8	6-8	3	3/4	4	6/8	6/8	6/8		
Coating	ALTIN	ALTIN	ALTIN	ALTIN	naco blue	ALTIN	TIALN	naco blue	ALTIN	ALTIN	Ta-C	ALTIN	naco blue	ALTIN	ALTIN	ALTIN		
Technology	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HSC	HPC	HPC	HSC	HSC	HSC	HSC		
Page	49	49	50	50	51	51	52	52	53	53	54	54	55	56	56	57		
Article-No.	332	333	336	337	338	339	661	060	308	309	251	310	312	218	220	221		
Stahl steel	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		
HRC 45-55	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		
HRC 55-60	○	○	●	●	●	●	●	●	●	●		●	●	●	●	●		
HRC 60-65	○	○	○	○	●	●	○	○	●	●		○	○	●	●	●		
GG(G)	●	●										●						
ALU NE											●							
Kunststoff plastic											○							
GFK/CFK Graphit																		
stainless steel																		
INCONEL TITAN																		
IK											●							
TYP	H-N	H-N	H	H	H-N	H	H	H	H	H	W	H	H	H	H	H		



Article-No. **525...**

Solid carbide miniature ball nose mill



D1	D2 h5	L2	L1	D3	L3	R	Z	Article-No.
0,20	4,00	0,20	40	0,18	0,50	0,10	2	525.020.01
0,20	4,00	0,20	40	0,18	1,00	0,10	2	525.020.02
0,20	4,00	0,20	40	0,18	1,50	0,10	2	525.020.03
0,20	4,00	0,20	40	0,18	2,00	0,10	2	525.020.04
0,20	4,00	0,20	40	0,18	2,50	0,10	2	525.020.05
0,20	4,00	0,20	40	0,18	3,00	0,10	2	525.020.06
0,30	4,00	0,30	40	0,28	1,00	0,15	2	525.030.01
0,30	4,00	0,30	40	0,28	1,50	0,15	2	525.030.02
0,30	4,00	0,30	40	0,28	2,00	0,15	2	525.030.03
0,30	4,00	0,30	40	0,28	2,50	0,15	2	525.030.04
0,30	4,00	0,30	40	0,28	3,00	0,15	2	525.030.05
0,30	4,00	0,30	40	0,28	3,50	0,15	2	525.030.06
0,30	4,00	0,30	40	0,28	4,00	0,15	2	525.030.07
0,30	4,00	0,30	40	0,28	5,00	0,15	2	525.030.08
0,40	4,00	0,40	40	0,38	1,00	0,20	2	525.040.01
0,40	4,00	0,40	40	0,38	1,50	0,20	2	525.040.02
0,40	4,00	0,40	40	0,38	2,00	0,20	2	525.040.03
0,40	4,00	0,40	40	0,38	2,50	0,20	2	525.040.04
0,40	4,00	0,40	40	0,38	3,00	0,20	2	525.040.05
0,40	4,00	0,40	40	0,38	3,50	0,20	2	525.040.06
0,40	4,00	0,40	40	0,38	4,00	0,20	2	525.040.07
0,40	4,00	0,40	40	0,38	4,50	0,20	2	525.040.08
0,40	4,00	0,40	40	0,38	5,00	0,20	2	525.040.09
0,40	4,00	0,40	40	0,38	6,00	0,20	2	525.040.10
0,40	4,00	0,40	40	0,38	8,00	0,20	2	525.040.11
0,50	6,00	0,50	50	0,48	1,00	0,25	2	525.050.01
0,50	4,00	0,50	45	0,48	1,50	0,25	2	525.050.02
0,50	4,00	0,50	45	0,48	2,00	0,25	2	525.050.03
0,50	6,00	0,50	50	0,48	2,00	0,25	2	525.050.04
0,50	4,00	0,50	45	0,48	2,50	0,25	2	525.050.05
0,50	4,00	0,50	45	0,48	3,00	0,25	2	525.050.06
0,50	6,00	0,50	50	0,48	3,00	0,25	2	525.050.07
0,50	4,00	0,50	45	0,48	3,50	0,25	2	525.050.08
0,50	4,00	0,50	45	0,48	4,00	0,25	2	525.050.09
0,50	6,00	0,50	50	0,48	4,00	0,25	2	525.050.10
0,50	4,00	0,50	45	0,48	4,50	0,25	2	525.050.11
0,50	4,00	0,50	45	0,48	5,00	0,25	2	525.050.12
0,50	6,00	0,50	50	0,48	5,00	0,25	2	525.050.13
0,50	4,00	0,50	45	0,48	6,00	0,25	2	525.050.14
0,50	6,00	0,50	50	0,48	6,00	0,25	2	525.050.15
0,50	4,00	0,50	45	0,48	8,00	0,25	2	525.050.16
0,50	4,00	0,50	45	0,48	10,00	0,25	2	525.050.17
0,50	4,00	0,50	45	0,48	12,00	0,25	2	525.050.18
0,60	4,00	0,60	45	0,58	1,00	0,30	2	525.060.01

1st
CHOICE

NEW

HSC



TYP H

HRC
52-65

Stahl
steel

 $\varnothing_1$
+0,000
-0,015

 r_p
+0,003
-0,003

VAROCON

Article-No. **525...**

Solid carbide miniature ball nose mill



D1	D2 h5	L2	L1	D3	L3	R	Z	Article-No.
0,60	6,00	0,60	50	0,58	1,00	0,30	2	525.060.02
0,60	4,00	0,60	45	0,58	2,00	0,30	2	525.060.03
0,60	6,00	0,60	50	0,58	2,00	0,30	2	525.060.04
0,60	4,00	0,60	45	0,58	3,00	0,30	2	525.060.05
0,60	6,00	0,60	50	0,58	3,00	0,30	2	525.060.06
0,60	4,00	0,60	45	0,58	4,00	0,30	2	525.060.07
0,60	6,00	0,60	50	0,58	4,00	0,30	2	525.060.08
0,60	4,00	0,60	45	0,58	5,00	0,30	2	525.060.09
0,60	6,00	0,60	50	0,58	5,00	0,30	2	525.060.10
0,60	4,00	0,60	45	0,58	6,00	0,30	2	525.060.11
0,60	6,00	0,60	50	0,58	6,00	0,30	2	525.060.12
0,60	4,00	0,60	45	0,58	8,00	0,30	2	525.060.13
0,60	6,00	0,60	50	0,58	8,00	0,30	2	525.060.14
0,60	4,00	0,60	45	0,58	10,00	0,30	2	525.060.15
0,60	4,00	0,60	45	0,58	12,00	0,30	2	525.060.16
0,60	4,00	0,60	45	0,58	14,00	0,30	2	525.060.17
0,70	4,00	0,70	45	0,68	2,00	0,35	2	525.070.01
0,70	4,00	0,70	45	0,68	4,00	0,35	2	525.070.02
0,70	4,00	0,70	45	0,68	6,00	0,35	2	525.070.03
0,70	4,00	0,70	45	0,68	8,00	0,35	2	525.070.04
0,70	4,00	0,70	45	0,68	10,00	0,35	2	525.070.05
0,70	4,00	0,70	45	0,68	12,00	0,35	2	525.070.06
0,80	4,00	0,80	45	0,77	2,00	0,40	2	525.080.01
0,80	6,00	0,80	50	0,77	2,00	0,40	2	525.080.02
0,80	4,00	0,80	45	0,77	3,00	0,40	2	525.080.03
0,80	6,00	0,80	50	0,77	3,00	0,40	2	525.080.04
0,80	4,00	0,80	45	0,77	4,00	0,40	2	525.080.05
0,80	6,00	0,80	50	0,77	4,00	0,40	2	525.080.06
0,80	4,00	0,80	45	0,77	5,00	0,40	2	525.080.07
0,80	6,00	0,80	50	0,77	5,00	0,40	2	525.080.08
0,80	4,00	0,80	45	0,77	6,00	0,40	2	525.080.09
0,80	6,00	0,80	50	0,77	6,00	0,40	2	525.080.10
0,80	4,00	0,80	45	0,77	8,00	0,40	2	525.080.11
0,80	6,00	0,80	50	0,77	8,00	0,40	2	525.080.12
0,80	4,00	0,80	45	0,77	10,00	0,40	2	525.080.13
0,80	4,00	0,80	45	0,77	12,00	0,40	2	525.080.14
0,90	4,00	0,90	45	0,87	4,00	0,45	2	525.090.01
0,90	4,00	0,90	45	0,87	6,00	0,45	2	525.090.02
0,90	4,00	0,90	45	0,87	8,00	0,45	2	525.090.03
0,90	4,00	0,90	50	0,87	10,00	0,45	2	525.090.04
0,90	4,00	0,90	50	0,87	12,00	0,45	2	525.090.05
1,00	4,00	1,00	45	0,95	2,00	0,50	2	525.100.01
1,00	6,00	1,00	50	0,95	2,00	0,50	2	525.100.02
1,00	4,00	1,00	45	0,95	3,00	0,50	2	525.100.03
1,00	6,00	1,00	50	0,95	3,00	0,50	2	525.100.04
1,00	4,00	1,00	45	0,95	4,00	0,50	2	525.100.05

to be continued

Article-No. **525...**

Solid carbide miniature ball nose mill



D1	D2 h5	L2	L1	D3	L3	R	Z	Article-No.
1,00	6,00	1,00	50	0,95	4,00	0,50	2	525.100.06
1,00	4,00	1,00	45	0,95	5,00	0,50	2	525.100.07
1,00	6,00	1,00	50	0,95	5,00	0,50	2	525.100.08
1,00	4,00	1,00	45	0,95	6,00	0,50	2	525.100.09
1,00	6,00	1,00	50	0,95	6,00	0,50	2	525.100.10
1,00	4,00	1,00	45	0,95	8,00	0,50	2	525.100.11
1,00	6,00	1,00	50	0,95	8,00	0,50	2	525.100.12
1,00	4,00	1,00	50	0,95	10,00	0,50	2	525.100.13
1,00	6,00	1,00	50	0,95	10,00	0,50	2	525.100.14
1,00	4,00	1,00	50	0,95	12,00	0,50	2	525.100.15
1,00	6,00	1,00	50	0,95	12,00	0,50	2	525.100.16
1,00	4,00	1,00	50	0,95	14,00	0,50	2	525.100.17
1,00	4,00	1,00	50	0,95	16,00	0,50	2	525.100.18
1,00	4,00	1,00	50	0,95	18,00	0,50	2	525.100.19
1,00	4,00	1,00	50	0,95	20,00	0,50	2	525.100.20
1,00	4,00	1,00	60	0,95	22,00	0,50	2	525.100.21
1,00	4,00	1,00	60	0,95	25,00	0,50	2	525.100.22
1,20	4,00	1,20	45	1,15	4,00	0,60	2	525.120.01
1,20	6,00	1,20	50	1,15	4,00	0,60	2	525.120.02
1,20	4,00	1,20	45	1,15	6,00	0,60	2	525.120.03
1,20	6,00	1,20	50	1,15	6,00	0,60	2	525.120.04
1,20	4,00	1,20	45	1,15	8,00	0,60	2	525.120.05
1,20	4,00	1,20	50	1,15	10,00	0,60	2	525.120.06
1,20	6,00	1,20	50	1,15	10,00	0,60	2	525.120.07
1,20	4,00	1,20	50	1,15	12,00	0,60	2	525.120.08
1,20	6,00	1,20	50	1,15	12,00	0,60	2	525.120.09
1,20	4,00	1,20	50	1,15	16,00	0,60	2	525.120.10
1,20	4,00	1,20	50	1,15	20,00	0,60	2	525.120.11
1,20	4,00	1,20	60	1,15	24,00	0,60	2	525.120.12
1,40	4,00	1,40	45	1,35	6,00	0,70	2	525.140.01
1,40	4,00	1,40	45	1,35	8,00	0,70	2	525.140.02
1,40	4,00	1,40	50	1,35	12,00	0,70	2	525.140.03
1,40	4,00	1,40	50	1,35	16,00	0,70	2	525.140.04
1,50	4,00	1,50	45	1,44	3,00	0,75	2	525.150.01
1,50	6,00	1,50	50	1,44	3,00	0,75	2	525.150.02
1,50	4,00	1,50	45	1,44	4,00	0,75	2	525.150.03
1,50	6,00	1,50	50	1,44	4,00	0,75	2	525.150.04
1,50	4,00	1,50	45	1,44	6,00	0,75	2	525.150.05
1,50	6,00	1,50	50	1,44	6,00	0,75	2	525.150.06
1,50	4,00	1,50	45	1,44	8,00	0,75	2	525.150.07
1,50	6,00	1,50	50	1,44	8,00	0,75	2	525.150.08
1,50	4,00	1,50	50	1,44	10,00	0,75	2	525.150.09
1,50	6,00	1,50	50	1,44	10,00	0,75	2	525.150.10
1,50	4,00	1,50	50	1,44	12,00	0,75	2	525.150.11
1,50	6,00	1,50	50	1,44	12,00	0,75	2	525.150.12
1,50	4,00	1,50	50	1,44	14,00	0,75	2	525.150.13
1,50	6,00	1,50	50	1,44	14,00	0,75	2	525.150.14
1,50	4,00	1,50	50	1,44	16,00	0,75	2	525.150.15

Article-No. **525...**

Solid carbide miniature ball nose mill

1st
CHOICE

NEW

HSC



TYP H

HRC
52-65Stahl
steel

Air



D1	D2 h5	L2	L1	D3	L3	R	Z	Article-No.
1,50	6,00	1,50	60	1,44	16,00	0,75	2	525.150.16
1,50	4,00	1,50	50	1,44	18,00	0,75	2	525.150.17
1,50	4,00	1,50	50	1,44	20,00	0,75	2	525.150.18
1,50	4,00	1,50	60	1,44	22,00	0,75	2	525.150.19
1,50	4,00	1,50	60	1,44	25,00	0,75	2	525.150.20
1,50	4,00	1,50	70	1,44	30,00	0,75	2	525.150.21
1,60	4,00	1,60	45	1,54	6,00	0,80	2	525.160.01
1,60	4,00	1,60	45	1,54	8,00	0,80	2	525.160.02
1,60	4,00	1,60	50	1,54	12,00	0,80	2	525.160.03
1,60	4,00	1,60	50	1,54	16,00	0,80	2	525.160.04
1,60	4,00	1,60	50	1,54	20,00	0,80	2	525.160.05
1,80	4,00	1,80	45	1,74	6,00	0,90	2	525.180.01
1,80	4,00	1,80	45	1,74	8,00	0,90	2	525.180.02
1,80	4,00	1,80	50	1,74	12,00	0,90	2	525.180.03
1,80	4,00	1,80	50	1,74	16,00	0,90	2	525.180.04
1,80	4,00	1,80	50	1,74	20,00	0,90	2	525.180.05
2,00	4,00	2,00	45	1,92	4,00	1,00	2	525.200.01
2,00	6,00	2,00	50	1,92	4,00	1,00	2	525.200.02
2,00	4,00	2,00	45	1,92	6,00	1,00	2	525.200.03
2,00	6,00	2,00	50	1,92	6,00	1,00	2	525.200.04
2,00	4,00	2,00	45	1,92	8,00	1,00	2	525.200.05
2,00	6,00	2,00	50	1,92	8,00	1,00	2	525.200.06
2,00	4,00	2,00	50	1,92	10,00	1,00	2	525.200.07
2,00	6,00	2,00	50	1,92	10,00	1,00	2	525.200.08
2,00	4,00	2,00	50	1,92	12,00	1,00	2	525.200.09
2,00	6,00	2,00	50	1,92	12,00	1,00	2	525.200.10
2,00	4,00	2,00	50	1,92	14,00	1,00	2	525.200.11
2,00	6,00	2,00	50	1,92	14,00	1,00	2	525.200.12
2,00	4,00	2,00	50	1,92	16,00	1,00	2	525.200.13
2,00	6,00	2,00	60	1,92	16,00	1,00	2	525.200.14
2,00	4,00	2,00	50	1,92	18,00	1,00	2	525.200.15
2,00	6,00	2,00	60	1,92	18,00	1,00	2	525.200.16
2,00	4,00	2,00	50	1,92	20,00	1,00	2	525.200.17
2,00	6,00	2,00	60	1,92	20,00	1,00	2	525.200.18
2,00	4,00	2,00	60	1,92	22,00	1,00	2	525.200.19
2,00	4,00	2,00	60	1,92	25,00	1,00	2	525.200.20
2,00	4,00	2,00	60	1,92	30,00	1,00	2	525.200.21
2,50	4,00	2,50	45	2,40	8,00	1,25	2	525.250.01
2,50	6,00	2,50	50	2,40	8,00	1,25	2	525.250.02
2,50	4,00	2,50	50	2,40	10,00	1,25	2	525.250.03
2,50	6,00	2,50	50	2,40	10,00	1,25	2	525.250.04
2,50	4,00	2,50	50	2,40	16,00	1,25	2	525.250.05
2,50	6,00	2,50	60	2,40	16,00	1,25	2	525.250.06
2,50	4,00	2,50	60	2,40	20,00	1,25	2	525.250.07
2,50	6,00	2,50	60	2,40	20,00	1,25	2	525.250.08
2,50	4,00	2,50	60	2,40	25,00	1,25	2	525.250.09
2,50	4,00	2,50	70	2,40	30,00	1,25	2	525.250.10

to be continued

Article-No. **525...**

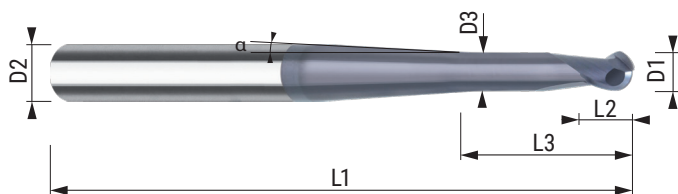
Solid carbide miniature ball nose mill



D1	D2 h5	L2	L1	D3	L3	R	Z	Article-No.
3,00	6,00	3,00	50	2,90	6,00	1,50	2	525.300.01
3,00	6,00	3,00	50	2,90	8,00	1,50	2	525.300.02
3,00	6,00	3,00	50	2,90	10,00	1,50	2	525.300.03
3,00	6,00	3,00	50	2,90	12,00	1,50	2	525.300.04
3,00	6,00	3,00	60	2,90	16,00	1,50	2	525.300.05
3,00	6,00	3,00	60	2,90	20,00	1,50	2	525.300.06
3,00	6,00	3,00	65	2,90	25,00	1,50	2	525.300.07
3,00	6,00	3,00	70	2,90	30,00	1,50	2	525.300.08
3,00	6,00	3,00	75	2,90	35,00	1,50	2	525.300.09
3,00	6,00	3,00	80	2,90	40,00	1,50	2	525.300.10
3,00	6,00	3,00	90	2,90	45,00	1,50	2	525.300.11
3,50	6,00	3,50	50	3,40	10,00	1,75	2	525.350.01
3,50	6,00	3,50	60	3,40	15,00	1,75	2	525.350.02
3,50	6,00	3,50	60	3,40	20,00	1,75	2	525.350.03
3,50	6,00	3,50	65	3,40	25,00	1,75	2	525.350.04
3,50	6,00	3,50	70	3,40	30,00	1,75	2	525.350.05
3,50	6,00	3,50	75	3,40	35,00	1,75	2	525.350.06
3,50	6,00	3,50	80	3,40	40,00	1,75	2	525.350.07
4,00	6,00	4,00	50	3,90	8,00	2,00	2	525.400.01
4,00	6,00	4,00	50	3,90	10,00	2,00	2	525.400.02
4,00	6,00	4,00	50	3,90	12,00	2,00	2	525.400.03
4,00	6,00	4,00	60	3,90	16,00	2,00	2	525.400.04
4,00	6,00	4,00	60	3,90	20,00	2,00	2	525.400.05
4,00	6,00	4,00	65	3,90	25,00	2,00	2	525.400.06
4,00	6,00	4,00	70	3,90	30,00	2,00	2	525.400.07
4,00	6,00	4,00	75	3,90	35,00	2,00	2	525.400.08
4,00	6,00	4,00	80	3,90	40,00	2,00	2	525.400.09
4,00	6,00	4,00	90	3,90	45,00	2,00	2	525.400.10
5,00	6,00	6,00	60	4,90	16,00	2,50	2	525.500.01
5,00	6,00	6,00	60	4,90	20,00	2,50	2	525.500.02
5,00	6,00	6,00	70	4,90	25,00	2,50	2	525.500.03
5,00	6,00	6,00	75	4,90	30,00	2,50	2	525.500.04
5,00	6,00	6,00	80	4,90	40,00	2,50	2	525.500.05
5,00	6,00	6,00	90	4,90	45,00	2,50	2	525.500.06
6,00	6,00	10,00	55	5,90	15,00	3,00	2	525.600.01

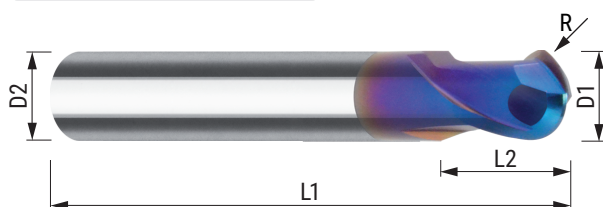
Article-No. **662...**

Solid carbide ball nose mill



D1	D2 h6	L2	L1	D3	L3	R	α	Z	Article-No.
1,00	6,00	1,50	60	0,95	4,00	0,50	9°	2	662.010.00
1,50	6,00	2,30	60	1,44	4,00	0,75	9°	2	662.015.00
1,50	6,00	2,30	60	1,44	8,00	0,75	9°	2	662.016.00
1,50	6,00	3,00	80	1,44	8,00	0,75	3°	2	662.017.00
2,00	6,00	3,00	60	1,92	8,00	1,00	9°	2	662.020.00
2,00	6,00	3,00	80	1,92	8,00	1,00	3°	2	662.021.00
3,00	6,00	3,50	60	2,90	10,00	1,50	9°	2	662.030.00
3,00	6,00	3,50	80	2,90	12,00	1,50	3°	2	662.031.00
4,00	6,00	4,00	60	3,90	12,00	2,00	9°	2	662.040.00
4,00	6,00	4,00	80	3,90	20,00	2,00	3°	2	662.041.00
6,00	6,00	6,00	57	5,90	25,00	3,00	-	2	662.060.00
6,00	6,00	6,00	80	5,90	30,00	3,00	-	2	662.061.00
6,00	8,00	6,00	100	5,90	50,00	3,00	2°	2	662.062.00
8,00	8,00	7,00	63	7,90	30,00	4,00	-	2	662.080.00
8,00	8,00	7,00	100	7,90	40,00	4,00	-	2	662.081.00
10,00	10,00	8,00	80	9,90	30,00	5,00	-	2	662.100.00
10,00	10,00	8,00	100	9,90	50,00	5,00	-	2	662.101.00


Article-No. **040...**

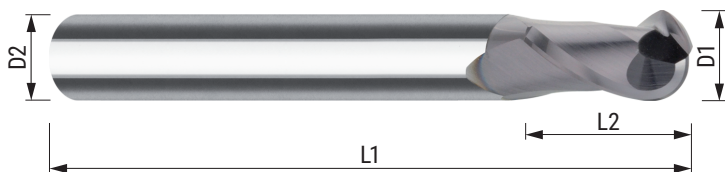
Solid carbide ball nose mill **Dynastar**


D1	D2 h6	L2	L1	R	Z	Article-No.
0,40	6,00	0,40	50	0,20	2	040.040.07
0,50	6,00	0,50	50	0,25	2	040.050.07
0,60	6,00	0,60	50	0,30	2	040.060.07
0,80	6,00	0,80	50	0,40	2	040.080.07
1,00	6,00	1,00	50	0,50	2	040.100.07
1,20	6,00	1,20	50	0,60	2	040.120.07
1,50	6,00	1,50	50	0,75	2	040.150.07
2,00	6,00	2,00	50	1,00	2	040.200.07
3,00	6,00	3,00	50	1,50	2	040.300.07
4,00	6,00	4,00	50	2,00	2	040.400.07
6,00	6,00	6,00	50	3,00	2	040.600.07

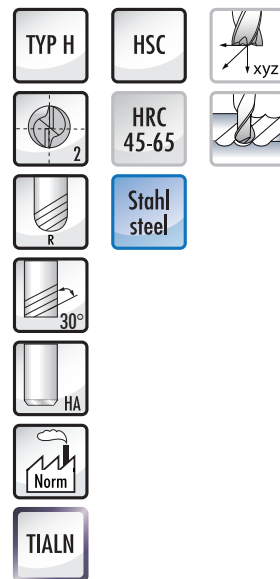


Article-No. **663...**

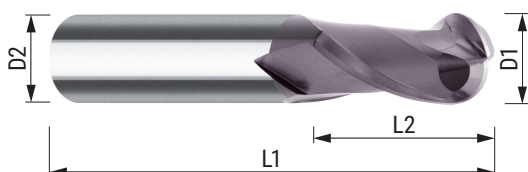
Solid carbide ball nose mill



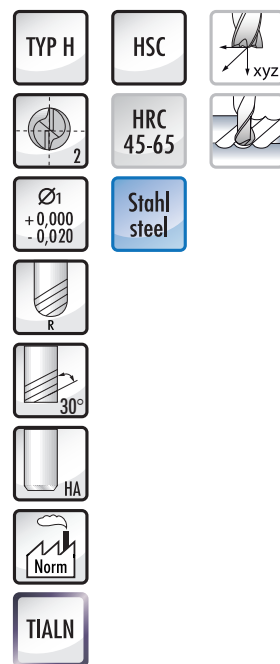
D1	D2 h6	L2	L1	Z	Article-No.
1,00	3,00	1,50	50	2	663.010.00
1,50	3,00	2,50	50	2	663.015.00
2,00	3,00	3,00	50	2	663.020.00
2,50	3,00	4,00	50	2	663.025.00
3,00	3,00	6,00	75	2	663.030.00
4,00	4,00	8,00	75	2	663.040.00
5,00	5,00	10,00	75	2	663.050.00
6,00	6,00	12,00	100	2	663.060.00
8,00	8,00	14,00	100	2	663.080.00
10,00	10,00	18,00	100	2	663.100.00
12,00	12,00	22,00	150	2	663.120.00
14,00	14,00	26,00	150	2	663.140.00
16,00	16,00	30,00	150	2	663.160.00
18,00	18,00	34,00	150	2	663.180.00
20,00	20,00	38,00	150	2	663.200.00


Article-No. **664...**

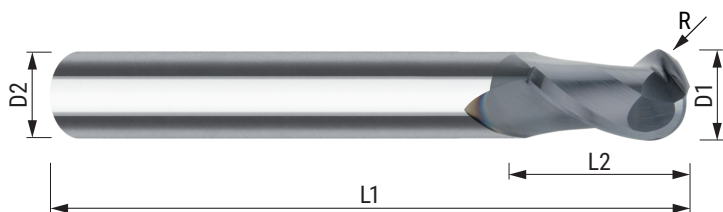
Solid carbide ball nose mill



D1	D2 h6	L2	L1	Z	Article-No.
3,00	3,00	6	50	2	664.030.00
4,00	4,00	8	54	2	664.040.00
5,00	5,00	10	54	2	664.050.00
6,00	6,00	12	54	2	664.060.00
8,00	8,00	14	58	2	664.080.00
10,00	10,00	18	66	2	664.100.00
12,00	12,00	22	73	2	664.120.00
14,00	14,00	26	75	2	664.140.00
16,00	16,00	30	82	2	664.160.00
18,00	18,00	34	84	2	664.180.00
20,00	20,00	38	92	2	664.200.00



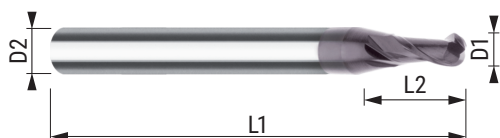
Article-No. **665...**

Solid carbide ball nose mill **PrimeLine**


D1 +0,000 -0,015	D2 h5	L2	L1	R +0,003 -0,003	Z	Article-No.
1,00	6,00	1,50	50	0,50	2	665.010.00
1,50	6,00	2,50	50	0,75	2	665.015.00
2,00	6,00	3,00	50	1,00	2	665.020.00
2,50	6,00	4,00	50	1,25	2	665.025.00
3,00	6,00	6,00	75	1,50	2	665.030.00
4,00	6,00	8,00	75	2,00	2	665.040.00
5,00	6,00	10,00	75	2,50	2	665.050.00
6,00	6,00	12,00	100	3,00	2	665.060.00
8,00	8,00	14,00	100	4,00	2	665.080.00
10,00	10,00	18,00	100	5,00	2	665.100.00
12,00	12,00	22,00	150	6,00	2	665.120.00
14,00	14,00	26,00	150	7,00	2	665.140.00
20,00	20,00	38,00	150	10,00	2	665.200.00


Article-No. **532...**

Solid carbide ball nose mill

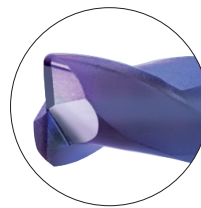
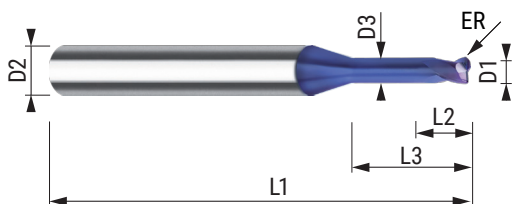


D1	D2 h6	L2	L1	Z	Article-No.	em branco/ blank	TIALN
0,20	3,00	0,50	38	2	532.020...	-	.00
0,30	3,00	1,00	38	2	532.030...	.09	.00
0,40	3,00	1,00	38	2	532.040...	.09	.00
0,50	3,00	1,50	38	2	532.050...	.09	.00
0,60	3,00	1,50	38	2	532.060...	.09	.00
0,70	3,00	2,00	38	2	532.070...	.09	.00
0,80	3,00	2,00	38	2	532.080...	.09	.00
0,90	3,00	2,50	38	2	532.090...	-	.00
1,00	3,00	3,00	38	2	532.100...	.09	.00
1,10	3,00	3,00	38	2	532.110...	-	.00
1,20	3,00	3,00	38	2	532.120...	.09	.00
1,40	3,00	4,00	38	2	532.140...	-	.00
1,50	3,00	4,00	38	2	532.150...	.09	.00
1,60	3,00	5,00	38	2	532.160...	.09	.00
1,80	3,00	5,00	38	2	532.180...	.09	.00
2,00	3,00	5,00	38	2	532.200...	.09	.00



Article-No. **570...**

Solid carbide miniature profile mill with corner radius


1st
CHOICE

NEW

HSC



TYP H

HRC
52-65

Stahl
steel


Air

 r_p
+0,005
-0,005


Diameter tolerances:

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
0,20	4,00	0,20	40	0,18	0,50	0,020	2	570.020.01
0,20	4,00	0,20	40	0,18	1,00	0,020	2	570.020.02
0,20	4,00	0,20	40	0,18	1,50	0,020	2	570.020.03
0,20	4,00	0,20	40	0,18	0,50	0,050	2	570.020.04
0,20	4,00	0,20	40	0,18	1,00	0,050	2	570.020.05
0,20	4,00	0,20	40	0,18	1,50	0,050	2	570.020.06
0,30	4,00	0,30	40	0,28	1,00	0,020	2	570.030.01
0,30	4,00	0,30	40	0,28	2,00	0,020	2	570.030.02
0,30	4,00	0,30	40	0,28	3,00	0,020	2	570.030.03
0,30	4,00	0,30	40	0,28	1,00	0,050	2	570.030.04
0,30	4,00	0,30	40	0,28	2,00	0,050	2	570.030.05
0,30	4,00	0,30	40	0,28	3,00	0,050	2	570.030.06
0,40	4,00	0,40	40	0,38	1,00	0,020	2	570.040.01
0,40	4,00	0,40	40	0,38	2,00	0,020	2	570.040.02
0,40	4,00	0,40	40	0,38	3,00	0,020	2	570.040.03
0,40	4,00	0,40	40	0,38	4,00	0,020	2	570.040.04
0,40	4,00	0,40	40	0,38	1,00	0,050	2	570.040.05
0,40	4,00	0,40	40	0,38	2,00	0,050	2	570.040.06
0,40	4,00	0,40	40	0,38	3,00	0,050	2	570.040.07
0,40	4,00	0,40	40	0,38	4,00	0,050	2	570.040.08
0,40	4,00	0,40	40	0,38	1,00	0,100	2	570.040.09
0,40	4,00	0,40	40	0,38	1,50	0,100	2	570.040.10
0,40	4,00	0,40	40	0,38	2,00	0,100	2	570.040.11
0,40	4,00	0,40	40	0,38	3,00	0,100	2	570.040.12
0,40	4,00	0,40	40	0,38	4,00	0,100	2	570.040.13
0,50	4,00	0,50	45	0,48	1,00	0,020	2	570.050.01
0,50	4,00	0,50	45	0,48	1,50	0,020	2	570.050.02
0,50	4,00	0,50	45	0,48	2,00	0,020	2	570.050.03
0,50	4,00	0,50	45	0,48	2,50	0,020	2	570.050.04
0,50	4,00	0,50	45	0,48	3,00	0,020	2	570.050.05
0,50	4,00	0,50	45	0,48	4,00	0,020	2	570.050.06
0,50	4,00	0,50	45	0,48	5,00	0,020	2	570.050.07
0,50	4,00	0,50	45	0,48	6,00	0,020	2	570.050.08
0,50	4,00	0,50	45	0,48	1,00	0,050	2	570.050.09
0,50	4,00	0,50	45	0,48	1,50	0,050	2	570.050.10
0,50	4,00	0,50	45	0,48	2,00	0,050	2	570.050.11
0,50	4,00	0,50	45	0,48	2,50	0,050	2	570.050.12
0,50	4,00	0,50	45	0,48	3,00	0,050	2	570.050.13
0,50	4,00	0,50	45	0,48	4,00	0,050	2	570.050.14
0,50	4,00	0,50	45	0,48	5,00	0,050	2	570.050.15
0,50	4,00	0,50	45	0,48	6,00	0,050	2	570.050.16
0,50	4,00	0,50	45	0,48	1,00	0,100	2	570.050.17
0,50	4,00	0,50	45	0,48	1,50	0,100	2	570.050.18
0,50	4,00	0,50	45	0,48	2,00	0,100	2	570.050.19

Article-No. **570...**

Solid carbide miniature profile mill with corner radius



Diameter tolerances:

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
0,50	4,00	0,50	45	0,48	2,50	0,100	2	570.050.20
0,50	4,00	0,50	45	0,48	3,00	0,100	2	570.050.21
0,50	4,00	0,50	45	0,48	4,00	0,100	2	570.050.22
0,50	4,00	0,50	45	0,48	5,00	0,100	2	570.050.23
0,50	4,00	0,50	45	0,48	6,00	0,100	2	570.050.24
0,60	4,00	0,60	45	0,58	2,00	0,020	2	570.060.00
0,60	4,00	0,60	45	0,58	3,00	0,020	2	570.060.01
0,60	4,00	0,60	45	0,58	4,00	0,020	2	570.060.02
0,60	4,00	0,60	45	0,58	6,00	0,020	2	570.060.03
0,60	4,00	0,60	45	0,58	8,00	0,020	2	570.060.04
0,60	4,00	0,60	45	0,58	2,00	0,050	2	570.060.05
0,60	4,00	0,60	45	0,58	3,00	0,050	2	570.060.06
0,60	4,00	0,60	45	0,58	4,00	0,050	2	570.060.07
0,60	4,00	0,60	45	0,58	6,00	0,050	2	570.060.08
0,60	4,00	0,60	45	0,58	8,00	0,050	2	570.060.09
0,60	4,00	0,60	45	0,58	2,00	0,100	2	570.060.10
0,60	4,00	0,60	45	0,58	3,00	0,100	2	570.060.11
0,60	4,00	0,60	45	0,58	4,00	0,100	2	570.060.12
0,60	4,00	0,60	45	0,58	6,00	0,100	2	570.060.13
0,60	4,00	0,60	45	0,58	8,00	0,100	2	570.060.14
0,70	4,00	0,70	45	0,67	2,00	0,100	2	570.070.00
0,70	4,00	0,70	45	0,67	4,00	0,100	2	570.070.01
0,70	4,00	0,70	45	0,67	6,00	0,100	2	570.070.02
0,80	4,00	0,80	45	0,77	2,00	0,020	2	570.080.00
0,80	4,00	0,80	45	0,77	4,00	0,020	2	570.080.01
0,80	4,00	0,80	45	0,77	6,00	0,020	2	570.080.02
0,80	4,00	0,80	45	0,77	8,00	0,020	2	570.080.03
0,80	4,00	0,80	45	0,77	2,00	0,050	2	570.080.04
0,80	4,00	0,80	45	0,77	4,00	0,050	2	570.080.05
0,80	4,00	0,80	45	0,77	6,00	0,050	2	570.080.06
0,80	4,00	0,80	45	0,77	8,00	0,050	2	570.080.07
0,80	4,00	0,80	45	0,77	2,00	0,100	2	570.080.08
0,80	4,00	0,80	45	0,77	4,00	0,100	2	570.080.09
0,80	4,00	0,80	45	0,77	6,00	0,100	2	570.080.10
0,80	4,00	0,80	45	0,77	8,00	0,100	2	570.080.11
0,80	4,00	0,80	45	0,77	2,00	0,200	2	570.080.12
0,80	4,00	0,80	45	0,77	4,00	0,200	2	570.080.13
0,80	4,00	0,80	45	0,77	6,00	0,200	2	570.080.14
0,80	4,00	0,80	45	0,77	8,00	0,200	2	570.080.15
1,00	4,00	1,00	45	0,95	4,00	0,020	2	570.100.00
1,00	4,00	1,00	45	0,95	6,00	0,020	2	570.100.01
1,00	4,00	1,00	45	0,95	8,00	0,020	2	570.100.02
1,00	4,00	1,00	50	0,95	10,00	0,020	2	570.100.03
1,00	4,00	1,00	50	0,95	12,00	0,020	2	570.100.04
1,00	4,00	1,00	50	0,95	16,00	0,020	2	570.100.05
1,00	4,00	1,00	50	0,95	20,00	0,020	2	570.100.06
1,00	4,00	1,00	45	0,95	4,00	0,050	2	570.100.07
1,00	4,00	1,00	45	0,95	6,00	0,050	2	570.100.08

to be continued

Article-No. **570...**

Solid carbide miniature profile mill with corner radius



Diameter tolerances:

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
1,00	4,00	1,00	45	0,95	8,00	0,050	2	570.100.09
1,00	4,00	1,00	50	0,95	10,00	0,050	2	570.100.10
1,00	4,00	1,00	50	0,95	12,00	0,050	2	570.100.11
1,00	4,00	1,00	50	0,95	16,00	0,050	2	570.100.12
1,00	4,00	1,00	50	0,95	20,00	0,050	2	570.100.13
1,00	4,00	1,00	45	0,95	4,00	0,100	2	570.100.14
1,00	4,00	1,00	45	0,95	6,00	0,100	2	570.100.15
1,00	4,00	1,00	45	0,95	8,00	0,100	2	570.100.16
1,00	4,00	1,00	50	0,95	10,00	0,100	2	570.100.17
1,00	4,00	1,00	50	0,95	12,00	0,100	2	570.100.18
1,00	4,00	1,00	50	0,95	16,00	0,100	2	570.100.19
1,00	4,00	1,00	50	0,95	20,00	0,100	2	570.100.20
1,00	4,00	1,00	45	0,95	4,00	0,200	2	570.100.21
1,00	4,00	1,00	45	0,95	6,00	0,200	2	570.100.22
1,00	4,00	1,00	45	0,95	8,00	0,200	2	570.100.23
1,00	4,00	1,00	50	0,95	10,00	0,200	2	570.100.24
1,00	4,00	1,00	50	0,95	12,00	0,200	2	570.100.25
1,00	4,00	1,00	50	0,95	16,00	0,200	2	570.100.26
1,00	4,00	1,00	50	0,95	20,00	0,200	2	570.100.27
1,00	4,00	1,00	45	0,95	4,00	0,300	2	570.100.28
1,00	4,00	1,00	45	0,95	6,00	0,300	2	570.100.29
1,00	4,00	1,00	45	0,95	8,00	0,300	2	570.100.30
1,00	4,00	1,00	50	0,95	10,00	0,300	2	570.100.31
1,00	4,00	1,00	50	0,95	12,00	0,300	2	570.100.32
1,00	4,00	1,00	50	0,95	16,00	0,300	2	570.100.33
1,00	4,00	1,00	50	0,95	20,00	0,300	2	570.100.34
1,20	4,00	1,20	45	1,15	4,00	0,020	2	570.120.00
1,20	4,00	1,20	45	1,15	6,00	0,020	2	570.120.01
1,20	4,00	1,20	45	1,15	8,00	0,020	2	570.120.02
1,20	4,00	1,20	50	1,15	10,00	0,020	2	570.120.03
1,20	4,00	1,20	50	1,15	12,00	0,020	2	570.120.04
1,20	4,00	1,20	50	1,15	16,00	0,020	2	570.120.05
1,20	4,00	1,20	50	1,15	20,00	0,020	2	570.120.06
1,20	4,00	1,20	45	1,15	4,00	0,050	2	570.120.07
1,20	4,00	1,20	45	1,15	6,00	0,050	2	570.120.08
1,20	4,00	1,20	45	1,15	8,00	0,050	2	570.120.09
1,20	4,00	1,20	50	1,15	10,00	0,050	2	570.120.10
1,20	4,00	1,20	50	1,15	12,00	0,050	2	570.120.11
1,20	4,00	1,20	50	1,15	16,00	0,050	2	570.120.12
1,20	4,00	1,20	50	1,15	20,00	0,050	2	570.120.13
1,20	4,00	1,20	45	1,15	4,00	0,100	2	570.120.14
1,20	4,00	1,20	45	1,15	6,00	0,100	2	570.120.15
1,20	4,00	1,20	45	1,15	8,00	0,100	2	570.120.16
1,20	4,00	1,20	50	1,15	10,00	0,100	2	570.120.17
1,20	4,00	1,20	50	1,15	12,00	0,100	2	570.120.18
1,20	4,00	1,20	50	1,15	16,00	0,100	2	570.120.19
1,20	4,00	1,20	50	1,15	20,00	0,100	2	570.120.20
1,20	4,00	1,20	45	1,15	4,00	0,200	2	570.120.21
1,20	4,00	1,20	45	1,15	6,00	0,200	2	570.120.22
1,20	4,00	1,20	45	1,15	8,00	0,200	2	570.120.23

Article-No. **570...**

Solid carbide miniature profile mill with corner radius



Diameter tolerances:

D1 = 0,20 - 5,00 0,000 | - 0,010

D1 = 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
1,20	4,00	1,20	50	1,15	10,00	0,200	2	570.120.24
1,20	4,00	1,20	50	1,15	12,00	0,200	2	570.120.25
1,20	4,00	1,20	50	1,15	16,00	0,200	2	570.120.26
1,20	4,00	1,20	50	1,15	20,00	0,200	2	570.120.27
1,20	4,00	1,20	45	1,15	4,00	0,300	2	570.120.28
1,20	4,00	1,20	45	1,15	6,00	0,300	2	570.120.29
1,20	4,00	1,20	45	1,15	8,00	0,300	2	570.120.30
1,20	4,00	1,20	50	1,15	10,00	0,300	2	570.120.31
1,20	4,00	1,20	50	1,15	12,00	0,300	2	570.120.32
1,20	4,00	1,20	50	1,15	16,00	0,300	2	570.120.33
1,20	4,00	1,20	50	1,15	20,00	0,300	2	570.120.34
1,50	4,00	1,50	45	1,44	4,00	0,020	2	570.150.00
1,50	4,00	1,50	45	1,44	6,00	0,020	2	570.150.01
1,50	4,00	1,50	45	1,44	8,00	0,020	2	570.150.02
1,50	4,00	1,50	50	1,44	10,00	0,020	2	570.150.03
1,50	4,00	1,50	50	1,44	12,00	0,020	2	570.150.04
1,50	4,00	1,50	50	1,44	16,00	0,020	2	570.150.05
1,50	4,00	1,50	50	1,44	20,00	0,020	2	570.150.06
1,50	4,00	1,50	45	1,44	4,00	0,050	2	570.150.07
1,50	4,00	1,50	45	1,44	6,00	0,050	2	570.150.08
1,50	4,00	1,50	45	1,44	8,00	0,050	2	570.150.09
1,50	4,00	1,50	50	1,44	10,00	0,050	2	570.150.10
1,50	4,00	1,50	50	1,44	12,00	0,050	2	570.150.11
1,50	4,00	1,50	50	1,44	16,00	0,050	2	570.150.12
1,50	4,00	1,50	50	1,44	20,00	0,050	2	570.150.13
1,50	4,00	1,50	45	1,44	4,00	0,100	2	570.150.14
1,50	4,00	1,50	45	1,44	6,00	0,100	2	570.150.15
1,50	4,00	1,50	45	1,44	8,00	0,100	2	570.150.16
1,50	4,00	1,50	50	1,44	10,00	0,100	2	570.150.17
1,50	4,00	1,50	50	1,44	12,00	0,100	2	570.150.18
1,50	4,00	1,50	50	1,44	16,00	0,100	2	570.150.19
1,50	4,00	1,50	50	1,44	20,00	0,100	2	570.150.20
1,50	4,00	1,50	45	1,44	4,00	0,200	2	570.150.21
1,50	4,00	1,50	45	1,44	6,00	0,200	2	570.150.22
1,50	4,00	1,50	45	1,44	8,00	0,200	2	570.150.23
1,50	4,00	1,50	50	1,44	10,00	0,200	2	570.150.24
1,50	4,00	1,50	50	1,44	12,00	0,200	2	570.150.25
1,50	4,00	1,50	50	1,44	16,00	0,200	2	570.150.26
1,50	4,00	1,50	50	1,44	20,00	0,200	2	570.150.27
1,50	4,00	1,50	45	1,44	4,00	0,300	2	570.150.28
1,50	4,00	1,50	45	1,44	6,00	0,300	2	570.150.29
1,50	4,00	1,50	45	1,44	8,00	0,300	2	570.150.30
1,50	4,00	1,50	50	1,44	10,00	0,300	2	570.150.31
1,50	4,00	1,50	50	1,44	12,00	0,300	2	570.150.32
1,50	4,00	1,50	50	1,44	16,00	0,300	2	570.150.33
1,50	4,00	1,50	50	1,44	20,00	0,300	2	570.150.34
1,50	4,00	1,50	45	1,44	4,00	0,500	2	570.150.35
1,50	4,00	1,50	45	1,44	6,00	0,500	2	570.150.36

to be continued

Article-No. **570...**

Solid carbide miniature profile mill with corner radius



Diameter tolerances:

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
1,50	4,00	1,50	45	1,44	8,00	0,500	2	570.150.37
1,50	4,00	1,50	50	1,44	10,00	0,500	2	570.150.38
1,50	4,00	1,50	50	1,44	12,00	0,500	2	570.150.39
1,50	4,00	1,50	50	1,44	16,00	0,500	2	570.150.40
1,50	4,00	1,50	50	1,44	20,00	0,500	2	570.150.41
2,00	4,00	2,00	45	1,92	6,00	0,020	2	570.200.00
2,00	4,00	2,00	45	1,92	8,00	0,020	2	570.200.01
2,00	4,00	2,00	50	1,92	10,00	0,020	2	570.200.02
2,00	4,00	2,00	50	1,92	12,00	0,020	2	570.200.03
2,00	4,00	2,00	50	1,92	16,00	0,020	2	570.200.04
2,00	4,00	2,00	50	1,92	20,00	0,020	2	570.200.05
2,00	4,00	2,00	60	1,92	25,00	0,020	2	570.200.06
2,00	4,00	2,00	45	1,92	6,00	0,050	2	570.200.07
2,00	4,00	2,00	45	1,92	8,00	0,050	2	570.200.08
2,00	4,00	2,00	50	1,92	10,00	0,050	2	570.200.09
2,00	4,00	2,00	50	1,92	12,00	0,050	2	570.200.10
2,00	4,00	2,00	50	1,92	16,00	0,050	2	570.200.11
2,00	4,00	2,00	50	1,92	20,00	0,050	2	570.200.12
2,00	4,00	2,00	60	1,92	25,00	0,050	2	570.200.13
2,00	4,00	2,00	45	1,92	6,00	0,100	2	570.200.14
2,00	4,00	2,00	45	1,92	8,00	0,100	2	570.200.15
2,00	4,00	2,00	50	1,92	10,00	0,100	2	570.200.16
2,00	4,00	2,00	50	1,92	12,00	0,100	2	570.200.17
2,00	4,00	2,00	50	1,92	16,00	0,100	2	570.200.18
2,00	4,00	2,00	50	1,92	20,00	0,100	2	570.200.19
2,00	4,00	2,00	60	1,92	25,00	0,100	2	570.200.20
2,00	4,00	2,00	45	1,92	6,00	0,200	2	570.200.21
2,00	4,00	2,00	45	1,92	8,00	0,200	2	570.200.22
2,00	4,00	2,00	50	1,92	10,00	0,200	2	570.200.23
2,00	4,00	2,00	50	1,92	12,00	0,200	2	570.200.24
2,00	4,00	2,00	50	1,92	16,00	0,200	2	570.200.25
2,00	4,00	2,00	50	1,92	20,00	0,200	2	570.200.26
2,00	4,00	2,00	60	1,92	25,00	0,200	2	570.200.27
2,00	4,00	2,00	45	1,92	6,00	0,300	2	570.200.28
2,00	4,00	2,00	45	1,92	8,00	0,300	2	570.200.29
2,00	4,00	2,00	50	1,92	10,00	0,300	2	570.200.30
2,00	4,00	2,00	50	1,92	12,00	0,300	2	570.200.31
2,00	4,00	2,00	50	1,92	16,00	0,300	2	570.200.32
2,00	4,00	2,00	50	1,92	20,00	0,300	2	570.200.33
2,00	4,00	2,00	60	1,92	25,00	0,300	2	570.200.34
2,00	4,00	2,00	45	1,92	6,00	0,500	2	570.200.35
2,00	4,00	2,00	45	1,92	8,00	0,500	2	570.200.36
2,00	4,00	2,00	50	1,92	10,00	0,500	2	570.200.37
2,00	4,00	2,00	50	1,92	12,00	0,500	2	570.200.38
2,00	4,00	2,00	50	1,92	16,00	0,500	2	570.200.39
2,00	4,00	2,00	50	1,92	20,00	0,500	2	570.200.40
2,00	4,00	2,00	60	1,92	25,00	0,500	2	570.200.41
2,50	4,00	2,50	50	2,42	10,00	0,100	2	570.250.00
2,50	4,00	2,50	50	2,42	16,00	0,100	2	570.250.01
2,50	4,00	2,50	50	2,42	20,00	0,100	2	570.250.02

Article-No. **570...**

Solid carbide miniature profile mill with corner radius



Diameter tolerances:

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
2,50	4,00	2,50	50	2,42	10,00	0,200	2	570.250.03
2,50	4,00	2,50	50	2,42	16,00	0,200	2	570.250.04
2,50	4,00	2,50	50	2,42	20,00	0,200	2	570.250.05
2,50	4,00	2,50	50	2,42	10,00	0,300	2	570.250.06
2,50	4,00	2,50	50	2,42	16,00	0,300	2	570.250.07
2,50	4,00	2,50	50	2,42	20,00	0,300	2	570.250.08
2,50	4,00	2,50	50	2,42	10,00	0,500	2	570.250.09
2,50	4,00	2,50	50	2,42	16,00	0,500	2	570.250.10
2,50	4,00	2,50	50	2,42	20,00	0,500	2	570.250.11
3,00	6,00	3,00	50	2,90	10,00	0,100	2	570.300.00
3,00	6,00	3,00	50	2,90	12,00	0,100	2	570.300.01
3,00	6,00	3,00	55	2,90	16,00	0,100	2	570.300.02
3,00	6,00	3,00	60	2,90	20,00	0,100	2	570.300.03
3,00	6,00	3,00	65	2,90	25,00	0,100	2	570.300.04
3,00	6,00	3,00	70	2,90	30,00	0,100	2	570.300.05
3,00	6,00	3,00	75	2,90	35,00	0,100	2	570.300.06
3,00	6,00	3,00	80	2,90	40,00	0,100	2	570.300.07
3,00	6,00	3,00	50	2,90	10,00	0,200	2	570.300.08
3,00	6,00	3,00	50	2,90	12,00	0,200	2	570.300.09
3,00	6,00	3,00	55	2,90	16,00	0,200	2	570.300.10
3,00	6,00	3,00	60	2,90	20,00	0,200	2	570.300.11
3,00	6,00	3,00	65	2,90	25,00	0,200	2	570.300.12
3,00	6,00	3,00	70	2,90	30,00	0,200	2	570.300.13
3,00	6,00	3,00	75	2,90	35,00	0,200	2	570.300.14
3,00	6,00	3,00	80	2,90	40,00	0,200	2	570.300.15
3,00	6,00	3,00	50	2,90	10,00	0,300	2	570.300.16
3,00	6,00	3,00	50	2,90	12,00	0,300	2	570.300.17
3,00	6,00	3,00	55	2,90	16,00	0,300	2	570.300.18
3,00	6,00	3,00	60	2,90	20,00	0,300	2	570.300.19
3,00	6,00	3,00	65	2,90	25,00	0,300	2	570.300.20
3,00	6,00	3,00	70	2,90	30,00	0,300	2	570.300.21
3,00	6,00	3,00	75	2,90	35,00	0,300	2	570.300.22
3,00	6,00	3,00	80	2,90	40,00	0,300	2	570.300.23
3,00	6,00	3,00	50	2,90	10,00	0,500	2	570.300.24
3,00	6,00	3,00	50	2,90	12,00	0,500	2	570.300.25
3,00	6,00	3,00	55	2,90	16,00	0,500	2	570.300.26
3,00	6,00	3,00	60	2,90	20,00	0,500	2	570.300.27
3,00	6,00	3,00	65	2,90	25,00	0,500	2	570.300.28
3,00	6,00	3,00	70	2,90	30,00	0,500	2	570.300.29
3,00	6,00	3,00	75	2,90	35,00	0,500	2	570.300.30
3,00	6,00	3,00	80	2,90	40,00	0,500	2	570.300.31
3,00	6,00	3,00	50	2,90	10,00	1,000	2	570.300.32
3,00	6,00	3,00	50	2,90	12,00	1,000	2	570.300.33
3,00	6,00	3,00	55	2,90	16,00	1,000	2	570.300.34
3,00	6,00	3,00	60	2,90	20,00	1,000	2	570.300.35
3,00	6,00	3,00	65	2,90	25,00	1,000	2	570.300.36
3,00	6,00	3,00	70	2,90	30,00	1,000	2	570.300.37
3,00	6,00	3,00	75	2,90	35,00	1,000	2	570.300.38

to be continued

Article-No. **570...**

Solid carbide miniature profile mill with corner radius



Diameter tolerances:

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
3,00	6,00	3,00	80	2,90	40,00	1,000	2	570.300.39
4,00	6,00	4,00	50	3,90	12,00	0,100	2	570.400.00
4,00	6,00	4,00	55	3,90	16,00	0,100	2	570.400.01
4,00	6,00	4,00	60	3,90	20,00	0,100	2	570.400.02
4,00	6,00	4,00	65	3,90	25,00	0,100	2	570.400.03
4,00	6,00	4,00	70	3,90	30,00	0,100	2	570.400.04
4,00	6,00	4,00	75	3,90	35,00	0,100	2	570.400.05
4,00	6,00	4,00	80	3,90	40,00	0,100	2	570.400.06
4,00	6,00	4,00	50	3,90	12,00	0,200	2	570.400.07
4,00	6,00	4,00	55	3,90	16,00	0,200	2	570.400.08
4,00	6,00	4,00	60	3,90	20,00	0,200	2	570.400.09
4,00	6,00	4,00	65	3,90	25,00	0,200	2	570.400.10
4,00	6,00	4,00	70	3,90	30,00	0,200	2	570.400.11
4,00	6,00	4,00	75	3,90	35,00	0,200	2	570.400.12
4,00	6,00	4,00	80	3,90	40,00	0,200	2	570.400.13
4,00	6,00	4,00	50	3,90	12,00	0,300	2	570.400.14
4,00	6,00	4,00	55	3,90	16,00	0,300	2	570.400.15
4,00	6,00	4,00	60	3,90	20,00	0,300	2	570.400.16
4,00	6,00	4,00	65	3,90	25,00	0,300	2	570.400.17
4,00	6,00	4,00	70	3,90	30,00	0,300	2	570.400.18
4,00	6,00	4,00	75	3,90	35,00	0,300	2	570.400.19
4,00	6,00	4,00	80	3,90	40,00	0,300	2	570.400.20
4,00	6,00	4,00	50	3,90	12,00	0,500	2	570.400.21
4,00	6,00	4,00	55	3,90	16,00	0,500	2	570.400.22
4,00	6,00	4,00	60	3,90	20,00	0,500	2	570.400.23
4,00	6,00	4,00	65	3,90	25,00	0,500	2	570.400.24
4,00	6,00	4,00	70	3,90	30,00	0,500	2	570.400.25
4,00	6,00	4,00	75	3,90	35,00	0,500	2	570.400.26
4,00	6,00	4,00	80	3,90	40,00	0,500	2	570.400.27
4,00	6,00	4,00	50	3,90	12,00	1,000	2	570.400.28
4,00	6,00	4,00	55	3,90	16,00	1,000	2	570.400.29
4,00	6,00	4,00	60	3,90	20,00	1,000	2	570.400.30
4,00	6,00	4,00	65	3,90	25,00	1,000	2	570.400.31
4,00	6,00	4,00	70	3,90	30,00	1,000	2	570.400.32
4,00	6,00	4,00	75	3,90	35,00	1,000	2	570.400.33
4,00	6,00	4,00	80	3,90	40,00	1,000	2	570.400.34
5,00	6,00	6,00	60	4,90	15,00	0,200	2	570.500.00
5,00	6,00	6,00	70	4,90	25,00	0,200	2	570.500.01
5,00	6,00	6,00	70	4,90	30,00	0,200	2	570.500.02
5,00	6,00	6,00	80	4,90	40,00	0,200	2	570.500.03
5,00	6,00	6,00	60	4,90	15,00	0,500	2	570.500.04
5,00	6,00	6,00	70	4,90	25,00	0,500	2	570.500.05
5,00	6,00	6,00	70	4,90	30,00	0,500	2	570.500.06
5,00	6,00	6,00	80	4,90	40,00	0,500	2	570.500.07
5,00	6,00	6,00	60	4,90	15,00	1,000	2	570.500.08
5,00	6,00	6,00	70	4,90	25,00	1,000	2	570.500.09
5,00	6,00	6,00	70	4,90	30,00	1,000	2	570.500.10
5,00	6,00	6,00	80	4,90	40,00	1,000	2	570.500.11
6,00	6,00	7,00	60	5,90	40,00	0,100	2	570.600.00
6,00	6,00	7,00	80	5,90	40,00	0,100	2	570.600.01

Article-No. **570...**

Solid carbide miniature profile mill with corner radius

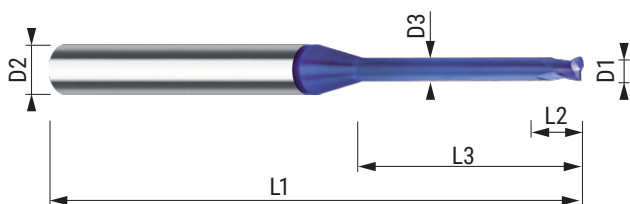


D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
6,00	6,00	7,00	60	5,90	20,00	0,200	2	570.600.02
6,00	6,00	7,00	80	5,90	40,00	0,200	2	570.600.03
6,00	6,00	7,00	60	5,90	20,00	0,300	2	570.600.04
6,00	6,00	7,00	80	5,90	40,00	0,300	2	570.600.05
6,00	6,00	7,00	60	5,90	20,00	0,500	2	570.600.06
6,00	6,00	7,00	80	5,90	40,00	0,500	2	570.600.07
6,00	6,00	7,00	60	5,90	20,00	1,000	2	570.600.08
6,00	6,00	7,00	80	5,90	40,00	1,000	2	570.600.09
6,00	6,00	7,00	60	5,90	20,00	1,500	2	570.600.10
6,00	6,00	7,00	80	5,90	40,00	1,500	2	570.600.11

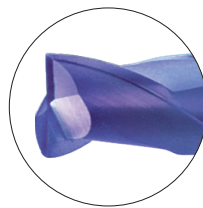
Diameter tolerances:

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

Article-No. **571...**


Solid carbide miniature mill


1st
CHOICE

NEW

HSC



TYP H

HRC
52-65

Stahl
steel


Air



Diameter tolerances:

D1= 0,10 - 0,20 0,000 | - 0,005

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	Z	Article-No.
0,10	4,00	0,15	40	0,10	0,3	2	571.010.01
0,10	4,00	0,15	40	0,10	0,5	2	571.010.02
0,20	4,00	0,20	40	0,18	0,5	2	571.020.01
0,20	4,00	0,20	40	0,18	1,0	2	571.020.02
0,20	4,00	0,20	40	0,18	1,5	2	571.020.03
0,20	4,00	0,20	40	0,18	2,0	2	571.020.04
0,20	4,00	0,20	40	0,18	2,5	2	571.020.05
0,20	4,00	0,20	40	0,18	3,0	2	571.020.06
0,30	4,00	0,30	40	0,28	1,0	2	571.030.01
0,30	4,00	0,30	40	0,28	1,5	2	571.030.02
0,30	4,00	0,30	40	0,28	2,0	2	571.030.03
0,30	4,00	0,30	40	0,28	2,5	2	571.030.04
0,30	4,00	0,30	40	0,28	3,0	2	571.030.05
0,30	4,00	0,30	40	0,28	3,5	2	571.030.06
0,30	4,00	0,30	40	0,28	4,0	2	571.030.07
0,40	4,00	0,40	40	0,38	1,0	2	571.040.01
0,40	4,00	0,40	40	0,38	1,5	2	571.040.02
0,40	4,00	0,40	40	0,38	2,0	2	571.040.03
0,40	4,00	0,40	40	0,38	2,5	2	571.040.04
0,40	4,00	0,40	40	0,38	3,0	2	571.040.05
0,40	4,00	0,40	40	0,38	3,5	2	571.040.06
0,40	4,00	0,40	40	0,38	4,0	2	571.040.07
0,40	4,00	0,40	40	0,38	5,0	2	571.040.08
0,40	4,00	0,40	40	0,38	6,0	2	571.040.09
0,40	4,00	0,40	40	0,38	8,0	2	571.040.10
0,50	4,00	0,50	40	0,48	1,0	2	571.050.01
0,50	4,00	0,50	40	0,48	2,0	2	571.050.02
0,50	4,00	0,50	40	0,48	3,0	2	571.050.03
0,50	4,00	0,50	40	0,48	4,0	2	571.050.04
0,50	4,00	0,50	40	0,48	5,0	2	571.050.05
0,50	4,00	0,50	40	0,48	6,0	2	571.050.06
0,50	4,00	0,50	40	0,48	8,0	2	571.050.07
0,50	4,00	0,50	40	0,48	10,0	2	571.050.08
0,60	4,00	0,60	40	0,58	1,0	2	571.060.01
0,60	4,00	0,60	40	0,58	2,0	2	571.060.02
0,60	4,00	0,60	40	0,58	3,0	2	571.060.03
0,60	4,00	0,60	40	0,58	4,0	2	571.060.04
0,60	4,00	0,60	40	0,58	5,0	2	571.060.05
0,60	4,00	0,60	40	0,58	6,0	2	571.060.06
0,60	4,00	0,60	40	0,58	8,0	2	571.060.07
0,60	4,00	0,60	40	0,58	10,0	2	571.060.08
0,70	4,00	0,70	40	0,68	2,0	2	571.070.01
0,70	4,00	0,70	40	0,68	4,0	2	571.070.02
0,70	4,00	0,70	40	0,68	6,0	2	571.070.03
0,70	4,00	0,70	40	0,68	8,0	2	571.070.04
0,70	4,00	0,70	40	0,68	10,0	2	571.070.05

Article-No. **571...**

Solid carbide miniature mill



Diameter tolerances:

D1= 0,10 - 0,20 0,000 | - 0,005

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

D1	D2 h6	L2	L1	D3	L3	Z	Article-No.
0,80	4,00	0,80	40	0,77	1,0	2	571.080.01
0,80	4,00	0,80	40	0,77	2,0	2	571.080.02
0,80	4,00	0,80	40	0,77	3,0	2	571.080.03
0,80	4,00	0,80	40	0,77	4,0	2	571.080.04
0,80	4,00	0,80	40	0,77	5,0	2	571.080.05
0,80	4,00	0,80	40	0,77	6,0	2	571.080.06
0,80	4,00	0,80	40	0,77	8,0	2	571.080.07
0,80	4,00	0,80	40	0,77	10,0	2	571.080.08
0,80	4,00	0,80	40	0,77	12,0	2	571.080.09
0,90	4,00	0,90	40	0,87	4,0	2	571.090.01
0,90	4,00	0,90	40	0,87	6,0	2	571.090.02
0,90	4,00	0,90	45	0,87	8,0	2	571.090.03
0,90	4,00	0,90	45	0,87	10,0	2	571.090.04
1,00	4,00	1,00	45	0,95	2,0	2	571.100.01
1,00	4,00	1,00	45	0,95	3,0	2	571.100.02
1,00	4,00	1,00	45	0,95	4,0	2	571.100.03
1,00	4,00	1,00	45	0,95	5,0	2	571.100.04
1,00	4,00	1,00	45	0,95	6,0	2	571.100.05
1,00	4,00	1,00	45	0,95	8,0	2	571.100.06
1,00	4,00	1,00	45	0,95	10,0	2	571.100.07
1,00	4,00	1,00	50	0,95	12,0	2	571.100.08
1,00	4,00	1,00	50	0,95	14,0	2	571.100.09
1,00	4,00	1,00	50	0,95	16,0	2	571.100.10
1,00	4,00	1,00	50	0,95	18,0	2	571.100.11
1,00	4,00	1,00	50	0,95	20,0	2	571.100.12
1,00	4,00	1,00	60	0,95	22,0	2	571.100.13
1,00	4,00	1,00	60	0,95	25,0	2	571.100.14
1,20	4,00	1,20	45	1,15	4,0	2	571.120.01
1,20	4,00	1,20	45	1,15	6,0	2	571.120.02
1,20	4,00	1,20	45	1,15	8,0	2	571.120.03
1,20	4,00	1,20	45	1,15	10,0	2	571.120.04
1,20	4,00	1,20	50	1,15	12,0	2	571.120.05
1,20	4,00	1,20	50	1,15	16,0	2	571.120.06
1,20	4,00	1,20	50	1,15	20,0	2	571.120.07
1,20	4,00	1,20	60	1,15	25,0	2	571.120.08
1,40	4,00	1,40	60	1,35	8,0	2	571.140.01
1,40	4,00	1,40	45	1,35	10,0	2	571.140.02
1,40	4,00	1,40	50	1,35	14,0	2	571.140.03
1,40	4,00	1,40	50	1,35	16,0	2	571.140.04
1,40	4,00	1,40	50	1,35	20,0	2	571.140.05
1,50	4,00	1,50	45	1,35	4,0	2	571.150.01
1,50	4,00	1,50	45	1,45	6,0	2	571.150.02
1,50	4,00	1,50	45	1,45	8,0	2	571.150.03
1,50	4,00	1,50	50	1,45	10,0	2	571.150.04
1,50	4,00	1,50	50	1,45	12,0	2	571.150.05
1,50	4,00	1,50	50	1,45	14,0	2	571.150.06
1,50	4,00	1,50	50	1,45	16,0	2	571.150.07
1,50	4,00	1,50	50	1,45	18,0	2	571.150.08

to be continued

Article-No. **571...**

Solid carbide miniature mill



D1	D2 h6	L2	L1	D3	L3	Z	Article-No.
1,50	4,00	1,50	50	1,45	20,0	2	571.150.09
1,50	4,00	1,50	60	1,45	22,0	2	571.150.10
1,50	4,00	1,50	60	1,45	25,0	2	571.150.11
1,60	4,00	1,60	45	1,55	6,0	2	571.160.01
1,60	4,00	1,60	50	1,55	10,0	2	571.160.02
1,60	4,00	1,60	50	1,55	14,0	2	571.160.03
1,60	4,00	1,60	50	1,55	18,0	2	571.160.04
1,80	4,00	1,80	50	1,75	10,0	2	571.180.01
1,80	4,00	1,80	50	1,75	14,0	2	571.180.02
1,80	4,00	1,80	50	1,75	18,0	2	571.180.03
2,00	4,00	2,00	45	1,92	6,0	2	571.200.01
2,00	4,00	2,00	45	1,92	8,0	2	571.200.02
2,00	4,00	2,00	50	1,92	10,0	2	571.200.03
2,00	4,00	2,00	50	1,92	12,0	2	571.200.04
2,00	4,00	2,00	50	1,92	14,0	2	571.200.05
2,00	4,00	2,00	50	1,92	16,0	2	571.200.06
2,00	4,00	2,00	50	1,92	18,0	2	571.200.07
2,00	4,00	2,00	50	1,92	20,0	2	571.200.08
2,00	4,00	2,00	60	1,92	22,0	2	571.200.09
2,00	4,00	2,00	60	1,92	25,0	2	571.200.10
2,00	4,00	2,00	60	1,92	30,0	2	571.200.11
2,00	4,00	2,00	70	1,92	35,0	2	571.200.12
2,00	4,00	2,00	80	1,92	40,0	2	571.200.13
2,50	4,00	2,50	50	2,40	10,0	2	571.250.01
2,50	4,00	2,50	50	2,40	12,0	2	571.250.02
2,50	4,00	2,50	50	2,40	16,0	2	571.250.03
2,50	4,00	2,50	50	2,40	20,0	2	571.250.04
2,50	4,00	2,50	60	2,40	25,0	2	571.250.05
2,50	4,00	2,50	70	2,40	30,0	2	571.250.06
2,50	4,00	2,50	70	2,40	35,0	2	571.250.07
2,50	4,00	2,50	80	2,40	40,0	2	571.250.08
3,00	6,00	3,00	45	2,90	6,0	2	571.300.01
3,00	6,00	3,00	45	2,90	8,0	2	571.300.02
3,00	6,00	3,00	50	2,90	10,0	2	571.300.03
3,00	6,00	3,00	50	2,90	12,0	2	571.300.04
3,00	6,00	3,00	55	2,90	16,0	2	571.300.05
3,00	6,00	3,00	60	2,90	20,0	2	571.300.06
3,00	6,00	3,00	65	2,90	25,0	2	571.300.07
3,00	6,00	3,00	70	2,90	30,0	2	571.300.08
3,00	6,00	3,00	75	2,90	35,0	2	571.300.09
3,00	6,00	3,00	80	2,90	40,0	2	571.300.10
3,00	6,00	3,00	90	2,90	45,0	2	571.300.11
3,00	6,00	3,00	100	2,90	50,0	2	571.300.12
4,00	6,00	4,00	50	3,90	8,0	2	571.400.01
4,00	6,00	4,00	50	3,90	10,0	2	571.400.02
4,00	6,00	4,00	50	3,90	12,0	2	571.400.03
4,00	6,00	4,00	55	3,90	16,0	2	571.400.04
4,00	6,00	4,00	60	3,90	20,0	2	571.400.05
4,00	6,00	4,00	65	3,90	25,0	2	571.400.06
4,00	6,00	4,00	70	3,90	30,0	2	571.400.07

Diameter tolerances:

D1= 0,10 - 0,20 0,000 | - 0,005

D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015

Article-No. **571...**

Solid carbide miniature mill



D1	D2 h6	L2	L1	D3	L3	Z	Article-No.
4,00	6,00	4,00	75	3,90	35,0	2	571.400.08
4,00	6,00	4,00	80	3,90	40,0	2	571.400.09
4,00	6,00	4,00	90	3,90	45,0	2	571.400.10
4,00	6,00	4,00	100	3,90	50,0	2	571.400.11
5,00	6,00	6,00	60	4,90	16,0	2	571.500.01
5,00	6,00	6,00	60	4,90	20,0	2	571.500.02
5,00	6,00	6,00	65	4,90	25,0	2	571.500.03
5,00	6,00	6,00	70	4,90	30,0	2	571.500.04
5,00	6,00	6,00	75	4,90	35,0	2	571.500.05
5,00	6,00	6,00	80	4,90	40,0	2	571.500.06
5,00	6,00	6,00	100	4,90	50,0	2	571.500.07
6,00	6,00	10,00	60	5,90	20,0	2	571.600.01
6,00	6,00	10,00	75	5,90	30,0	2	571.600.02
6,00	6,00	10,00	80	5,90	40,0	2	571.600.03
6,00	6,00	10,00	90	5,90	50,0	2	571.600.04
6,00	6,00	10,00	110	5,90	60,0	2	571.600.05

Diameter tolerances:

D1= 0,10 - 0,20 0,000 | - 0,005

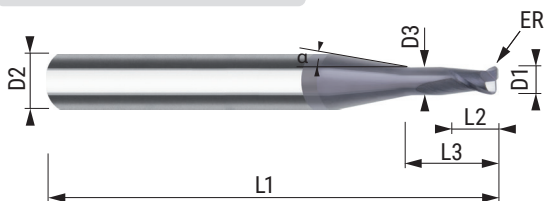
D1= 0,20 - 5,00 0,000 | - 0,010

D1= 5,00 - 6,00 - 0,005 | - 0,015



Article-No. **551...**

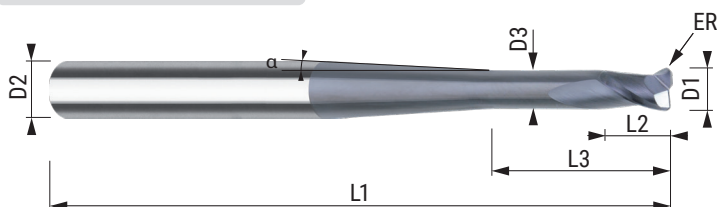
Solid carbide mill with corner radius



D1	D2 h6	L2	L1	D3	L3	α	Z	R	Article-No.
1,00	6,00	1,50	60	0,90	4,00	9°	2	0,10	551.0010.00
1,00	6,00	1,50	60	0,90	4,00	9°	2	0,20	551.0011.00
1,50	6,00	2,30	60	1,40	4,00	9°	2	0,20	551.0015.00
1,50	6,00	2,30	60	1,40	8,00	9°	2	0,20	551.0016.00
2,00	6,00	3,00	60	1,90	8,00	9°	2	0,20	551.0020.00
2,00	6,00	3,00	80	1,90	8,00	3°	2	0,20	551.0021.00
2,00	6,00	3,00	60	1,90	8,00	9°	2	0,50	551.0022.00
2,00	6,00	3,00	80	1,90	8,00	3°	2	0,50	551.0023.00
3,00	6,00	3,50	60	2,90	10,00	9°	2	0,50	551.0030.00
3,00	6,00	3,50	80	2,90	12,00	3°	2	0,50	551.0031.00


Article-No. **552...**

Solid carbide mill with corner radius

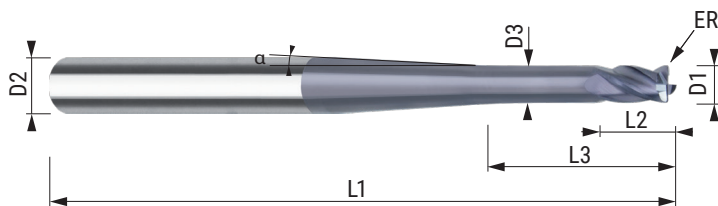


D1	D2 h6	L2	L1	D3	L3	α	Z	R	Article-No.
4,00	6,00	6,00	60	3,90	12,00	9°	2	0,50	552.040.00
4,00	6,00	6,00	80	3,90	20,00	3°	2	0,50	552.041.00
5,00	6,00	7,00	60	4,90	12,00	9°	2	0,50	552.050.00
5,00	6,00	7,00	80	4,90	25,00	3°	2	0,50	552.051.00
6,00	6,00	8,00	57	5,90	25,00	-	2	0,50	552.060.00
6,00	6,00	8,00	80	5,90	30,00	-	2	0,50	552.061.00
8,00	8,00	9,00	63	7,90	30,00	-	2	0,50	552.080.00
8,00	8,00	9,00	100	7,90	40,00	-	2	0,50	552.081.00
10,00	10,00	10,00	80	9,90	30,00	-	2	0,50	552.100.00
10,00	10,00	10,00	100	9,90	50,00	-	2	0,50	552.101.00



Article-No. **639...**

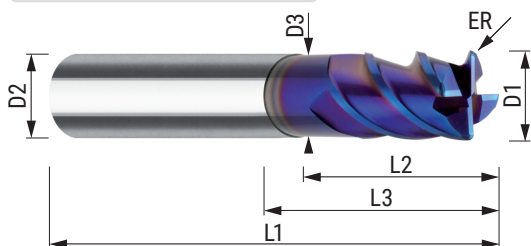
Solid carbide mill with corner radius



D1	D2 h6	L2	L1	D3	L3	α	Z	R	Article-No.
4,00	6,00	4,00	60	3,90	12,00	9°	4	0,20	639.040.00
4,00	6,00	6,00	80	3,90	20,00	3°	4	0,20	639.041.00
4,00	6,00	6,00	60	3,90	12,00	9°	4	0,50	639.042.00
4,00	6,00	6,00	80	3,90	20,00	3°	4	0,50	639.043.00
4,00	6,00	6,00	60	3,90	12,00	9°	4	1,00	639.044.00
4,00	6,00	6,00	80	3,90	20,00	3°	4	1,00	639.045.00
5,00	6,00	7,00	60	4,90	12,00	9°	4	0,50	639.050.00
5,00	6,00	7,00	80	4,90	25,00	3°	4	0,50	639.051.00
5,00	6,00	7,00	60	4,90	12,00	9°	4	1,00	639.052.00
5,00	6,00	7,00	80	4,90	25,00	3°	4	1,00	639.053.00
6,00	6,00	8,00	57	5,90	25,00	-	4	0,20	639.060.00
6,00	6,00	8,00	57	5,90	25,00	-	4	0,50	639.061.00
6,00	6,00	8,00	80	5,90	30,00	-	4	0,50	639.062.00
6,00	6,00	8,00	57	5,90	25,00	-	4	1,00	639.063.00
6,00	6,00	8,00	80	5,90	30,00	-	4	1,00	639.064.00
6,00	8,00	8,00	100	5,90	50,00	2°	4	1,00	639.065.00
8,00	8,00	9,00	63	7,90	30,00	-	4	0,50	639.080.00
8,00	8,00	9,00	100	7,90	40,00	-	4	0,50	639.081.00
8,00	8,00	9,00	63	7,90	30,00	-	4	1,00	639.082.00
8,00	8,00	9,00	100	7,90	40,00	-	4	1,00	639.083.00
10,00	10,00	10,00	80	9,90	30,00	-	4	0,50	639.100.00
10,00	10,00	10,00	100	9,90	50,00	-	4	0,50	639.101.00
10,00	10,00	10,00	75	9,90	30,00	-	4	1,00	639.102.00
10,00	10,00	10,00	100	9,90	50,00	-	4	1,00	639.103.00



Article-No. **313...**

Solid carbide profile mill with corner radius **PrimeLine**


D1	D2 h5	L2	L1	D3	L3	ER + 0,003 - 0,003	Z	Article-No.
2,00	6,00	6	57	1,90	12	0,20	4	313.020.00
2,00	6,00	6	57	1,90	12	0,30	4	313.030.00
3,00	6,00	8	57	2,80	15	0,30	4	313.040.00
3,00	6,00	8	57	2,80	15	0,50	4	313.050.00
4,00	6,00	11	57	3,60	21	0,20	4	313.060.00
4,00	6,00	11	57	3,60	21	0,30	4	313.070.00
4,00	6,00	11	57	3,60	21	0,50	4	313.080.00
4,00	6,00	11	57	3,60	21	1,00	4	313.090.00
5,00	6,00	12	57	4,60	21	0,20	4	313.100.00
5,00	6,00	12	57	4,60	21	0,50	4	313.110.00
5,00	6,00	12	57	4,60	21	1,00	4	313.120.00
6,00	6,00	12	57	5,50	21	0,10	4	313.130.00
6,00	6,00	12	57	5,50	21	0,20	4	313.140.00
6,00	6,00	12	57	5,50	21	0,30	4	313.150.00
6,00	6,00	12	57	5,50	21	0,50	4	313.160.00
6,00	6,00	12	57	5,50	21	1,00	4	313.170.00
6,00	6,00	12	57	5,50	21	2,00	4	313.180.00
8,00	8,00	15	75	7,50	27	0,30	4	313.190.00
8,00	8,00	15	75	7,50	27	0,50	4	313.200.00
8,00	8,00	15	75	7,50	27	1,00	4	313.210.00
8,00	8,00	15	75	7,50	27	1,50	4	313.220.00
8,00	8,00	15	75	7,50	27	2,00	4	313.230.00
10,00	10,00	17	75	9,50	32	0,50	4	313.240.00
10,00	10,00	17	80	9,50	32	1,00	4	313.250.00
10,00	10,00	17	80	9,50	32	1,50	4	313.260.00
10,00	10,00	17	80	9,50	32	2,00	4	313.270.00
12,00	12,00	20	100	11,50	38	0,50	4	313.280.00
12,00	12,00	20	100	11,50	38	1,00	4	313.290.00
12,00	12,00	20	100	11,50	38	1,50	4	313.300.00
12,00	12,00	20	100	11,50	38	2,00	4	313.310.00
16,00	16,00	25	110	15,50	42	1,00	4	313.320.00
16,00	16,00	25	110	15,50	42	1,50	4	313.330.00
16,00	16,00	25	110	15,50	42	2,00	4	313.340.00
16,00	16,00	25	110	15,50	42	3,00	4	313.350.00

TYP H

HSC

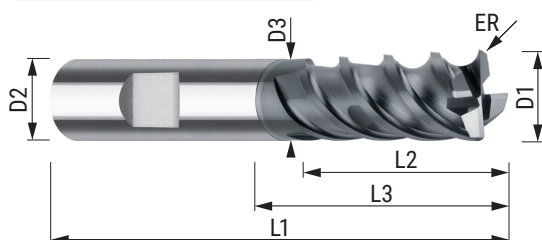

HRC
45-65

Stahl
steel


Air


naco
blue

Article-No. **315...**

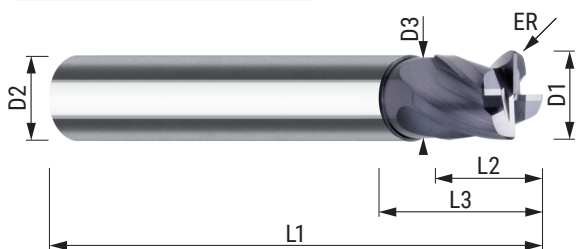
Solid carbide profile mill with corner radius **Hardmax**


D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.	HA	HB
3,00	6,00	8	57	2,90	18	0,20	3	315.031...	.00	.10
3,00	6,00	8	57	2,90	18	0,50	3	315.032...	.00	.10
4,00	6,00	11	57	3,80	21	0,30	4	315.041...	.00	.10
4,00	6,00	11	57	3,80	21	0,50	4	315.042...	.00	.10
4,00	6,00	11	57	3,80	21	1,00	4	315.043...	.00	.10
5,00	6,00	13	57	4,80	21	0,30	4	315.051...	.00	.10
5,00	6,00	13	57	4,80	21	0,50	4	315.052...	.00	.10
5,00	6,00	13	57	4,80	21	1,00	4	315.053...	.00	.10
6,00	6,00	13	57	5,80	21	0,30	4	315.061...	.00	.10
6,00	6,00	13	57	5,80	21	0,50	4	315.062...	.00	.10
6,00	6,00	13	57	5,80	21	1,00	4	315.063...	.00	.10
6,00	6,00	13	57	5,80	21	1,50	4	315.064...	.00	.10
6,00	6,00	13	57	5,80	21	2,00	4	315.065...	.00	.10
8,00	8,00	19	63	7,80	27	0,50	4	315.081...	.00	.10
8,00	8,00	19	63	7,80	27	1,00	4	315.082...	.00	.10
8,00	8,00	19	63	7,80	27	1,50	4	315.083...	.00	.10
8,00	8,00	19	63	7,80	27	2,00	4	315.084...	.00	.10
10,00	10,00	22	72	9,80	32	0,50	4	315.101...	.00	.10
10,00	10,00	22	72	9,80	32	1,00	4	315.102...	.00	.10
10,00	10,00	22	72	9,80	32	1,50	4	315.103...	.00	.10
10,00	10,00	22	72	9,80	32	2,00	4	315.104...	.00	.10
12,00	12,00	26	83	11,80	38	0,50	4	315.121...	.00	.10
12,00	12,00	26	83	11,80	38	1,00	4	315.122...	.00	.10
12,00	12,00	26	83	11,80	38	1,50	4	315.123...	.00	.10
12,00	12,00	26	83	11,80	38	2,00	4	315.124...	.00	.10
16,00	16,00	32	92	15,80	44	0,50	4	315.161...	.00	.10
16,00	16,00	32	92	15,80	44	1,00	4	315.162...	.00	.10
16,00	16,00	32	92	15,80	44	1,50	4	315.163...	.00	.10
16,00	16,00	32	92	15,80	44	2,00	4	315.164...	.00	.10
16,00	16,00	32	150	15,80	44	1,00	4	315.165...	.00	.10
20,00	20,00	38	104	19,80	54	0,50	4	315.201...	.00	.10
20,00	20,00	38	104	19,80	54	1,00	4	315.202...	.00	.10
20,00	20,00	38	104	19,80	54	1,50	4	315.203...	.00	.10
20,00	20,00	38	104	19,80	54	2,00	4	315.204...	.00	.10
20,00	20,00	38	150	19,80	54	1,00	4	315.205...	.00	.10
25,00	25,00	38	160	19,80	54	2,00	4	315.206...	.00	.10



Article-No. **640...**

Solid carbide profile mill with corner radius



D1	D2 h6	L2	L1	D3	L3	ER <0,01	Z	Article-No.
2,00	6,00	4	50	1,80	11	0,10	4	640.020.01
2,00	6,00	4	50	1,80	11	0,20	4	640.020.02
2,00	6,00	4	50	1,80	11	0,30	4	640.020.03
2,00	6,00	4	50	1,80	11	0,40	4	640.020.04
3,00	6,00	4	50	2,80	11	0,20	4	640.030.02
3,00	6,00	4	50	2,80	11	0,30	4	640.030.03
3,00	6,00	4	50	2,80	11	0,40	4	640.030.04
3,00	6,00	4	50	2,80	11	0,50	4	640.030.05
3,00	6,00	4	50	2,80	11	1,00	4	640.030.10
4,00	6,00	6	50	3,60	11	0,10	4	640.040.01
4,00	6,00	6	50	3,60	11	0,20	4	640.040.02
4,00	6,00	6	50	3,60	11	0,30	4	640.040.03
4,00	6,00	6	50	3,60	11	0,40	4	640.040.04
4,00	6,00	6	50	3,60	11	0,50	4	640.040.05
4,00	6,00	6	50	3,60	11	0,80	4	640.040.08
4,00	6,00	6	50	3,60	11	1,00	4	640.040.10
4,00	6,00	6	50	3,60	11	1,50	4	640.040.15
5,00	6,00	6	50	4,60	11	0,20	4	640.050.02
5,00	6,00	6	50	4,60	11	0,30	4	640.050.03
6,00	6,00	7	50	5,50	11	0,10	4	640.060.01
6,00	6,00	7	50	5,50	11	0,20	4	640.060.02
6,00	6,00	7	50	5,50	11	0,30	4	640.060.03
6,00	6,00	7	50	5,50	11	0,40	4	640.060.04
6,00	6,00	7	50	5,50	11	0,50	4	640.060.05
6,00	6,00	7	50	5,50	11	0,80	4	640.060.08
6,00	6,00	7	50	5,50	11	0,90	4	640.060.09
6,00	6,00	7	50	5,50	11	1,00	4	640.060.10
6,00	6,00	7	50	5,50	11	2,00	4	640.060.20
8,00	8,00	9	58	7,40	13	0,50	4	640.080.05
8,00	8,00	9	58	7,40	13	1,00	4	640.080.10
8,00	8,00	9	58	7,40	13	1,50	4	640.080.15
8,00	8,00	9	58	7,40	13	2,00	4	640.080.20
10,00	10,00	11	66	9,20	15	0,50	4	640.100.05
10,00	10,00	11	66	9,20	15	1,00	4	640.100.10
10,00	10,00	11	66	9,20	15	1,50	4	640.100.15
10,00	10,00	11	66	9,20	15	2,00	4	640.100.20

TYP H

HSC


HRC
45-55

Stahl
steel


GG(G)



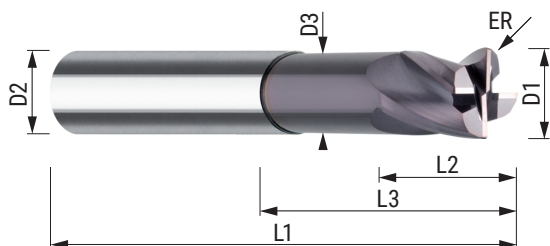
Air



TIALN

Article-No. **641...**

Solid carbide profile mill with corner radius



D1	D2 h6	L2	L1	D3	L3	ER <0,01	Z	Article-No.
2,00	6,00	4	57	1,80	21	0,10	4	641.020.01
2,00	6,00	4	57	1,80	21	0,20	4	641.020.02
2,00	6,00	4	57	1,80	21	0,30	4	641.020.03
2,00	6,00	4	57	1,80	21	0,40	4	641.020.04
2,00	6,00	4	57	1,80	21	0,50	4	641.020.05
3,00	6,00	6	57	2,80	21	0,10	4	641.030.01
3,00	6,00	6	57	2,80	21	0,20	4	641.030.02
3,00	6,00	6	57	2,80	21	0,30	4	641.030.03
3,00	6,00	6	57	2,80	21	0,40	4	641.030.04
3,00	6,00	6	57	2,80	21	0,50	4	641.030.05
3,00	6,00	6	57	2,80	21	1,00	4	641.030.10
4,00	6,00	6	57	3,60	21	0,10	4	641.040.01
4,00	6,00	6	57	3,60	21	0,20	4	641.040.02
4,00	6,00	6	57	3,60	21	0,30	4	641.040.03
4,00	6,00	6	57	3,60	21	0,40	4	641.040.04
4,00	6,00	6	57	3,60	21	0,50	4	641.040.05
4,00	6,00	6	57	3,60	21	0,60	4	641.040.06
4,00	6,00	6	57	3,60	21	0,70	4	641.040.07
4,00	6,00	6	57	3,60	21	0,80	4	641.040.08
4,00	6,00	6	57	3,60	21	1,00	4	641.040.10
4,00	6,00	6	57	3,60	21	1,50	4	641.040.15
5,00	6,00	6	57	4,60	21	0,10	4	641.050.01
5,00	6,00	6	57	4,60	21	0,20	4	641.050.02
5,00	6,00	6	57	4,60	21	0,30	4	641.050.03
5,00	6,00	6	57	4,60	21	0,40	4	641.050.04
5,00	6,00	6	57	4,60	21	0,50	4	641.050.05
5,00	6,00	6	57	4,60	21	1,00	4	641.050.10
5,00	6,00	6	57	4,60	21	1,50	4	641.050.15
5,00	6,00	6	57	4,60	21	2,00	4	641.050.20
6,00	6,00	7	57	5,50	21	0,10	4	641.060.01
6,00	6,00	7	57	5,50	21	0,20	4	641.060.02
6,00	6,00	7	57	5,50	21	0,30	4	641.060.03
6,00	6,00	7	57	5,50	21	0,40	4	641.060.04
6,00	6,00	7	57	5,50	21	0,50	4	641.060.05
6,00	6,00	7	57	5,50	21	0,60	4	641.060.06
6,00	6,00	7	57	5,50	21	0,80	4	641.060.08
6,00	6,00	7	57	5,50	21	1,00	4	641.060.10
6,00	6,00	7	57	5,50	21	1,20	4	641.060.12
6,00	6,00	7	57	5,50	21	1,50	4	641.060.15
6,00	6,00	7	57	5,50	21	2,00	4	641.060.20
6,00	6,00	7	57	5,50	21	2,50	4	641.060.25
8,00	8,00	9	63	7,40	27	0,10	4	641.080.01
8,00	8,00	9	63	7,40	27	0,30	4	641.080.03
8,00	8,00	9	63	7,40	27	0,50	4	641.080.05

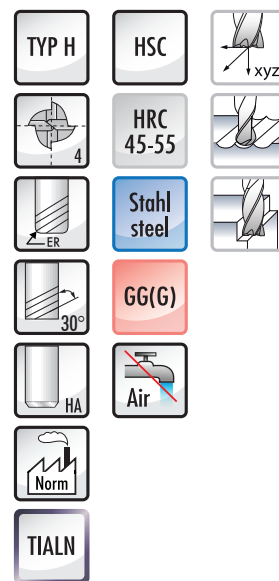


Article-No. **641...**

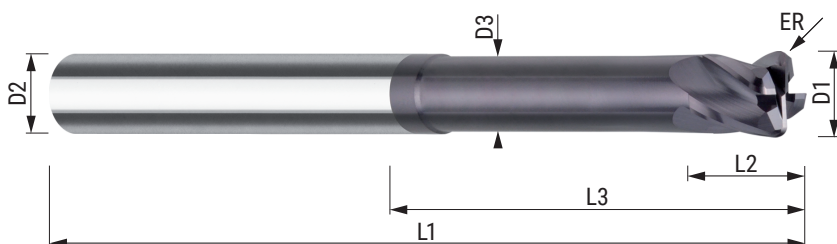
Solid carbide profile mill with corner radius



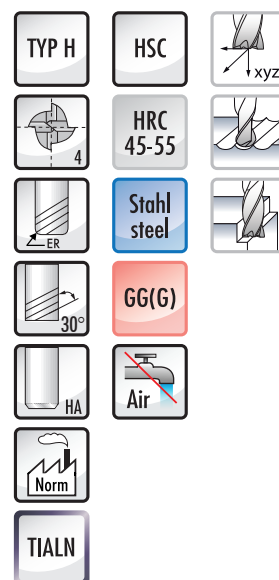
D1	D2 h6	L2	L1	D3	L3	ER <0,01	Z	Article-No.
8,00	8,00	9	63	7,40	27	1,00	4	641.080.10
8,00	8,00	9	63	7,40	27	1,50	4	641.080.15
8,00	8,00	9	63	7,40	27	2,00	4	641.080.20
10,00	10,00	11	72	9,20	32	0,50	4	641.100.05
10,00	10,00	11	72	9,20	32	1,00	4	641.100.10
10,00	10,00	11	72	9,20	32	1,50	4	641.100.15
10,00	10,00	11	72	9,20	32	2,00	4	641.100.20
12,00	12,00	12	83	11,00	38	0,50	4	641.120.05
12,00	12,00	12	83	11,00	38	1,00	4	641.120.10
12,00	12,00	12	83	11,00	38	1,50	4	641.120.15
12,00	12,00	12	83	11,00	38	2,00	4	641.120.20
16,00	16,00	16	92	15,00	44	0,50	4	641.160.05
16,00	16,00	16	92	15,00	44	1,00	4	641.160.10
16,00	16,00	16	92	15,00	44	2,00	4	641.160.20


Article-No. **642...**

Solid carbide profile mill with corner radius

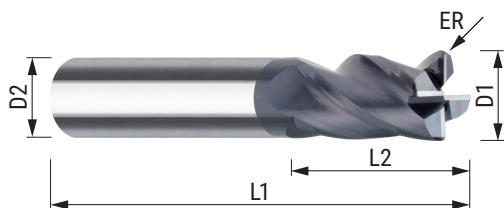


D1	D2 h6	L2	L1	D3	L3	ER <0,01	Z	Article-No.
6,00	6,00	7	80	5,50	44	0,10	4	642.060.01
6,00	6,00	7	80	5,50	44	0,20	4	642.060.02
6,00	6,00	7	80	5,50	44	0,30	4	642.060.03
6,00	6,00	7	80	5,50	44	0,40	4	642.060.04
6,00	6,00	7	80	5,50	44	0,50	4	642.060.05
6,00	6,00	7	80	5,50	44	0,60	4	642.060.06
6,00	6,00	7	80	5,50	44	1,00	4	642.060.10
6,00	6,00	7	80	5,50	44	1,50	4	642.060.15
6,00	6,00	7	80	5,50	44	2,00	4	642.060.20
8,00	8,00	9	100	7,40	54	0,50	4	642.080.05
8,00	8,00	9	100	7,40	54	1,00	4	642.080.10
8,00	8,00	9	100	7,40	54	1,50	4	642.080.15
8,00	8,00	9	100	7,40	54	2,00	4	642.080.20
10,00	10,00	11	100	9,20	60	1,00	4	642.100.10
10,00	10,00	11	100	9,20	60	1,50	4	642.100.15
10,00	10,00	11	100	9,20	60	2,00	4	642.100.20
12,00	12,00	12	120	11,00	75	0,50	4	642.120.05
12,00	12,00	12	120	11,00	75	1,00	4	642.120.10
12,00	12,00	12	120	11,00	75	1,50	4	642.120.15
12,00	12,00	12	120	11,00	75	2,00	4	642.120.20
16,00	16,00	16	150	15,00	92	2,00	4	642.160.20



Article-No. **643...**

Solid carbide profile mill with corner radius

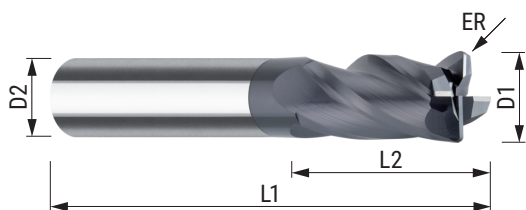


D1	D2 h5	L2	L1	ER	Z	Article-No.
3,00	3,00	6	50	0,30	4	643.030.03
3,00	3,00	6	50	0,50	4	643.030.05
4,00	4,00	8	60	0,30	4	643.040.03
4,00	4,00	8	60	0,50	4	643.040.05
4,00	4,00	8	60	1,00	4	643.040.10
5,00	5,00	10	60	0,30	4	643.050.03
5,00	5,00	10	60	0,50	4	643.050.05
5,00	5,00	10	60	1,00	4	643.050.10
6,00	6,00	12	70	0,30	4	643.060.03
6,00	6,00	12	70	0,50	4	643.060.05
6,00	6,00	12	70	1,00	4	643.060.10
6,00	6,00	12	70	1,50	4	643.060.15
6,00	6,00	12	70	2,00	4	643.060.20
8,00	8,00	16	70	0,30	4	643.080.03
8,00	8,00	16	70	0,50	4	643.080.05
8,00	8,00	16	70	1,00	4	643.080.10
8,00	8,00	16	70	1,50	4	643.080.15
8,00	8,00	16	70	2,00	4	643.080.20
8,00	8,00	16	70	2,50	4	643.080.25
8,00	8,00	16	70	3,00	4	643.080.30
10,00	10,00	20	70	0,30	4	643.100.03
10,00	10,00	20	70	0,50	4	643.100.05
10,00	10,00	20	70	1,00	4	643.100.10
10,00	10,00	20	70	2,00	4	643.100.20
10,00	10,00	20	70	2,50	4	643.100.25
10,00	10,00	20	70	3,00	4	643.100.30
12,00	12,00	24	80	0,30	4	643.120.03
12,00	12,00	24	80	0,50	4	643.120.05
12,00	12,00	24	80	1,00	4	643.120.10
12,00	12,00	24	80	2,00	4	643.120.20
12,00	12,00	24	80	3,00	4	643.120.30
16,00	16,00	32	90	1,00	4	643.160.10
16,00	16,00	32	90	2,00	4	643.160.20
16,00	16,00	32	90	3,00	4	643.160.30
20,00	20,00	40	120	1,00	4	643.200.10
20,00	20,00	40	120	3,00	4	643.200.30



Article-No. **644...**

Solid carbide profile mill with corner radius



D1	D2 h5	L2	L1	ER	Z	Article-No.
3,00	3,00	6	70	0,30	4	644.030.03
3,00	3,00	6	70	0,50	4	644.030.05
4,00	4,00	8	80	0,30	4	644.040.03
4,00	4,00	8	80	0,50	4	644.040.05
4,00	4,00	8	80	1,00	4	644.040.10
5,00	5,00	10	100	0,30	4	644.050.03
5,00	5,00	10	100	0,50	4	644.050.05
5,00	5,00	10	100	1,50	4	644.050.15
6,00	6,00	12	100	0,30	4	644.060.03
6,00	6,00	12	100	0,50	4	644.060.05
6,00	6,00	12	100	1,00	4	644.060.10
6,00	6,00	12	100	1,50	4	644.060.15
6,00	6,00	12	100	2,00	4	644.060.20
6,00	6,00	12	100	2,50	4	644.060.25
8,00	8,00	16	100	0,30	4	644.080.03
8,00	8,00	16	100	0,50	4	644.080.05
8,00	8,00	16	100	1,00	4	644.080.10
8,00	8,00	16	100	2,00	4	644.080.20
8,00	8,00	16	100	3,00	4	644.080.30
10,00	10,00	20	120	0,30	4	644.100.03
10,00	10,00	20	120	0,50	4	644.100.05
10,00	10,00	20	120	1,00	4	644.100.10
10,00	10,00	20	120	2,00	4	644.100.20
10,00	10,00	20	120	2,50	4	644.100.25
12,00	12,00	24	120	0,50	4	644.120.05
12,00	12,00	24	120	1,00	4	644.120.10
12,00	12,00	24	120	2,00	4	644.120.20
12,00	12,00	24	120	2,50	4	644.120.25
12,00	12,00	24	120	3,00	4	644.120.30
16,00	16,00	32	120	1,00	4	644.160.10
16,00	16,00	32	120	2,00	4	644.160.20
16,00	16,00	32	120	3,00	4	644.160.30

TYP H

HSC


HRC
45-65

Stahl
steel

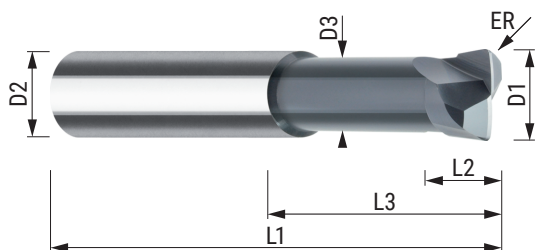

GG(G)



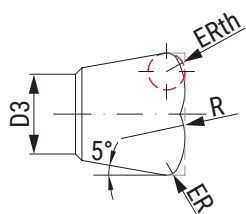
Air


DIN 6527
short

ALTIN

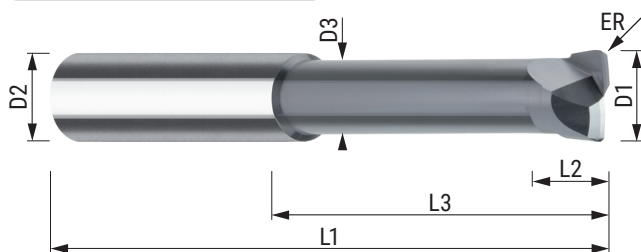
Article-No. **332...**


D1	D2 h6	L2	L1	D3	L3	ERth	ER	R	Z	Article-No.
4,00	6,00	1,50	57	3,40	20	0,40	0,32	6,00	2	332.040.00
5,00	6,00	2,00	57	4,20	20	0,50	0,40	7,50	2	332.050.00
6,00	6,00	2,50	57	5,00	25	0,60	0,50	9,00	2	332.060.00
8,00	8,00	3,00	63	6,70	25	0,80	0,65	12,00	2	332.080.00
10,00	10,00	4,00	72	8,50	35	1,00	0,80	15,00	2	332.100.00
12,00	12,00	5,00	83	10,00	40	1,20	1,00	18,00	2	332.120.00
16,00	16,00	6,00	92	13,50	45	1,60	1,30	24,00	2	332.160.00
20,00	20,00	8,00	104	17,00	55	2,00	1,65	30,00	2	332.200.00

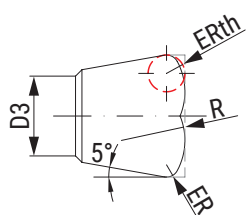

ERth =

The theoretic corner radius is taken to ease the programming of profile milling.

Solid carbide high feed mill


Article-No. **333...**


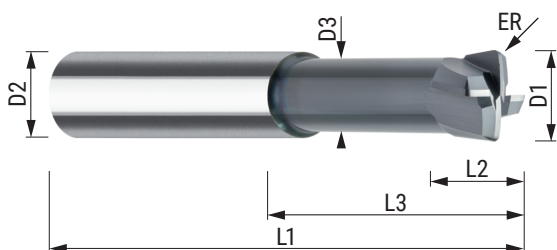
D1	D2 h6	L2	L1	D3	L3	ERth	ER	R	Z	Article-No.
4,00	6,00	1,50	80	3,40	40	0,40	0,32	6,00	2	333.040.00
5,00	6,00	2,00	80	4,20	40	0,50	0,40	7,50	2	333.050.00
6,00	6,00	2,50	80	5,00	45	0,60	0,50	9,00	2	333.060.00
8,00	8,00	3,00	90	6,70	55	0,80	0,65	12,00	2	333.080.00
10,00	10,00	4,00	100	8,70	60	1,00	0,80	15,00	2	333.100.00
12,00	12,00	5,00	110	10,00	65	1,20	1,00	18,00	2	333.120.00
16,00	16,00	5,00	130	13,50	80	1,60	1,30	24,00	2	333.160.00
20,00	20,00	8,00	150	17,00	95	2,00	1,65	30,00	2	333.200.00


ERth =

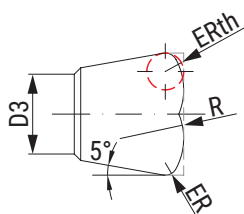
The theoretic corner radius is taken to ease the programming of profile milling.

Solid carbide high feed mill



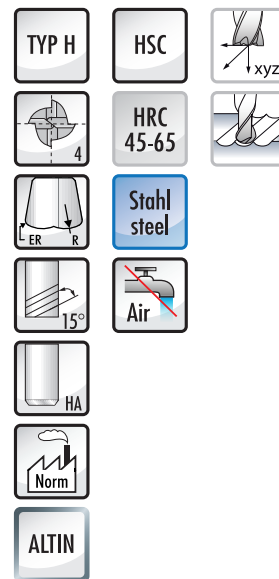
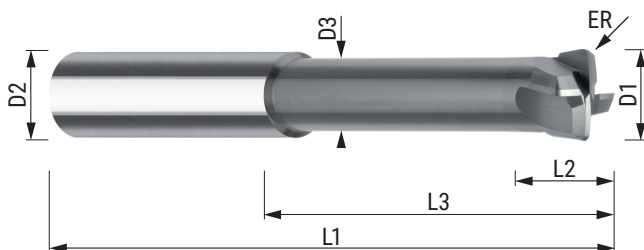
Article-No. **336...**


D1	D2 h6	L2	L1	D3	L3	ERth	ER	R	Z	Article-No.
4,00	6,00	1,50	57	3,40	20	0,40	0,32	6,00	4	336.040.00
5,00	6,00	2,00	57	4,20	20	0,50	0,40	7,50	4	336.050.00
6,00	6,00	2,50	57	5,00	25	0,60	0,50	9,00	4	336.060.00
8,00	8,00	3,00	63	6,70	25	0,80	0,65	12,00	4	336.080.00
10,00	10,00	4,00	72	8,70	35	1,00	0,80	15,00	4	336.100.00
12,00	12,00	5,00	83	10,00	40	1,20	1,00	18,00	4	336.120.00
16,00	16,00	6,00	92	13,50	45	1,60	1,30	24,00	4	336.160.00
20,00	20,00	8,00	104	17,00	55	2,00	1,65	30,00	4	336.200.00

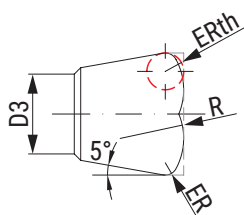


ERth = The theoretic corner radius is taken to ease the programming of profile milling.

Solid carbide high feed mill

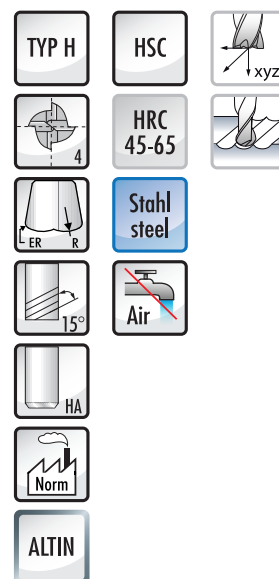

Article-No. **337...**


D1	D2 h6	L2	L1	D3	L3	ERth	ER	R	Z	Article-No.
4,00	6,00	1,50	80	3,40	40	0,40	0,32	6,00	4	337.040.00
5,00	6,00	2,00	80	4,20	40	0,50	0,40	7,50	4	337.050.00
6,00	6,00	2,50	80	5,00	45	0,60	0,50	9,00	4	337.060.00
8,00	8,00	3,00	90	6,70	55	0,80	0,65	12,00	4	337.080.00
10,00	10,00	4,00	100	8,50	60	1,00	0,80	15,00	4	337.100.00
12,00	12,00	5,00	110	10,00	65	1,20	1,00	18,00	4	337.120.00
16,00	16,00	6,00	130	13,50	80	1,60	1,30	24,00	4	337.160.00
20,00	20,00	8,00	150	17,00	95	2,00	1,65	30,00	4	337.200.00

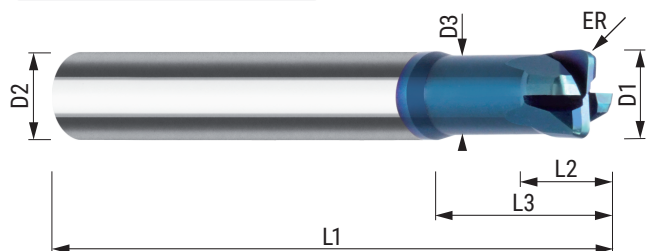


ERth = The theoretic corner radius is taken to ease the programming of profile milling.

Solid carbide high feed mill



Article-No. **338...**

Solid carbide high feed mill **INO-SPEED**


D1	D2 h6	L2	L1	D3	L3	ER + 0,01 - 0,01	Z	Article-No.
2,00	6,00	1,50	50	1,90	6	0,50	4	338.020.05
3,00	6,00	2,00	50	2,80	8	0,50	4	338.030.05
4,00	6,00	4,50	50	3,80	20	0,50	4	338.040.05
5,00	6,00	2,00	60	4,80	10	0,50	4	338.050.05
6,00	6,00	2,50	75	5,40	25	0,50	4	338.060.05
6,00	6,00	2,50	60	5,40	30	1,00	4	338.060.10
8,00	8,00	3,50	75	7,60	40	1,00	4	338.080.10
10,00	10,00	4,00	70	9,00	45	1,00	4	338.100.10
10,00	10,00	4,00	70	9,00	45	2,00	4	338.100.20
12,00	12,00	5,00	100	11,00	62	1,00	4	338.120.10
12,00	12,00	5,00	100	11,00	62	2,00	4	338.121.20
12,00	12,00	5,00	80	11,00	45	2,00	4	338.120.20
16,00	16,00	7,00	120	15,00	70	1,00	4	338.160.10
16,00	16,00	7,00	120	15,00	70	2,00	4	338.160.20
20,00	20,00	8,00	130	19,00	75	2,00	4	338.200.20
20,00	20,00	8,00	130	19,00	75	3,00	4	338.200.30

TYP H-N

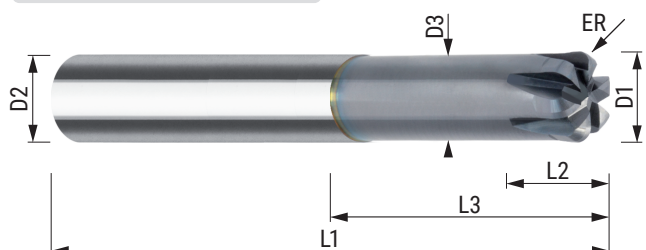
HSC


HRC
45-65

Stahl
steel

naco
blue

Article-No. **339...**

Solid carbide high feed mill **INO-SPEED**


D1	D2 h6	L2	L1	D3	L3	ER + 0,01 - 0,01	Z	Article-No.
4,00	6,00	2,50	60	3,80	15	0,50	6	339.040.05
4,00	6,00	2,50	60	3,80	15	1,00	6	339.040.10
6,00	6,00	3,00	60	5,60	20	0,50	6	339.060.05
6,00	6,00	3,00	60	5,60	20	1,00	6	339.060.10
8,00	8,00	3,50	70	7,60	30	0,50	6	339.080.05
8,00	8,00	3,50	70	7,60	30	1,00	6	339.080.10
10,00	10,00	4,00	75	9,50	35	1,00	6	339.100.10
10,00	10,00	4,00	75	9,50	35	2,00	6	339.100.20
12,00	12,00	4,00	90	11,50	40	1,00	6	339.120.10
12,00	12,00	4,00	90	11,50	40	1,50	6	339.120.15

TYP H

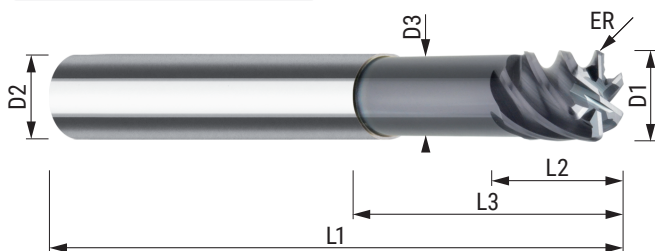
HSC


HRC
45-65

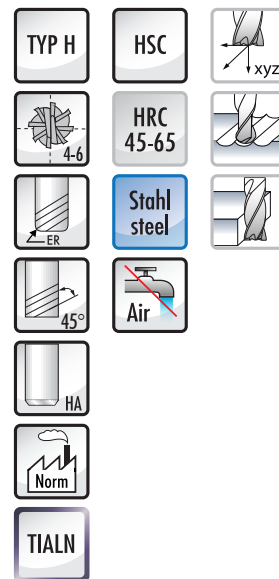
Stahl
steel

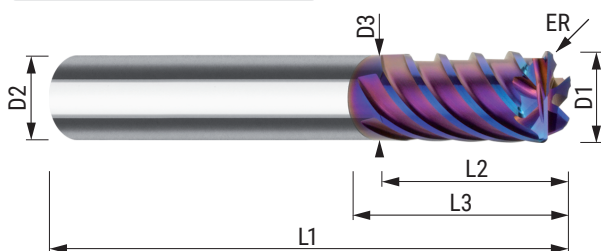

ALTIN

Article-No. **661...**

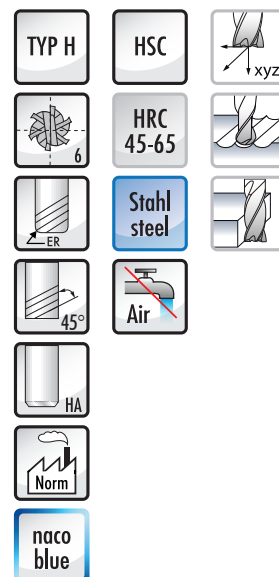
Solid carbide profile mill with corner radius **Multicut**


D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
3,00	6,00	4	50	2,70	14	0,30	4	661.030.00
4,00	6,00	5	54	3,70	16	0,40	4	661.040.00
5,00	6,00	6	54	4,60	18	0,50	4	661.050.00
6,00	6,00	7	65	5,50	21	0,50	6	661.060.00
8,00	8,00	9	70	7,40	27	0,50	6	661.080.00
8,00	8,00	9	70	7,40	27	1,00	6	661.080.01
10,00	10,00	11	80	9,20	32	0,50	6	661.100.00
10,00	10,00	11	80	9,20	32	2,00	6	661.100.03
12,00	12,00	12	93	11,00	38	0,50	6	661.120.00
12,00	12,00	12	93	11,00	38	1,00	6	661.120.01

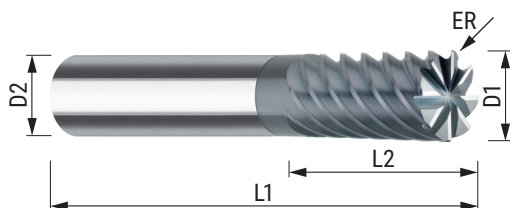

Article-No. **060...**

Solid carbide profile mill with corner radius **Dynastar**


D1	D2 h6	L2	L1	D3	L3	ER	Z	Article-No.
6,00	6,00	6	50	5,70	14	0,50	6	060.060.07
6,00	6,00	13	70	-	-	0,50	6	060.061.07
6,00	6,00	26	70	-	-	0,50	6	060.062.07
8,00	8,00	8	60	7,65	24	0,50	6	060.080.07
8,00	8,00	19	90	-	-	0,50	6	060.081.07
8,00	8,00	36	90	-	-	0,50	6	060.082.07
10,00	10,00	10	70	9,65	30	1,00	6	060.100.07
10,00	10,00	22	100	-	-	0,50	6	060.101.07
10,00	10,00	22	100	-	-	1,00	6	060.102.07
10,00	10,00	46	100	-	-	1,00	6	060.103.07
12,00	12,00	12	75	11,60	30	1,00	6	060.120.07
12,00	12,00	26	110	-	-	0,50	6	060.121.07
12,00	12,00	26	110	-	-	1,00	6	060.122.07
12,00	12,00	56	110	-	-	1,00	6	060.123.07
16,00	16,00	32	130	-	-	1,00	6	060.161.07
16,00	16,00	32	130	-	-	1,50	6	060.162.07
16,00	16,00	66	130	-	-	1,50	6	060.163.07
20,00	20,00	38	140	-	-	1,00	6	060.201.07
20,00	20,00	38	140	-	-	1,50	6	060.202.07
20,00	20,00	38	140	-	-	2,00	6	060.203.07
20,00	20,00	76	140	-	-	2,00	6	060.204.07

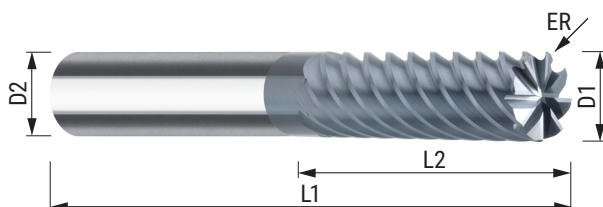


Article-No. **308...**

Solid carbide profile mill with corner radius **Multicut**


D1	D2 h6	L2	L1	ER	Z	Article-No.
6,00	6,00	13	57	0,50	6	308.060.05
6,00	6,00	13	57	1,00	6	308.060.10
8,00	8,00	19	63	0,50	6	308.080.05
8,00	8,00	19	63	1,00	6	308.080.10
10,00	10,00	22	72	0,50	6	308.100.05
10,00	10,00	22	72	1,00	6	308.100.10
12,00	12,00	26	83	0,50	6	308.120.05
12,00	12,00	26	83	1,00	6	308.120.10
12,00	12,00	26	83	1,50	6	308.120.15
12,00	12,00	26	83	2,00	6	308.120.20
12,00	12,00	26	83	2,50	6	308.120.25
16,00	16,00	32	92	0,50	8	308.160.05
16,00	16,00	32	92	1,00	8	308.160.10
16,00	16,00	32	92	2,00	8	308.160.20
20,00	20,00	38	104	2,00	8	308.200.20

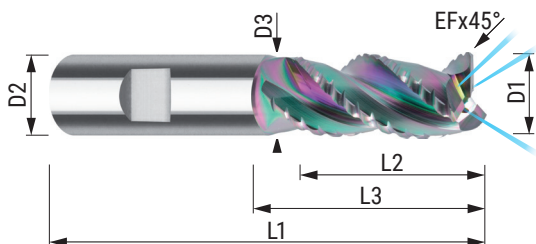

Article-No. **309...**

Solid carbide profile mill with corner radius **Multicut**


D1	D2 h6	L2	L1	ER	Z	Article-No.
6,00	6,00	18	62	0,50	6	309.060.05
8,00	8,00	24	68	0,50	6	309.080.05
8,00	8,00	24	68	1,00	6	309.080.10
10,00	10,00	30	80	0,50	6	309.100.05
10,00	10,00	30	80	1,00	6	309.100.10
10,00	10,00	30	80	1,50	6	309.100.15
12,00	12,00	36	93	0,50	6	309.120.05
12,00	12,00	36	93	1,00	6	309.120.10
12,00	12,00	36	93	1,50	6	309.120.15
12,00	12,00	36	93	2,00	6	309.120.20
16,00	16,00	48	93	0,50	8	309.160.05
16,00	16,00	48	93	1,00	8	309.160.10
16,00	16,00	48	93	1,50	8	309.160.15
16,00	16,00	48	108	2,00	8	309.160.20
20,00	20,00	60	126	2,00	8	309.200.20



Article-No. **251...**

Solid carbide roughing mill with internal coolant hole **Primus**


D1	D2 h6	L2	L1	D3	L3	EF	Z	Article-No.	HA	HB
6,00	6,00	14	57	5,70	20	0,20	3	251.060...	.00	.10
8,00	8,00	21	63	7,40	26	0,25	3	251.080...	.00	.10
10,00	10,00	23	72	9,50	31	0,30	3	251.100...	.00	.10
12,00	12,00	27	83	11,00	37	0,35	3	251.120...	.00	.10
16,00	16,00	36	92	15,00	43	0,40	3	251.160...	.00	.10
20,00	20,00	41	104	19,00	52	0,40	3	251.200...	.00	.10

1st
CHOICE

NEW

TYP W

frontal Y-IX

HA

HB

Norm

Ta-C

HPC

ALU
NE

Kunststoff
plastic

KSS

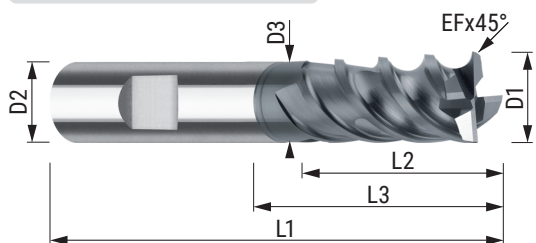
frontal Y-IX

HA

HB

Norm

Ta-C

Article-No. **310...**


D1	D2 h6	L2	L1	D3	L3	EF	Z	Article-No.	HA	HB
2,50	6,00	4	57	2,30	7	0,10	3	310.025...	.00	.10
3,00	6,00	5	57	2,80	7	0,10	3	310.030...	.00	.10
4,00	6,00	11	57	3,80	21	0,10	4	310.040...	.00	.10
5,00	6,00	13	57	4,80	21	0,10	4	310.050...	.00	.10
6,00	6,00	13	57	5,80	21	0,10	4	310.060...	.00	.10
8,00	8,00	19	63	7,80	27	0,15	4	310.080...	.00	.10
10,00	10,00	22	72	9,80	32	0,15	4	310.100...	.00	.10
12,00	12,00	26	83	11,80	38	0,20	4	310.120...	.00	.10
14,00	14,00	26	83	13,80	42	0,20	4	310.140...	.00	.10
16,00	16,00	32	92	15,80	44	0,20	4	310.160...	.00	.10
18,00	18,00	32	92	17,80	44	0,30	4	310.180...	.00	.10
20,00	20,00	38	104	19,80	54	0,30	4	310.200...	.00	.10

Solid carbide mill **Hardmax**

1st
CHOICE

TYP H

HA

HB

Norm

ALTIN

HPC

TSC

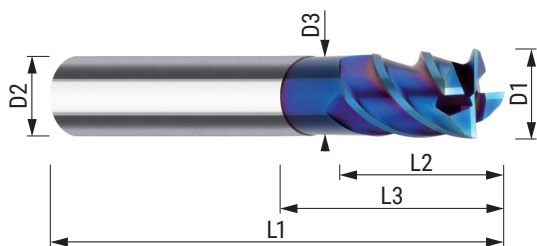
HRC
45-60

Stahl
steel

GG(G)

Article-No. **312...**

Solid carbide miniature mill **PrimeLine**



D1	D2 h5	L2	L1	D3	L3	Z	Article-No.
1,00	6,00	3	57	0,90	10	4	312.010.00
2,00	6,00	4	57	1,90	12	4	312.020.00
3,00	6,00	5	57	2,80	15	4	312.030.00
4,00	6,00	6	57	3,60	21	4	312.040.00
5,00	6,00	7	57	4,60	21	4	312.050.00
6,00	6,00	10	57	5,50	21	4	312.060.00
8,00	8,00	12	63	7,50	27	4	312.080.00
10,00	10,00	15	72	9,50	32	4	312.100.00
12,00	12,00	18	83	11,50	38	4	312.120.00
16,00	16,00	24	92	15,50	42	4	312.160.00

TYP H

HSC



HRC 45-65



Stahl steel



Air



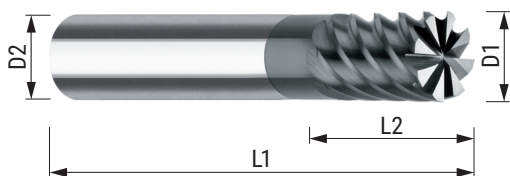
DIN 6527 short



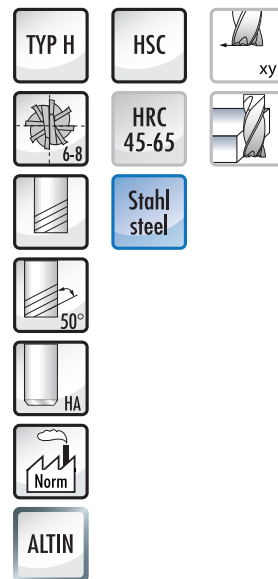
naco blue

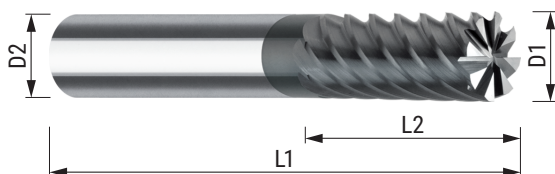


Article-No. **218...**

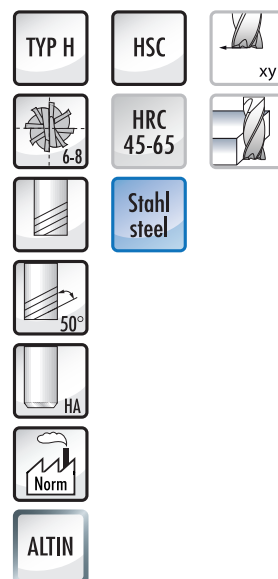
Solid carbide finishing mill **Multicut**


D1	D2 h6	L2	L1	Z	Article-No.
4,00	6,00	10	54	6	218.040.00
5,00	6,00	10	54	6	218.050.00
6,00	6,00	10	54	6	218.060.00
7,00	8,00	12	58	6	218.070.00
8,00	8,00	12	58	6	218.080.00
9,00	10,00	14	66	6	218.090.00
10,00	10,00	14	66	6	218.100.00
12,00	12,00	16	73	6	218.120.00
16,00	16,00	20	82	8	218.160.00
20,00	20,00	25	92	8	218.200.00


Article-No. **220...**

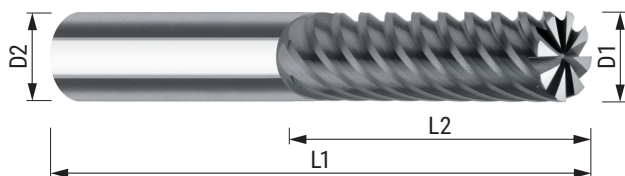
Solid carbide finishing mill **Multicut**


D1	D2 h6	L2	L1	Z	Article-No.
3,00	6,00	8	57	6	220.030.00
4,00	6,00	11	57	6	220.040.00
5,00	6,00	13	57	6	220.050.00
6,00	6,00	13	57	6	220.060.00
8,00	8,00	19	63	6	220.080.00
10,00	10,00	22	72	6	220.100.00
12,00	12,00	26	83	6	220.120.00
16,00	16,00	32	92	8	220.160.00
20,00	20,00	38	104	8	220.200.00



Article-No. **221...**

Solid carbide finishing mill **Multicut**



D1	D2 h6	L2	L1	Z	Article-No.
6,00	6,00	18	57	6	221.060.00
8,00	8,00	24	63	6	221.080.00
10,00	10,00	30	75	6	221.100.00
12,00	12,00	36	83	6	221.120.00
12,00	12,00	36	150	6	221.120.02
16,00	16,00	48	104	8	221.160.00
16,00	16,00	65	150	8	221.160.02
20,00	20,00	55	110	8	221.200.00
20,00	20,00	65	150	8	221.200.02

TYP H

HSC



HRC
45-65



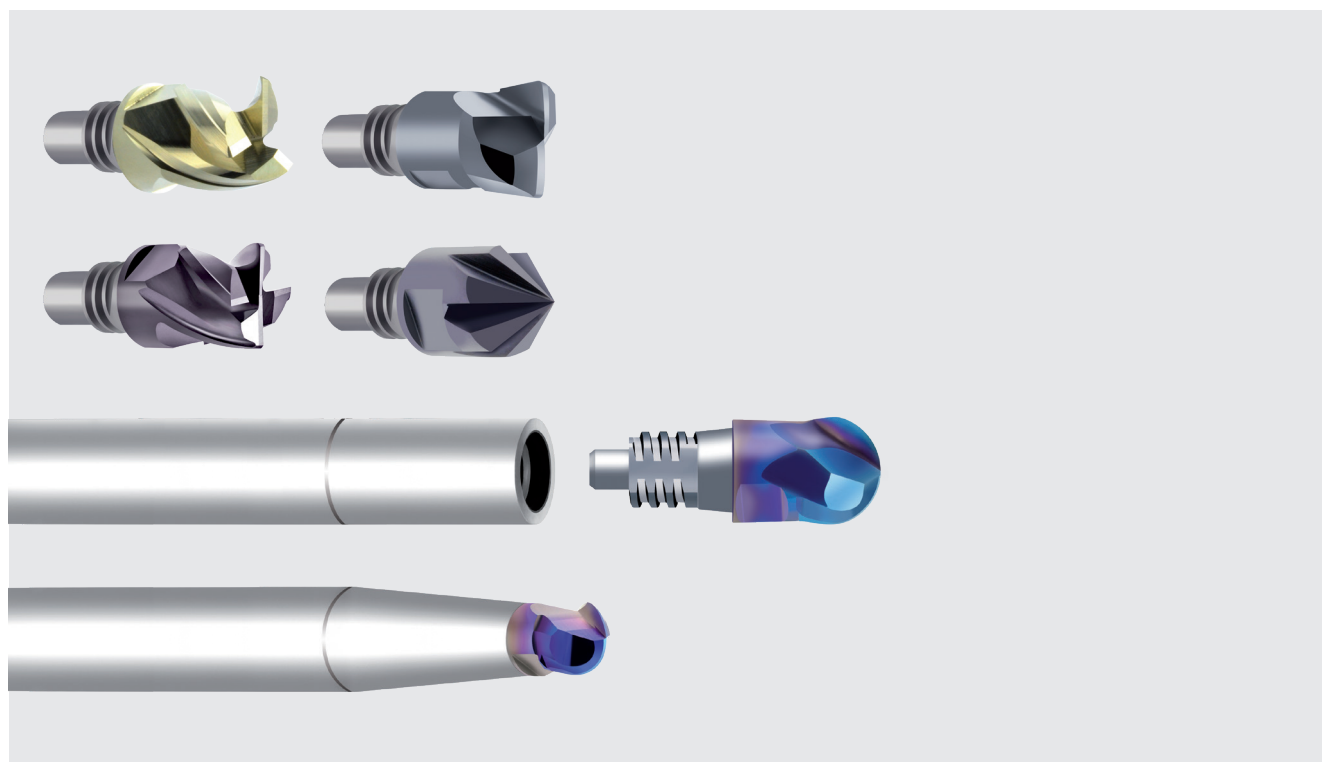
Stahl
steel



ALTIN







	Page
Overview, Field of application	60
Inoscrew - Modular milling system	62



Universal mills

Finishing mills

Profile mills

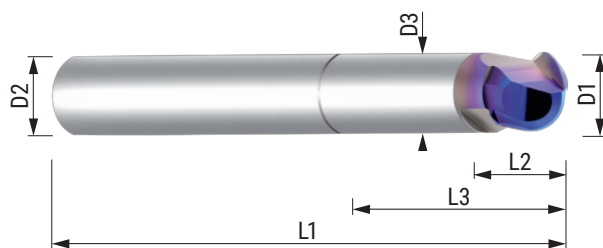
Roughing mills

																
Z (no.of teeth)	2	3	4		6-8		2	4	2	2	4		3	4	4-6	4-5
Coating																
Technology																
Page	64	64	65		65		66	66	67	67	68		68	69	69	70
Article-No.	38.102	38.213	38.214		38.208		38.332	38.313	38.520	38.671	38.514		38.244	38.733	38.344	38.347
	●	●	●		●		●	●	●	●	●			●	○	●
	○	○	○		○		●	●	●	●	○			○		
							○	●	●	●						
							○	○	●	●						
	●	●	●		●		●	●		●	●			●	○	○
	○	○	○		○								●			
	○	○			○								○			
																
	○	○	○		○						○			○	●	○
					○						○					
																
TYP	N	N	N		N		H-N	H	H	H-N	N		W	N-H	N-W	N-W

	Special mills				Replaceable head holder				Mounting keys			
Z (no. of teeth)	2	6	4									
Coating	TIALN	TIALN	TIALN									
Technology	UNI	UNI	UNI									
Page	70	71	71		72	73			72	73	73	
Article-No.	38.690	38.790	38.780		68	69			70	71	72	
Stahl steel	●	●	●									
HRC 45-55												
HRC 55-60												
HRC 60-65												
GG(G)	○	○	○									
ALU NE	●	●	●									
Kunststoff plastic	●	●	●									
GFK/CFK Graphit												
stainless steel	○	○	○									
INCONEL TITAN												
IK												
TYP	N	N	N									

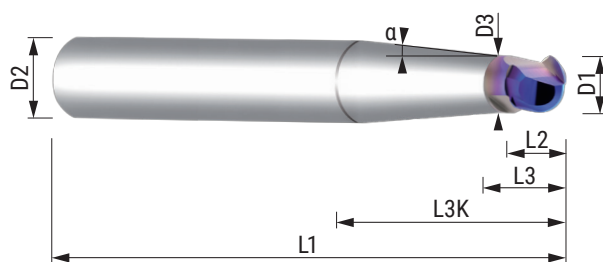


Solid carbide milling head and cylindrical replaceable head holder short/long/extra long

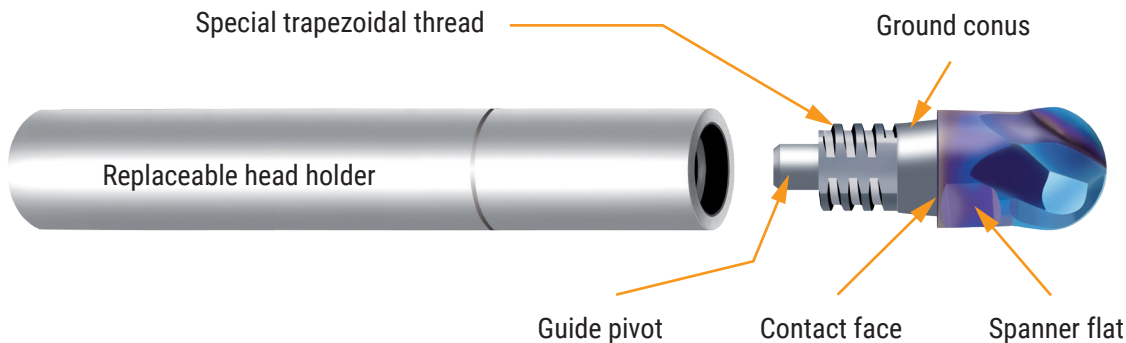


Size	D1	D2	L2	L1	D3	L3	Information	Shank
20	10,00	10,00	7	79	9,60	19	short/stable	steel HA
20	10,00	10,00	7	89	9,60	32	long	steel HA
20	10,00	10,00	7	125	9,60	70	extra long	solid carbide HA
30	12,00	12,00	9	92	11,60	22	short/stable	steel HA
30	12,00	12,00	9	102	11,60	38	long	steel HA
30	12,00	12,00	9	145	11,60	80	extra long	solid carbide HA
40	16,00	16,00	12	101	15,40	27	short/stable	steel HA
40	16,00	16,00	12	116	15,40	44	long	steel HA
40	16,00	16,00	12	170	15,40	100	extra long	solid carbide HA
50	20,00	20,00	15	116	19,20	32	short/stable	steel HA
50	20,00	20,00	15	136	19,20	54	long	steel HA
50	20,00	20,00	15	200	19,20	120	extra long	solid carbide HA

Solid carbide milling head and conical replaceable head holder short/long



Size	D1	D2	L2	L1	D3	L3	L3K	α	shank
20	10,00	16,00	7	119	9,60	14	50	5°	steel HA
20	10,00	16,00	7	124	9,60	14	50	1°	steel HA
30	12,00	20,00	9	137	11,60	17	65	5°	steel HA
30	12,00	20,00	9	147	11,60	17	70	1°	steel HA
40	16,00	20,00	12	156	15,40	21	47	5°	steel HA
40	16,00	20,00	12	166	15,40	21	80	1°	steel HA
50	20,00	25,00	15	176	19,20	26	59	5°	steel HA
50	20,00	25,00	15	206	19,20	26	100	1°	steel HA



Characteristics:

- Short set-up times
- Different geometries
- Diverse shank designs
- Diameter from 10 up to 20mm

Advantages:

- High true running accuracy < 20µm
- High stability and stiffness by the guide pivot
- Low vibration
- Guaranteed repeatability

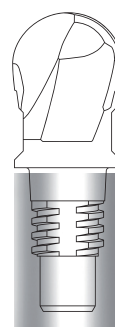
Assembly instruction

1. Clean the contact point of the milling head and the tool holder.
2. Tighten the milling head in clockwise direction hand-tight into the tool holder (**ATTENTION** - Risk of injury! – Use gloves during assembly).
3. Tighten the milling head form-fit with the torque key and the specified torques (see table).

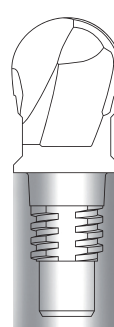
Turning moments for assembly

Size	Wrench opening	Bolting torque (Nm)
20	8	12
30	10	15
40	13	30
50	16	45

approximately 0.4 mm

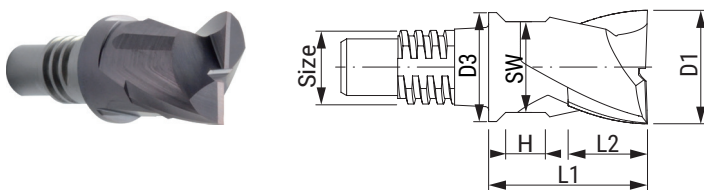


0,0 mm



Article-No. **38.102...**

Solid carbide milling head



Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	2	38.102.100
30	12	9	17	11,60	10 x 4	2	38.102.120
40	16	12	21	15,40	13 x 4	2	38.102.160
50	20	15	26	19,20	16 x 5	2	38.102.200

TYP N

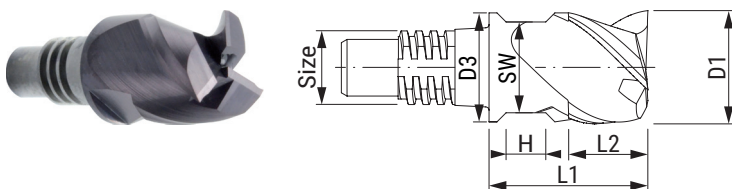
Universal



TIALN

Article-No. **38.213...**

Solid carbide milling head



Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	3	38.213.100
30	12	9	17	11,60	10 x 4	3	38.213.120
40	16	12	21	15,40	13 x 4	3	38.213.160
50	20	15	26	19,20	16 x 5	3	38.213.200

TYP N

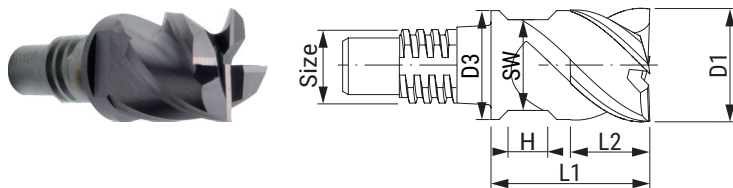
Universal



TIALN

Article-No. **38.214...**

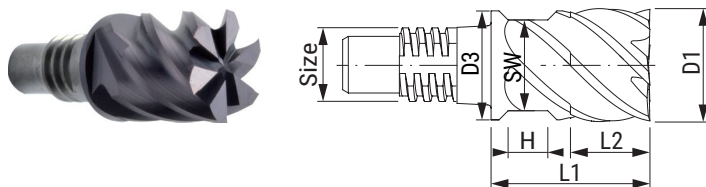
Solid carbide milling head



Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	4	38.214.100
30	12	9	17	11,60	10 x 4	4	38.214.120
40	16	12	21	15,40	13 x 4	4	38.214.160
50	20	15	26	19,20	16 x 5	4	38.214.200

TYP N


Article-No. **38.208...**

Solid carbide milling head **Multicut**


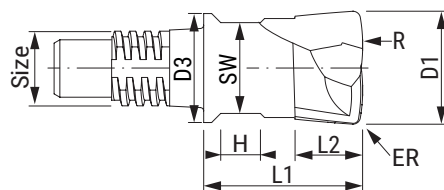
Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	6	38.208.100
30	12	9	17	11,60	10 x 4	6	38.208.120
40	16	12	21	15,40	13 x 4	6	38.208.160
50	20	15	26	19,20	16 x 5	8	38.208.200

TYP N

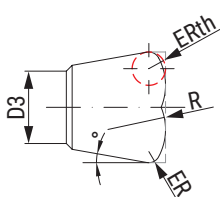


Article-No. **38.332...**

Solid carbide profile milling head with face radius



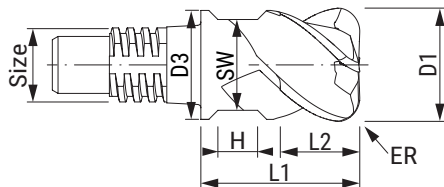
Size	D1	L2	L1	D3	ER	R	ERth	SW x H	Z	Article-No.
20	10	4	14	9,60	0,80	15	1,00	8 x 3	2	38.332.100
30	12	5	17	11,60	1,00	18	1,20	10 x 4	2	38.332.120
40	16	6	21	15,40	1,30	24	1,60	13 x 4	2	38.332.160
50	20	8	26	19,20	1,65	30	2,00	16 x 5	2	38.332.200



ERth = The theoretic corner radius is taken to ease the programming of profile milling.


Article-No. **38.313...**

Solid carbide profile milling head with corner radius

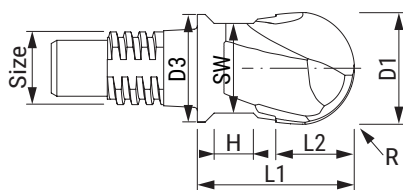


Size	D1	L2	L1	D3	ER	SW x H	Z	Article-No.
20	10	7	14	9,60	0,50	8 x 3	4	38.313.100
20	10	7	14	9,60	1,00	8 x 3	4	38.313.101
20	10	7	14	9,60	1,50	8 x 3	4	38.313.102
20	10	7	14	9,60	2,00	8 x 3	4	38.313.103
30	12	9	17	11,60	0,50	10 x 4	4	38.313.120
30	12	9	17	11,60	1,00	10 x 4	4	38.313.121
30	12	9	17	11,60	1,50	10 x 4	4	38.313.122
30	12	9	17	11,60	2,00	10 x 4	4	38.313.123
40	16	12	21	15,40	1,00	13 x 4	4	38.313.160
40	16	12	21	15,40	1,50	13 x 4	4	38.313.161
40	16	12	21	15,40	2,00	13 x 4	4	38.313.162
40	16	12	21	15,40	3,00	13 x 4	4	38.313.163
50	20	15	26	19,20	1,00	16 x 5	4	38.313.200



Article-No. **38.520...**

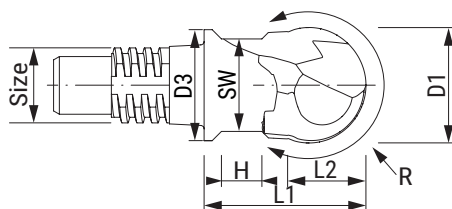
Solid carbide ball nose milling head



Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	2	38.520.100
30	12	9	17	11,60	10 x 4	2	38.520.120
40	16	12	21	15,40	13 x 4	2	38.520.160
50	20	15	26	19,20	16 x 5	2	38.520.200


Article-No. **38.671...**

Solid carbide ball nose milling head



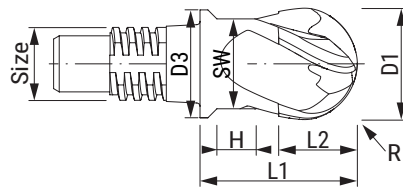
ball nose 220°

Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	2	38.671.100
30	12	9	17	11,60	10 x 4	2	38.671.120
40	16	12	21	15,40	13 x 4	2	38.671.160
50	20	15	26	19,20	16 x 5	2	38.671.200



Article-No. **38.514...**

Solid carbide ball nose milling head

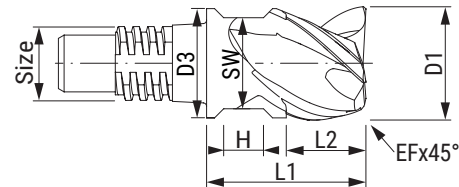


Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	4	38.514.100
30	12	9	17	11,60	10 x 4	4	38.514.120
40	16	12	21	15,40	13 x 4	4	38.514.160
50	20	15	26	19,20	16 x 5	4	38.514.200


INO Roughing mills / HPC

Article-No. **38.244...**

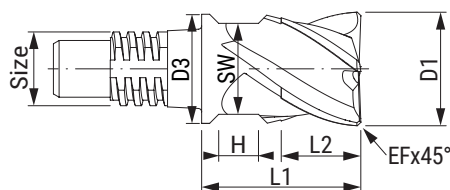
Solid carbide milling head



Size	D1	L2	L1	D3	EF	SW x H	Z	Article-No.
20	10	7	14	9,60	0,20	8 x 3	3	38.244.100
30	12	9	17	11,60	0,20	10 x 4	3	38.244.120
40	16	12	21	15,40	0,20	13 x 4	3	38.244.160
50	20	15	26	19,20	0,20	16 x 5	3	38.244.200



Article-No. **38.733...**

Solid carbide milling head **Starmax**


Size	D1	L2	L1	D3	EF	SW x H	Z	Article-No.
20	10	7	14	9,60	0,30	8 x 3	4	38.733.100
30	12	9	17	11,60	0,30	10 x 4	4	38.733.120
40	16	12	21	15,40	0,40	13 x 4	4	38.733.160
50	20	15	26	19,20	0,50	16 x 5	4	38.733.200

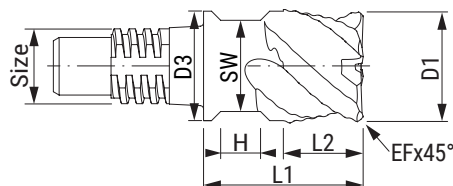
TYP N-H

HPC


Stahl
steel


GG(G)


Article-No. **38.344...**

Solid carbide roughing milling head **Quickmax Type NRf**


Size	D1	L2	L1	D3	EF	SW x H	Z	Article-No.
20	10	7	14	9,60	0,20	8 x 3	4	38.344.100
30	12	9	17	11,60	0,20	10 x 4	4	38.344.120
40	16	12	21	15,40	0,25	13 x 4	5	38.344.160
50	20	15	26	19,20	0,25	16 x 5	6	38.344.200

TYP N-W

HPC


INOX
VA

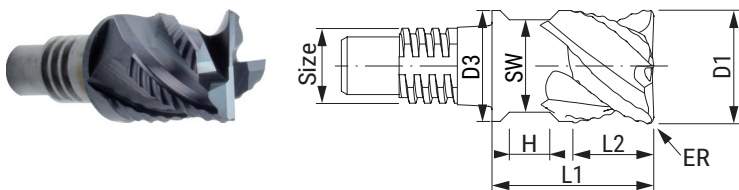

Universal



KSS



Article-No. **38.347...**

Solid carbide roughing milling head
with corner radius Type NR


Size	D1	L2	L1	D3	ER	SW x H	Z	Article-No.
20	10	7	14	9,60	0,50	8 x 3	4	38.347.100
30	12	9	17	11,60	0,50	10 x 4	4	38.347.120
40	16	12	21	15,40	1,00	13 x 4	5	38.347.160
50	20	15	26	19,20	1,00	16 x 5	5	38.347.200

TYP N-W

HPC

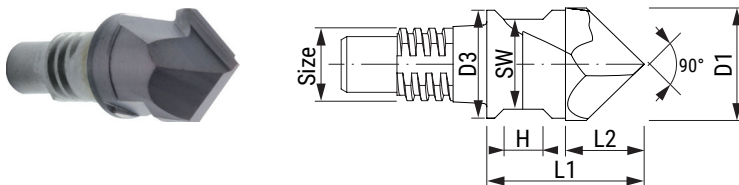

Stahl
steel


GG(G)


INO Special mills

Article-No. **38.690...**

Solid carbide multimilling head



Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	7	14	9,60	8 x 3	2	38.690.100
30	12	9	17	11,60	10 x 4	2	38.690.120
40	16	12	21	15,40	13 x 4	2	38.690.160
50	20	15	26	19,20	16 x 5	2	38.690.200

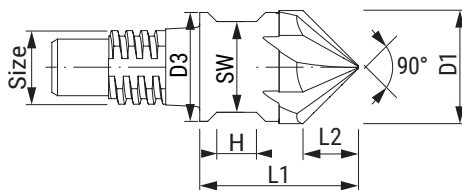
TYP N

Universal



Article-No. **38.790...**

Solid carbide deburring tool



Size	D1	L2	L1	D3	SW x H	Z	Article-No.
20	10	5	14	9,60	8 x 3	6	38.790.100
30	12	6	17	11,60	10 x 4	6	38.790.120
40	16	8	21	15,40	13 x 4	6	38.790.160
50	20	10	26	19,20	16 x 5	6	38.790.200

TYP N

Universal

xy

6

90°

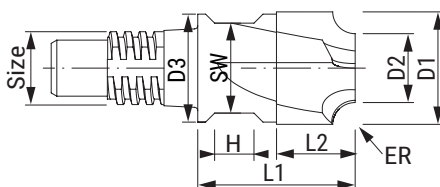
0°

INOscrew

TIALN


Article-No. **38.780...**

Solid carbide quadrant milling head with corner radius



Size	ER	D1	D2	L2	L1	D3	SW x H	Z	Article-No.
20	1,50	10	7	7	14	9,60	8 x 3	4	38.780.100
20	2,00	10	6	7	14	9,60	8 x 3	4	38.780.101
30	2,50	12	7	9	17	11,60	10 x 4	4	38.780.120
30	3,00	12	6	9	17	11,60	10 x 4	4	38.780.121
40	3,50	16	9	12	21	15,40	13 x 4	4	38.780.160
40	4,00	16	8	12	21	15,40	13 x 4	4	38.780.161
40	4,50	16	7	12	21	15,40	13 x 4	4	38.780.162
50	5,00	20	10	15	26	19,20	16 x 5	4	38.780.200
50	6,00	20	8	15	26	19,20	16 x 5	4	38.780.201

TYP N

Universal

xy

4

ER

0°

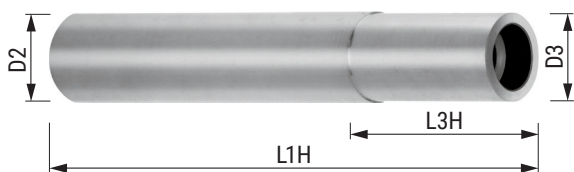
INOscrew

TIALN



Article-No. **60...**

Cylindrical replaceable head holder incl. Article 62...



Size	D2	L1H	D3	L3H	Article-No.
------	----	-----	----	-----	-------------

replaceable head holder - short

Steel

20	10	65	9,60	5	60.100.001
30	12	75	11,60	5	60.120.001
40	16	80	15,40	6	60.160.001
50	20	90	19,20	6	60.200.001

replaceable head holder - long

Steel

20	10	75	9,60	18	60.100.002
30	12	85	11,60	21	60.120.002
40	16	95	15,40	23	60.160.002
50	20	110	19,20	28	60.200.002

replaceable head holder - extra long

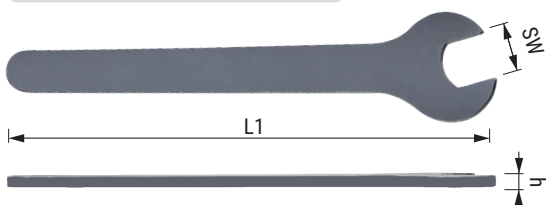
HM

= Heavy Metal

20	10	111	9,60	56	60.100.101
30	12	128	11,60	63	60.120.101
40	16	149	15,40	79	60.160.101
50	20	174	19,20	94	60.200.101

Article-No. **62...**

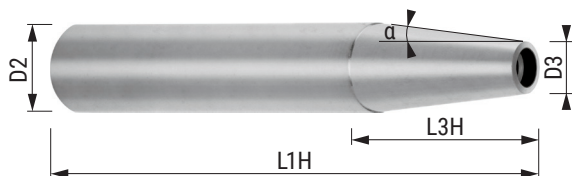
Mounting key



Size	SW	L1	h	Article-No.
20	8	92	2,80	62.100
30	10	100	3,80	62.120
40	13	135	3,80	62.160
50	16	145	4,80	62.200

Article-No. **61...**

Conical replaceable head holder incl. Article 62...



Steel



h6

Size	D2	L1H	D3	L3H	Article-No.
------	----	-----	----	-----	-------------

replaceable head holder $\alpha = 5^\circ$

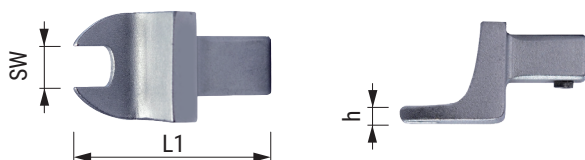
20	16	105	9,60	36	61.100.005
30	20	120	11,60	48	61.120.005
40	20	135	15,40	26	61.160.005
50	25	150	19,20	33	61.200.005

replaceable head holder $\alpha = 1^\circ$

20	16	110	9,60	36	61.100.001
30	20	130	11,60	53	61.120.001
40	20	145	15,40	59	61.160.001
50	25	180	19,20	74	61.200.001

Article-No. **63...**

Socket key



Size	SW	L1	h	Article-No.
20	8	92	2,80	63.100
30	10	100	3,80	63.120
40	13	135	3,80	63.160
50	16	145	4,80	63.200

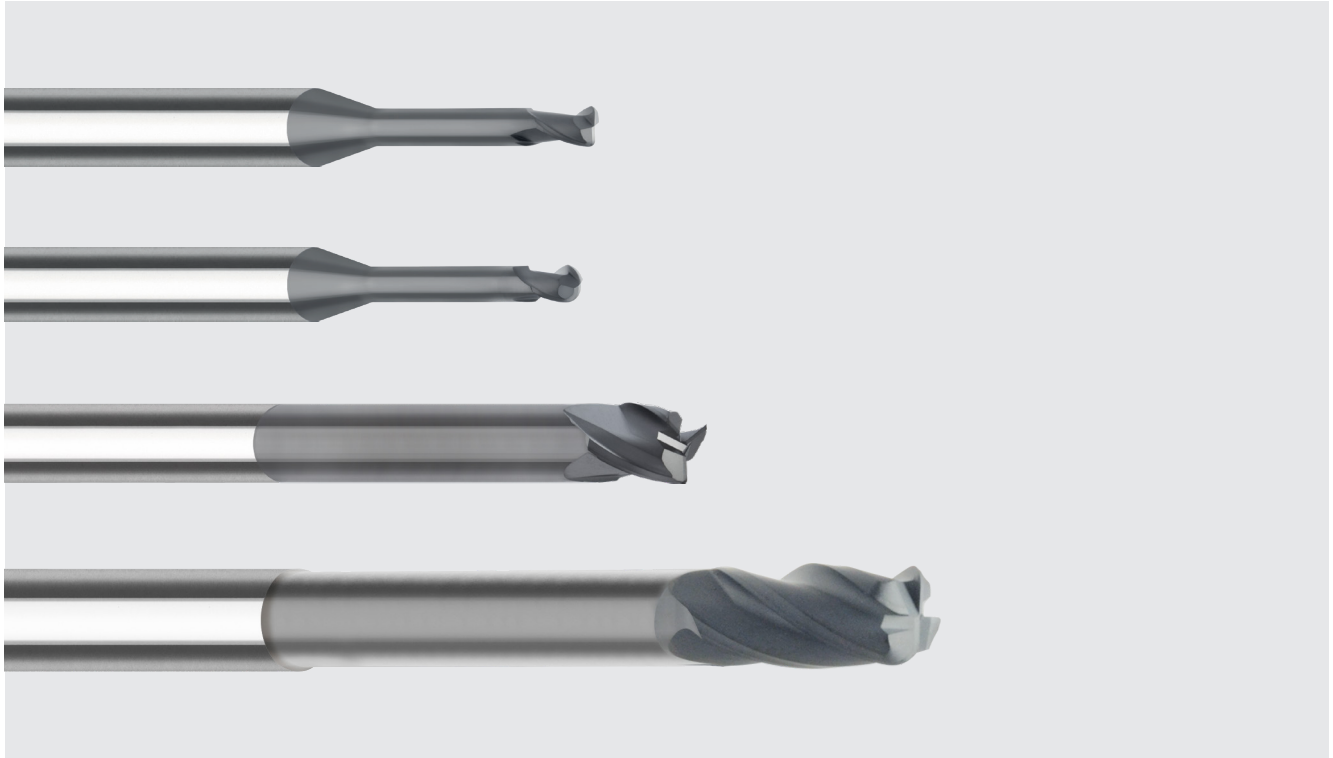
Article-No. **64...**

Torque key for socket key



Insert shank	Tightening torque	overall length	Article-No.
9 x 12	2-25	285	64.090
9 x 12	10-50	325	64.091





	Page
Overview, Field of application	76
Diamond coated mills	78



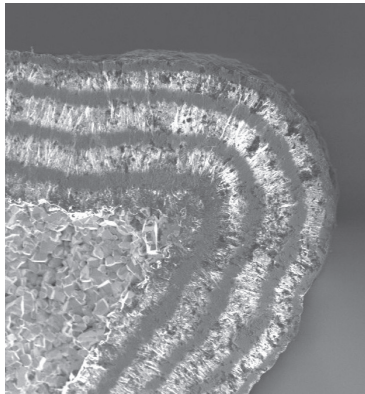
Diamond coated mills



Z (no. of teeth)	2	2	3	4	4														
Coating	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND														
Technology	HSC	HSC	HSC	HSC	HSC														
Page	78	81	85	86	87														
Article-No.	561	560	562	563	564														
Stahl steel																			
HRC 45-55																			
HRC 55-60																			
HRC 60-65																			
GG(G)	○	○	○	○	○														
ALU NE	○	○	○	○	○														
Kunststoff plastic																			
GFK/CFK Graphit	●	●	●	●	●														
stainless steel																			
INCONEL TITAN																			
TYP	N	N	N	N	N														

Diamond coating

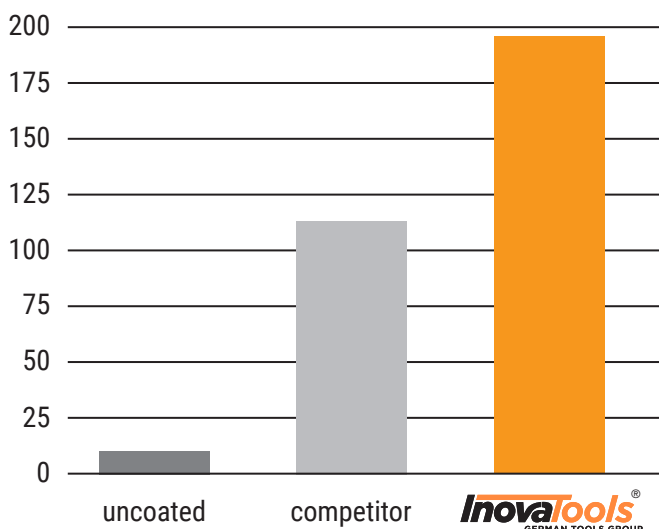
The crystalline diamond coating, which was specially developed for our diamond program, is optimally suited for the machining of graphite, glass-reinforced plastic and copper. Our diamond program is able to achieve the highest tool life due to our coatings ability to adhere to hard metal. Not only is this coating long lasting, it is also extremely abrasion-proof and there are no typical CVD lugs on the sharp cutting edges. To you, this means more parts per tool which equals a cost reduction and higher earnings! These are benefits which you do not want to miss out on!



In comparison with competitor

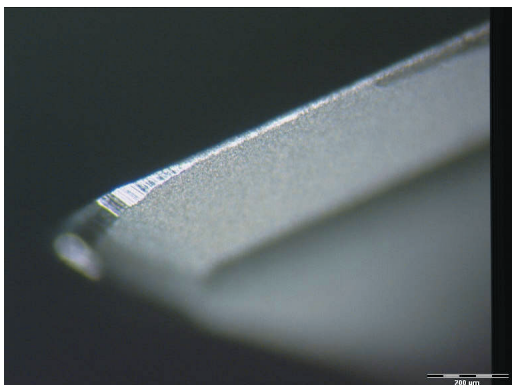
Constant layer thickness in perimeter and radius 10 µm + 2 µm

Tool life (m)

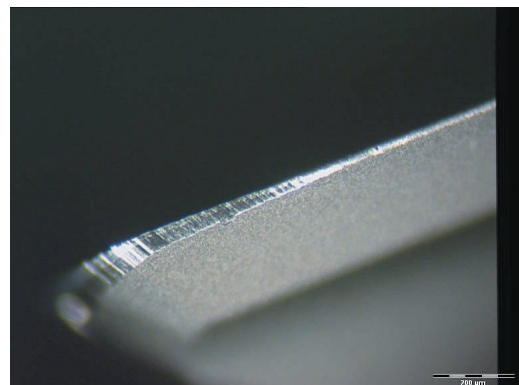


Extended tool life by factor 19 when milling graphite Application

- carbide: EMT 100
- tool: mill, Ø 12 mm
- material: Graphite EK85
- treatment: milling
- cooling: dry/air
- tool life criteria: tool wear



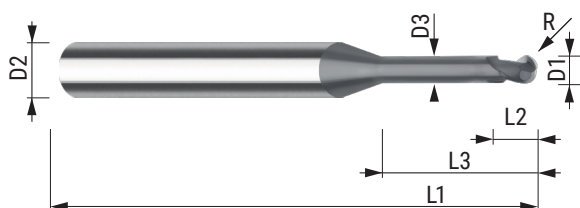
Abrasion after treatment of graphite EK 85



competitor

Article-No. **561...**

Solid carbide ball nose mill HQ-Line



D1 +0,000 -0,015	D2 h5	L2	L1	D3	L3	R +0,003 -0,003	Z	Article-No.
0,20	4,00	0,20	55	0,18	0,6	0,10	2	561.018.75
0,20	4,00	0,20	55	0,18	1,5	0,10	2	561.019.75
0,20	3,00	0,20	55	0,18	1,0	0,10	2	561.020.75
0,20	4,00	0,20	55	0,18	1,0	0,10	2	561.550.75
0,30	3,00	0,30	55	0,27	1,0	0,15	2	561.030.75
0,30	4,00	0,30	55	0,27	1,0	0,15	2	561.551.75
0,30	4,00	0,30	55	0,27	1,5	0,15	2	561.299.75
0,30	3,00	0,30	55	0,27	3,0	0,15	2	561.031.75
0,30	4,00	0,30	55	0,27	3,0	0,15	2	561.552.75
0,30	4,00	0,30	55	0,27	4,5	0,15	2	561.310.75
0,30	3,00	0,30	55	0,27	5,0	0,15	2	561.032.75
0,30	4,00	0,30	55	0,27	5,0	0,15	2	561.553.75
0,30	4,00	0,30	55	0,27	6,0	0,15	2	561.320.75
0,30	3,00	0,30	55	0,27	8,0	0,15	2	561.033.75
0,30	4,00	0,30	55	0,27	8,0	0,15	2	561.554.75
0,40	4,00	0,40	55	0,35	2,0	0,20	2	561.330.75
0,40	3,00	0,40	55	0,35	4,0	0,20	2	561.040.75
0,40	4,00	0,40	55	0,35	4,0	0,20	2	561.555.75
0,40	3,00	0,40	55	0,35	6,0	0,20	2	561.041.75
0,40	4,00	0,40	55	0,35	6,0	0,20	2	561.556.75
0,40	3,00	0,40	55	0,35	8,0	0,20	2	561.042.75
0,40	4,00	0,40	55	0,35	8,0	0,20	2	561.557.75
0,50	4,00	0,50	55	0,45	2,5	0,25	2	561.420.75
0,50	4,00	0,50	55	0,45	3,5	0,25	2	561.421.75
0,50	3,00	0,50	55	0,45	5,0	0,25	2	561.050.75
0,50	4,00	0,50	55	0,45	5,0	0,25	2	561.558.75
0,50	4,00	0,50	55	0,45	7,5	0,25	2	561.499.75
0,50	3,00	0,50	55	0,45	10,0	0,25	2	561.051.75
0,50	4,00	0,50	55	0,45	10,0	0,25	2	561.559.75
0,60	4,00	0,80	55	0,56	3,0	0,30	2	561.065.75
0,60	3,00	0,80	55	0,56	6,0	0,30	2	561.060.75
0,60	4,00	0,80	55	0,56	6,0	0,30	2	561.560.75
0,60	3,00	0,80	55	0,56	9,0	0,30	2	561.061.75
0,60	4,00	0,80	55	0,56	9,0	0,30	2	561.561.75
0,60	4,00	0,80	55	0,56	11,0	0,30	2	561.599.75
0,60	3,00	0,80	55	0,56	12,0	0,30	2	561.062.75
0,60	4,00	0,80	55	0,56	12,0	0,30	2	561.562.75
0,70	3,00	0,90	55	0,65	7,0	0,35	2	561.070.75
0,70	4,00	0,90	55	0,65	7,0	0,35	2	561.563.75
0,70	3,00	0,90	55	0,65	14,0	0,35	2	561.071.75
0,70	4,00	0,90	55	0,65	14,0	0,35	2	561.564.75

Article-No. **561...**

Solid carbide ball nose mill HQ-Line



D1 +0,000 -0,015	D2 h5	L2	L1	D3	L3	R +0,003 -0,003	Z	Article-No.
0,80	4,00	1,00	55	0,75	4,0	0,40	2	561.079.75
0,80	3,00	1,00	55	0,75	8,0	0,40	2	561.080.75
0,80	4,00	1,00	55	0,75	8,0	0,40	2	561.565.75
0,80	3,00	1,00	55	0,75	12,0	0,40	2	561.081.75
0,80	4,00	1,00	55	0,75	12,0	0,40	2	561.566.75
0,80	3,00	1,00	55	0,75	16,0	0,40	2	561.082.75
0,80	4,00	1,00	55	0,75	16,0	0,40	2	561.567.75
0,80	4,00	1,00	75	0,75	45,0	0,40	2	561.083.75
1,00	3,00	1,00	55	0,90	5,0	0,50	2	561.100.75
1,00	4,00	1,00	55	0,90	5,0	0,50	2	561.568.75
1,00	3,00	1,00	55	0,90	10,0	0,50	2	561.101.75
1,00	4,00	1,00	55	0,90	10,0	0,50	2	561.569.75
1,00	3,00	1,00	55	0,90	15,0	0,50	2	561.102.75
1,00	4,00	1,00	55	0,90	15,0	0,50	2	561.570.75
1,00	3,00	1,00	55	0,90	20,0	0,50	2	561.103.75
1,00	6,00	1,00	55	0,90	15,0	0,50	2	561.106.75
1,00	4,00	1,00	55	0,90	20,0	0,50	2	561.571.75
1,00	3,00	1,00	55	0,90	25,0	0,50	2	561.104.75
1,00	4,00	1,00	55	0,90	25,0	0,50	2	561.572.75
1,00	3,00	1,00	55	0,90	30,0	0,50	2	561.105.75
1,00	4,00	1,00	65	0,90	30,0	0,50	2	561.573.75
1,20	3,00	1,50	55	1,10	5,0	0,60	2	561.120.75
1,20	4,00	1,50	55	1,10	5,0	0,60	2	561.574.75
1,20	3,00	1,50	55	1,10	10,0	0,60	2	561.121.75
1,20	4,00	1,50	55	1,10	10,0	0,60	2	561.575.75
1,20	3,00	1,50	55	1,10	15,0	0,60	2	561.122.75
1,20	4,00	1,50	55	1,10	15,0	0,60	2	561.576.75
1,50	3,00	2,00	55	1,40	5,0	0,75	2	561.150.75
1,50	4,00	2,00	55	1,40	5,0	0,75	2	561.577.75
1,50	3,00	2,00	55	1,40	10,0	0,75	2	561.151.75
1,50	4,00	2,00	55	1,40	10,0	0,75	2	561.578.75
1,50	3,00	2,00	55	1,40	15,0	0,75	2	561.152.75
1,50	4,00	2,00	55	1,40	15,0	0,75	2	561.579.75
1,50	6,00	2,00	55	1,40	15,0	0,75	2	561.155.75
1,50	3,00	2,00	55	1,40	20,0	0,75	2	561.153.75
1,50	4,00	2,00	55	1,40	20,0	0,75	2	561.580.75
1,50	3,00	2,00	55	1,40	25,0	0,75	2	561.154.75
1,50	4,00	2,00	55	1,40	25,0	0,75	2	561.581.75
1,80	4,00	2,00	55	1,70	10,00	0,90	2	561.582.75
1,80	3,00	2,00	55	1,70	25,00	0,90	2	561.181.75
1,80	4,00	2,00	55	1,70	20,00	0,90	2	561.583.75
2,00	6,00	2,00	55	1,90	6,0	1,00	2	561.210.75
2,00	3,00	2,00	55	1,90	10,0	1,00	2	561.200.75
2,00	4,00	2,00	55	1,90	10,0	1,00	2	561.584.75
2,00	6,00	2,00	55	1,90	12,0	1,00	2	561.211.75
2,00	3,00	2,00	55	1,90	15,0	1,00	2	561.201.75
2,00	4,00	2,00	55	1,90	15,0	1,00	2	561.585.75
2,00	6,00	2,00	65	1,90	18,0	1,00	2	561.212.75



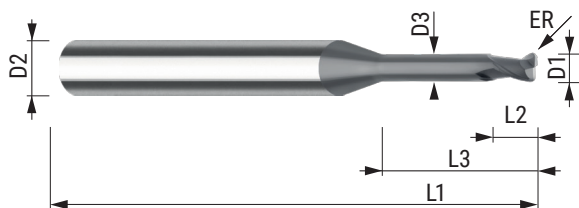
to be continued

Article-No. **561...**

Solid carbide ball nose mill HQ-Line



D1 +0,000 -0,015	D2 h5	L2	L1	D3	L3	R +0,003 -0,003	Z	Article-No.
2,00	3,00	2,00	55	1,90	20,0	1,00	2	561.202.75
2,00	4,00	2,00	55	1,90	20,0	1,00	2	561.586.75
2,00	6,00	2,00	65	1,90	20,0	1,00	2	561.205.75
2,00	6,00	2,00	65	1,90	24,0	1,00	2	561.213.75
2,00	3,00	2,00	65	1,90	25,0	1,00	2	561.203.75
2,00	4,00	2,00	65	1,90	25,0	1,00	2	561.587.75
2,00	3,00	2,00	65	1,90	30,0	1,00	2	561.204.75
2,00	4,00	2,00	65	1,90	30,0	1,00	2	561.588.75
2,00	6,00	2,00	65	1,90	20,0	1,00	2	561.206.75
2,50	6,00	3,00	65	2,40	20,0	1,25	2	561.250.75
3,00	6,00	3,00	65	2,90	9,0	1,50	2	561.311.75
3,00	4,00	3,00	65	2,90	10,0	1,50	2	561.300.75
3,00	4,00	3,00	65	2,90	12,0	1,50	2	561.313.75
3,00	4,00	3,00	65	2,90	15,0	1,50	2	561.301.75
3,00	6,00	3,00	65	2,90	18,0	1,50	2	561.312.75
3,00	4,00	3,00	65	2,90	20,0	1,50	2	561.302.75
3,00	6,00	3,00	65	2,90	20,0	1,50	2	561.305.75
3,00	4,00	3,00	75	2,90	25,0	1,50	2	561.303.75
3,00	4,00	3,00	75	2,90	30,0	1,50	2	561.304.75
3,00	4,00	3,00	75	2,90	45,0	1,50	2	561.306.75
3,50	6,00	3,00	65	3,40	20,0	1,75	2	561.350.75
4,00	6,00	4,00	65	3,90	10,0	2,00	2	561.411.75
4,00	6,00	4,00	65	3,90	12,0	2,00	2	561.412.75
4,00	6,00	4,00	75	3,90	24,0	2,00	2	561.413.75
4,00	6,00	4,00	65	3,90	20,0	2,00	2	561.400.75
4,00	6,00	4,00	75	3,90	30,0	2,00	2	561.401.75
4,00	6,00	4,00	90	3,90	40,0	2,00	2	561.402.75
5,00	6,00	5,00	65	4,90	15,0	2,00	2	561.414.75
5,00	6,00	5,00	65	4,90	20,0	2,50	2	561.500.75
5,00	6,00	5,00	75	4,90	30,0	2,50	2	561.501.75
5,00	6,00	5,00	90	4,90	40,0	2,50	2	561.502.75
5,00	6,00	5,00	90	4,90	50,0	2,50	2	561.503.75
6,00	6,00	6,00	65	5,90	18,0	3,00	2	561.515.75
6,00	6,00	6,00	75	5,90	30,0	3,00	2	561.600.75
6,00	6,00	6,00	90	5,90	40,0	3,00	2	561.601.75
6,00	6,00	6,00	90	5,90	50,0	3,00	2	561.602.75
6,00	6,00	6,00	100	5,90	60,0	3,00	2	561.603.75
8,00	8,00	8,00	80	7,80	30,0	4,00	2	561.800.75
8,00	8,00	8,00	100	7,80	60,0	4,00	2	561.801.75
10,00	10,00	10,00	80	9,80	30,0	5,00	2	561.900.75
10,00	10,00	10,00	100	9,80	60,0	5,00	2	561.901.75
12,00	12,00	12,00	83	11,80	30,0	6,00	2	561.902.75
12,00	12,00	12,00	100	11,80	60,0	6,00	2	561.903.75

Article-No. **560...**
Solid carbide profile mill with corner radius HQ-Line


D1 +0,000 -0,015	D2 h5	L2	L1	D3	L3	ER +0,003 -0,003	Z	Article-No.
0,20	4,00	0,20	55	0,18	0,60	0,02	2	560.016.75
0,20	4,00	0,20	55	0,18	1,50	0,02	2	560.017.75
0,20	3,00	0,20	55	0,20	1,00	0,02	2	560.018.75
0,20	4,00	0,20	55	0,20	1,00	0,02	2	560.019.75
0,20	3,00	0,20	55	0,20	1,00	0,05	2	560.020.75
0,20	4,00	0,20	55	0,20	1,00	0,05	2	560.021.75
0,30	3,00	0,30	55	0,27	1,00	0,02	2	560.023.75
0,30	4,00	0,30	55	0,27	1,00	0,02	2	560.024.75
0,30	4,00	0,30	55	0,27	1,50	0,02	2	560.025.75
0,30	3,00	0,30	55	0,27	3,00	0,02	2	560.026.75
0,30	4,00	0,30	55	0,27	3,00	0,02	2	560.027.75
0,30	4,00	0,30	55	0,27	4,50	0,02	2	560.028.75
0,30	4,00	0,30	55	0,27	6,00	0,02	2	560.029.75
0,30	3,00	0,30	55	0,27	1,00	0,05	2	560.030.75
0,30	4,00	0,30	55	0,27	1,00	0,05	2	560.330.75
0,30	3,00	0,30	55	0,27	3,00	0,05	2	560.031.75
0,30	4,00	0,30	55	0,27	3,00	0,05	2	560.032.75
0,40	3,00	0,40	55	0,35	2,00	0,05	2	560.040.75
0,40	4,00	0,40	55	0,35	2,00	0,05	2	560.440.75
0,40	3,00	0,40	55	0,35	4,00	0,05	2	560.041.75
0,40	4,00	0,40	55	0,35	4,00	0,05	2	560.441.75
0,40	4,00	0,40	55	0,35	6,00	0,05	2	560.442.75
0,40	3,00	0,40	55	0,35	8,00	0,05	2	560.042.75
0,40	4,00	0,40	55	0,35	8,00	0,05	2	560.043.75
0,50	3,00	0,50	55	0,45	2,00	0,05	2	560.050.75
0,50	4,00	0,50	55	0,45	2,00	0,05	2	560.550.75
0,50	4,00	0,50	55	0,45	2,50	0,05	2	560.553.75
0,50	4,00	0,50	55	0,45	3,50	0,05	2	560.554.75
0,50	3,00	0,50	55	0,45	5,00	0,05	2	560.051.75
0,50	4,00	0,50	55	0,45	5,00	0,05	2	560.551.75
0,50	4,00	0,50	55	0,45	7,00	0,05	2	560.555.75
0,50	3,00	0,50	55	0,45	10,00	0,05	2	560.052.75
0,50	4,00	0,50	55	0,45	10,00	0,05	2	560.053.75
0,60	3,00	0,80	55	0,56	3,00	0,06	2	560.060.75
0,60	4,00	0,80	55	0,56	3,00	0,06	2	560.660.75
0,60	3,00	0,80	55	0,56	6,00	0,06	2	560.061.75
0,60	4,00	0,80	55	0,56	6,00	0,06	2	560.661.75
0,60	3,00	0,80	55	0,56	9,00	0,06	2	560.062.75
0,60	4,00	0,80	55	0,56	9,00	0,06	2	560.662.75
0,60	4,00	0,80	55	0,56	11,00	0,06	2	560.664.75
0,60	3,00	0,80	55	0,56	12,00	0,06	2	560.063.75
0,60	4,00	0,80	55	0,56	12,00	0,06	2	560.663.75

**1st
CHOICE**

TYP N

HSC


GFK/CFK
Graphit


to be continued

Article-No. 560...

Solid carbide profile mill with corner radius HQ-Line



D1 +0,000 -0,015	D2 h5	L2	L1	D3	L3	ER +0,003 -0,003	Z	Article-No.
0,80	3,00	1,00	55	0,75	4,00	0,08	2	560.080.75
0,80	4,00	1,00	55	0,75	4,00	0,08	2	560.880.75
0,80	3,00	1,00	55	0,75	8,00	0,08	2	560.081.75
0,80	4,00	1,00	55	0,75	8,00	0,08	2	560.881.75
0,80	3,00	1,00	55	0,75	12,00	0,08	2	560.082.75
0,80	4,00	1,00	55	0,75	12,00	0,08	2	560.882.75
0,80	3,00	1,00	55	0,75	16,00	0,08	2	560.083.75
0,80	4,00	1,00	55	0,75	16,00	0,08	2	560.883.75
1,00	3,00	1,00	55	0,90	5,00	0,10	2	560.100.75
1,00	4,00	1,00	55	0,90	5,00	0,10	2	560.110.75
1,00	3,00	1,00	55	0,90	10,00	0,10	2	560.101.75
1,00	4,00	1,00	55	0,90	10,00	0,10	2	560.111.75
1,00	3,00	1,00	55	0,90	15,00	0,10	2	560.102.75
1,00	4,00	1,00	55	0,90	15,00	0,10	2	560.112.75
1,00	6,00	1,00	55	0,90	15,00	0,10	2	560.115.75
1,00	3,00	1,00	55	0,90	20,00	0,10	2	560.103.75
1,00	4,00	1,00	55	0,90	20,00	0,10	2	560.113.75
1,00	3,00	1,00	55	0,90	25,00	0,10	2	560.104.75
1,00	4,00	1,00	55	0,90	25,00	0,10	2	560.114.75
1,20	4,00	1,50	55	1,10	5,00	0,12	2	560.125.75
1,20	3,00	1,50	55	1,10	5,00	0,12	2	560.120.75
1,20	3,00	1,50	55	1,10	10,00	0,12	2	560.121.75
1,20	4,00	1,50	55	1,10	10,00	0,12	2	560.124.75
1,20	3,00	1,50	55	1,10	15,00	0,12	2	560.122.75
1,20	4,00	1,50	55	1,10	15,00	0,12	2	560.123.75
1,50	3,00	2,00	55	1,40	5,00	0,15	2	560.150.75
1,50	4,00	2,00	55	1,40	5,00	0,15	2	560.161.75
1,50	4,00	2,00	55	1,40	8,00	0,15	2	560.160.75
1,50	3,00	2,00	55	1,40	8,00	0,15	2	560.151.75
1,50	3,00	2,00	55	1,40	10,00	0,15	2	560.152.75
1,50	4,00	2,00	55	1,40	10,00	0,15	2	560.159.75
1,50	3,00	2,00	55	1,40	15,00	0,15	2	560.153.75
1,50	4,00	2,00	55	1,40	15,00	0,15	2	560.158.75
1,50	6,00	2,00	55	1,40	15,00	0,15	2	560.179.75
1,50	3,00	2,00	55	1,40	20,00	0,15	2	560.154.75
1,50	4,00	2,00	55	1,40	20,00	0,15	2	560.157.75
1,50	3,00	2,00	55	1,40	25,00	0,15	2	560.155.75
1,50	4,00	2,00	55	1,40	25,00	0,15	2	560.156.75
1,80	3,00	2,00	55	1,70	10,00	0,18	2	560.180.75
1,80	4,00	2,00	55	1,70	10,00	0,18	2	560.183.75
1,80	3,00	2,00	55	1,70	20,00	0,18	2	560.181.75
1,80	4,00	2,00	55	1,70	20,00	0,18	2	560.182.75
2,00	4,00	2,00	55	1,90	6,00	0,20	2	560.184.75
2,00	3,00	2,00	65	1,90	10,00	0,20	2	560.200.75
2,00	4,00	2,00	65	1,90	10,00	0,20	2	560.210.75
2,00	4,00	2,00	55	1,90	12,00	0,20	2	560.211.75
2,00	3,00	2,00	65	1,90	15,00	0,20	2	560.201.75
2,00	4,00	2,00	65	1,90	15,00	0,20	2	560.221.75
2,00	4,00	2,00	65	1,90	18,00	0,20	2	560.234.75

TYP N

HSC

GFK/CFK
Graphit

Article-No. 560...

Solid carbide profile mill with corner radius HQ-Line



D1 +0,000 -0,015	D2 h5	L2	L1	D3	L3	ER +0,003 -0,003	Z	Article-No.
2,00	3,00	2,00	65	1,90	20,00	0,20	2	560.202.75
2,00	4,00	2,00	65	1,90	20,00	0,20	2	560.222.75
2,00	6,00	2,00	65	1,90	20,00	0,20	2	560.209.75
2,00	4,00	2,00	65	1,90	24,00	0,20	2	560.218.75
2,00	3,00	2,00	65	1,90	25,00	0,20	2	560.203.75
2,00	4,00	2,00	65	1,90	25,00	0,20	2	560.231.75
2,00	4,00	2,00	65	1,90	30,00	0,20	2	560.232.75
2,00	4,00	2,00	55	1,90	6,00	0,50	2	560.233.75
2,00	3,00	2,00	65	1,90	10,00	0,50	2	560.204.75
2,00	4,00	2,00	65	1,90	10,00	0,50	2	560.241.75
2,00	4,00	2,00	55	1,90	12,00	0,50	2	560.242.75
2,00	3,00	2,00	65	1,90	15,00	0,50	2	560.205.75
2,00	4,00	2,00	65	1,90	15,00	0,50	2	560.251.75
2,00	4,00	2,00	65	1,90	18,00	0,50	2	560.252.75
2,00	3,00	2,00	65	1,90	20,00	0,50	2	560.206.75
2,00	4,00	2,00	65	1,90	20,00	0,50	2	560.261.75
2,00	4,00	2,00	65	1,90	24,00	0,50	2	560.262.75
2,00	3,00	2,00	65	1,90	25,00	0,50	2	560.207.75
2,00	4,00	2,00	65	1,90	25,00	0,50	2	560.208.75
2,00	4,00	2,00	65	1,90	30,00	0,50	2	560.281.75
2,50	6,00	3,00	65	2,40	20,00	0,20	2	560.250.75
3,00	6,00	3,00	65	2,90	9,00	0,30	2	560.311.75
3,00	6,00	3,00	65	2,90	12,00	0,30	2	560.312.75
3,00	4,00	3,00	65	2,90	15,00	0,30	2	560.300.75
3,00	6,00	3,00	65	2,90	18,00	0,30	2	560.313.75
3,00	4,00	3,00	75	2,90	25,00	0,30	2	560.301.75
3,00	6,00	3,00	75	2,90	30,00	0,30	2	560.314.75
3,00	6,00	3,00	90	2,90	45,00	0,30	2	560.315.75
3,00	6,00	3,00	65	2,90	8,00	0,50	2	560.316.75
3,00	4,00	3,00	65	2,90	10,00	0,50	2	560.302.75
3,00	6,00	3,00	65	2,90	12,00	0,50	2	560.317.75
3,00	4,00	3,00	65	2,90	15,00	0,50	2	560.303.75
3,00	6,00	3,00	65	2,90	18,00	0,50	2	560.318.75
3,00	4,00	3,00	65	2,90	20,00	0,50	2	560.304.75
3,00	6,00	3,00	65	2,90	20,00	0,50	2	560.308.75
3,00	4,00	3,00	75	2,90	25,00	0,50	2	560.305.75
3,00	4,00	3,00	75	2,90	30,00	0,50	2	560.306.75
3,00	6,00	3,00	90	2,90	45,00	0,50	2	560.307.75
3,50	6,00	3,00	65	3,40	20,00	0,50	2	560.350.75
4,00	6,00	4,00	65	3,90	15,00	0,30	2	560.411.75
4,00	6,00	4,00	65	3,90	15,00	0,40	2	560.400.75
4,00	6,00	4,00	75	3,90	25,00	0,40	2	560.401.75
4,00	6,00	4,00	65	3,90	10,00	0,50	2	560.412.75
4,00	6,00	4,00	65	3,90	12,00	0,50	2	560.413.75
4,00	6,00	4,00	65	3,90	20,00	0,50	2	560.402.75
4,00	6,00	4,00	75	3,90	24,00	0,50	2	560.414.75
4,00	6,00	4,00	75	3,90	30,00	0,50	2	560.403.75
4,00	6,00	4,00	90	3,90	40,00	0,50	2	560.404.75

TYP N

HSC

GFK/CFK
Graphit

to be continued

Article-No. **560...**

Solid carbide profile mill with corner radius **HQ-Line**


D1 + 0,000 - 0,015	D2 h5	L2	L1	D3	L3	ER + 0,003 - 0,003	Z	Article-No.
5,00	6,00	5,00	65	3,90	15,00	0,50	2	560.405.75
5,00	6,00	5,00	75	4,90	20,00	0,50	2	560.500.75
5,00	6,00	5,00	75	4,90	30,00	0,50	2	560.501.75
5,00	6,00	5,00	90	4,90	40,00	0,50	2	560.502.75
5,00	6,00	5,00	90	4,90	50,00	0,50	2	560.503.75
6,00	6,00	6,00	75	5,90	30,00	0,30	2	560.504.75
6,00	6,00	6,00	75	5,90	20,00	0,50	2	560.505.75
6,00	6,00	6,00	75	5,90	30,00	0,50	2	560.600.75
6,00	6,00	6,00	90	5,90	40,00	0,50	2	560.601.75
6,00	6,00	6,00	90	5,90	50,00	0,50	2	560.602.75
6,00	6,00	6,00	100	5,90	60,00	0,50	2	560.603.75
6,00	6,00	6,00	75	5,90	30,00	1,00	2	560.604.75
6,00	6,00	6,00	90	5,90	40,00	1,00	2	560.605.75
8,00	8,00	8,00	80	7,80	30,00	0,50	2	560.800.75
8,00	8,00	8,00	100	7,80	60,00	0,50	2	560.801.75
8,00	8,00	8,00	80	7,80	30,00	1,00	2	560.802.75
8,00	8,00	8,00	100	7,80	60,00	1,00	2	560.803.75
10,00	10,00	10,00	80	9,80	30,00	0,50	2	560.900.75
10,00	10,00	10,00	100	9,80	60,00	0,50	2	560.901.75
10,00	10,00	10,00	80	9,80	30,00	1,00	2	560.902.75
10,00	10,00	10,00	100	9,80	60,00	1,00	2	560.903.75
12,00	12,00	12,00	80	11,80	30,00	0,50	2	560.904.75
12,00	12,00	12,00	100	11,80	60,00	0,50	2	560.905.75
12,00	12,00	12,00	80	11,80	30,00	1,00	2	560.906.75
12,00	12,00	12,00	100	11,80	60,00	1,00	2	560.907.75

TYP N

HSC


GFK/CFK
Graphit

 $\varnothing_1$
+ 0,000
- 0,015

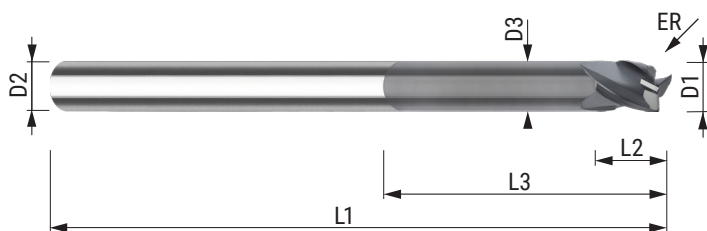
 λ 0,005

 r_p
+ 0,003
- 0,003

Diamond
10+2 μ m

Article-No. **562...**

Solid carbide profile mill with corner radius



D1	D2 h5	L2	L1	D3	L3	ER	Z	Article-No.
3,00	6,00	6	80	2,80	20	0,20	3	562.030.75
3,00	6,00	6	80	2,80	30	0,30	3	562.031.75
4,00	6,00	8	90	3,80	30	0,50	3	562.040.75
4,00	6,00	8	100	3,80	20	0,20	3	562.041.75
4,00	6,00	8	100	3,80	20	0,30	3	562.042.75
4,00	6,00	8	100	3,80	20	0,50	3	562.043.75
6,00	6,00	10	108	5,80	25	0,30	3	562.060.75
6,00	6,00	10	108	5,80	25	0,50	3	562.061.75

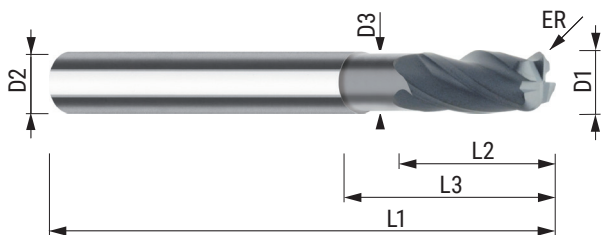
TYP N

HSC


GFK/CFK
Graphit


Article-No. **563...**

Solid carbide profile mill with corner radius



D1	D2 h5	L2	L1	D3	L3	ER + 0,003 - 0,003	Z	Article-No.
3,00	3,00	6	50	2,70	14	0,30	4	563.030.75
3,00	3,00	6	50	2,70	14	0,50	4	563.031.75
3,00	3,00	6	50	2,70	14	1,00	4	563.032.75
4,00	4,00	8	50	3,70	16	0,40	4	563.040.75
4,00	4,00	8	50	3,70	16	0,50	4	563.041.75
4,00	4,00	8	50	3,70	16	1,00	4	563.042.75
5,00	5,00	10	54	4,60	18	0,50	4	563.050.75
5,00	5,00	10	54	4,60	18	1,00	4	563.051.75
6,00	6,00	13	57	5,50	21	0,50	4	563.060.75
6,00	6,00	13	57	5,50	21	1,00	4	563.061.75
6,00	6,00	13	57	5,50	21	1,50	4	563.062.75
8,00	8,00	15	63	7,40	27	0,50	4	563.080.75
8,00	8,00	15	63	7,40	27	1,00	4	563.081.75
8,00	8,00	15	63	7,40	27	1,50	4	563.082.75
8,00	8,00	15	63	7,40	27	2,00	4	563.083.75
10,00	10,00	18	72	9,20	32	0,50	4	563.100.75
10,00	10,00	18	72	9,20	32	1,00	4	563.101.75
10,00	10,00	18	72	9,20	32	1,50	4	563.102.75
10,00	10,00	18	72	9,20	32	2,00	4	563.103.75
12,00	12,00	26	83	11,00	38	0,50	4	563.120.75
12,00	12,00	26	83	11,00	38	1,00	4	563.121.75
12,00	12,00	26	83	11,00	38	1,50	4	563.122.75
12,00	12,00	26	83	11,00	38	2,00	4	563.123.75
16,00	16,00	32	92	15,00	50	0,50	4	563.160.75
16,00	16,00	32	92	15,00	50	1,00	4	563.161.75
16,00	16,00	32	92	15,00	50	1,50	4	563.162.75
16,00	16,00	32	92	15,00	50	2,00	4	563.163.75

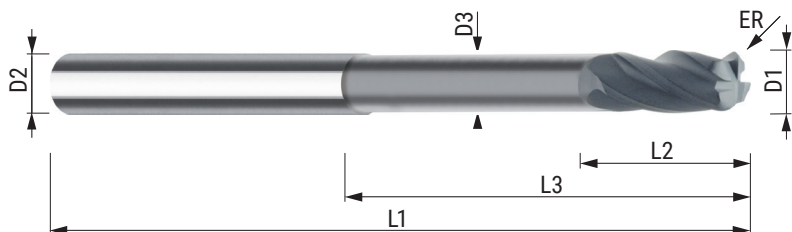
TYP N

HSC


GFK/CFK
Graphit


Article-No. **564...**

Solid carbide profile mill with corner radius



D1	D2 h5	L2	L1	D3	L3	ER	Z	Article-No.
3,00	3,00	6	80	2,70	32	0,30	4	564.030.75
3,00	3,00	6	80	2,70	32	0,50	4	564.031.75
3,00	3,00	6	80	2,70	32	1,00	4	564.032.75
4,00	4,00	8	80	3,70	36	0,40	4	564.040.75
4,00	4,00	8	80	3,70	36	0,50	4	564.041.75
4,00	4,00	8	80	3,70	36	1,00	4	564.042.75
5,00	5,00	10	80	4,60	40	0,50	4	564.050.75
5,00	5,00	10	80	4,60	40	1,00	4	564.051.75
6,00	6,00	13	90	5,50	44	0,50	4	564.060.75
6,00	6,00	13	90	5,50	44	1,00	4	564.061.75
6,00	6,00	13	90	5,50	44	1,50	4	564.062.75
8,00	8,00	15	100	7,40	54	0,50	4	564.080.75
8,00	8,00	15	100	7,40	54	1,00	4	564.081.75
8,00	8,00	15	100	7,40	54	1,50	4	564.082.75
8,00	8,00	15	100	7,40	54	2,00	4	564.083.75
10,00	10,00	18	100	9,20	60	0,50	4	564.100.75
10,00	10,00	18	100	9,20	60	1,00	4	564.101.75
10,00	10,00	18	100	9,20	60	1,50	4	564.102.75
10,00	10,00	18	100	9,20	60	2,00	4	564.103.75
12,00	12,00	26	120	11,00	75	0,50	4	564.120.75
12,00	12,00	26	120	11,00	75	1,00	4	564.121.75
12,00	12,00	26	120	11,00	75	1,50	4	564.122.75
12,00	12,00	26	120	11,00	75	2,00	4	564.123.75
16,00	16,00	32	120	15,00	85	0,50	4	564.160.75
16,00	16,00	32	120	15,00	85	1,00	4	564.161.75
16,00	16,00	32	120	15,00	85	1,50	4	564.162.75
16,00	16,00	32	120	15,00	85	2,00	4	564.163.75







	Page
Overview, Field of application	90
Special mills	91



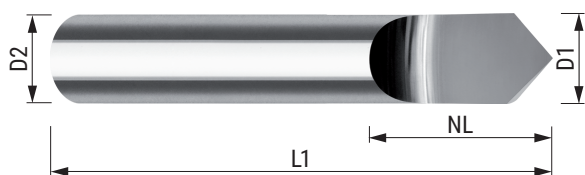
Special mills



Z (no. of teeth)	1	1	4-6	3-6	3-4	5-6	3-6	4	4										
Coating	BLANK	TIALN	TIALN	TIALN	TIALN	TIALN	TIALN	TIALN	TIALN										
Technology	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI										
Page	91	91	92	92	93	93	94	94	95										
Article-No.	740	745	760	790	900	903	904	780	901										
Stahl steel	●	●	●	●	●	●	●	●	●										
HRC 45-55	●		●	●	●	●	○	●	●										
HRC 55-60	○		○	○	○	○		○	○										
HRC 60-65																			
GG(G)	●	●	●	●	●	●	●	●	●										
ALU NE		●	●	●	●	●	●	●	●										
Kunststoff plastic		●	○	○	●	●	●	●	●										
GFK/CFK Graphit																			
stainless steel	○	○	○	○	●	●	●	●	●										
INCONEL TITAN			○	○	○	○	○	○	○										
TYP	N-H	N	N	N	N	N	N	N	N										

Article-No. **740...**

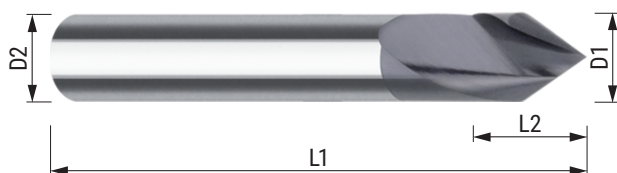
Solid carbide engraver 60°, 90°



D1	D2	L1	NL	Z	60° Article-No.	90° Article-No.
2,00	2,00	50	3,00	1	740.020.60	740.020.90
2,50	2,50	50	3,00	1	740.025.60	740.025.90
3,00	3,00	50	4,50	1	740.030.60	740.030.90
4,00	4,00	50	6,00	1	740.040.60	740.040.90
5,00	5,00	50	7,50	1	740.050.60	740.050.90
6,00	6,00	50	9,00	1	740.060.60	740.060.90
8,00	8,00	50	12,00	1	740.080.60	740.080.90
10,00	10,00	60	15,00	1	740.100.60	740.100.90
12,00	12,00	60	18,00	1	740.120.60	740.120.90


Article-No. **745...**

Solid carbide engraver 60°

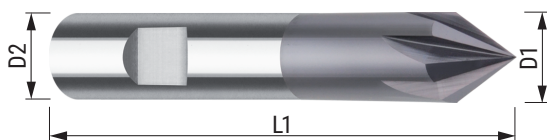


D1	D2 h6	L2	L1	Z	Article-No.
3,00	3,00	10	40	1	745.030.00
4,00	4,00	10	40	1	745.040.00
6,00	6,00	10	50	1	745.060.00



Article-No. **760...**

90° degree solid carbide deburring tool



Below Ø6 without weldon shank

D1	D2 h6	L1	Z	Article-No.	BLANK	TIALN
4,00	4,00	54	4	760.040...	.09	.00
6,00	6,00	57	4	760.060...	.09	.00
8,00	8,00	63	5	760.080...	.09	.00
10,00	10,00	72	6	760.100...	.09	.00
12,00	12,00	83	6	760.120...	.09	.00
16,00	16,00	92	6	760.160...	.09	.00
20,00	20,00	104	6	760.200...	.09	.00

TYP N

Universal

xy

4-6

60°

0°

HB

DIN 6527
long

BLANK

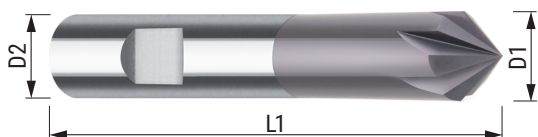
TIALN

xy

xy

Article-No. **790...**

90° degree solid carbide deburring tool



Below Ø6 without weldon shank

D1	D2 h6	L1	Z	Article-No.	BLANK	TIALN
1,00	3,00	38	3	790.010...	.09	.00
2,00	3,00	38	3	790.020...	.09	.00
3,00	3,00	38	4	790.030...	.09	.00
4,00	4,00	54	4	790.040...	.09	.00
6,00	6,00	57	4	790.060...	.09	.00
8,00	8,00	63	5	790.080...	.09	.00
10,00	10,00	72	6	790.100...	.09	.00
12,00	12,00	83	6	790.120...	.09	.00
16,00	16,00	92	6	790.160...	.09	.00
20,00	20,00	104	6	790.200...	.09	.00

TYP N

Universal

xy

3-6

90°

0°

HB

DIN 6527
long

BLANK

TIALN

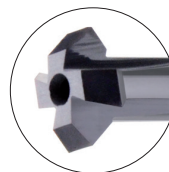
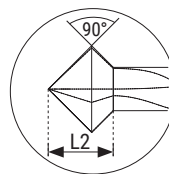
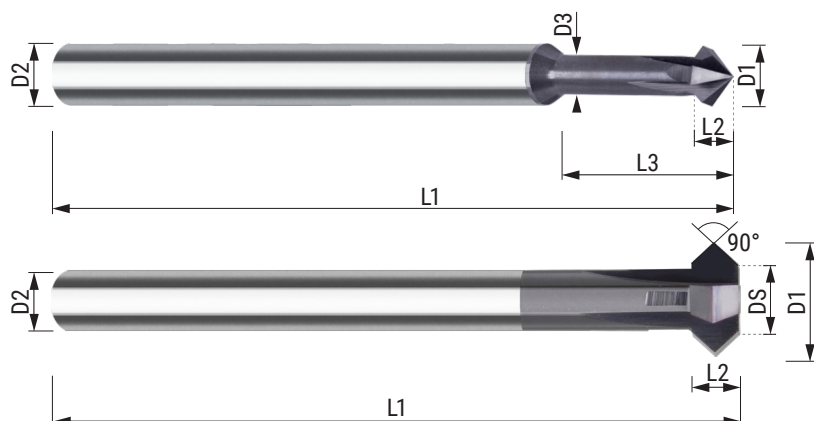
xy

xy

xy

Article-No. **900...**

90° solid carbide forward and backward deburring tool



TYP N

Universal

xy

3-4

90°

0°

HA

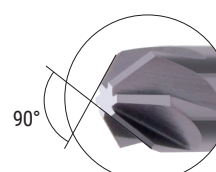
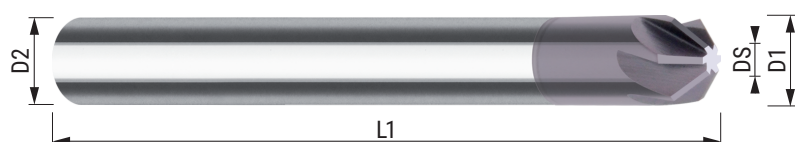
Norm

TIALN

D1	D2 h6	DS	L2	L1	D3	L3	Z	Article-No.
2,00	6,00	-	1,40	100	1,20	8	3	900.020.00
3,00	6,00	-	2,00	100	2,00	8	4	900.030.00
4,00	6,00	-	3,00	100	2,00	10	4	900.040.00
6,00	6,00	-	4,00	100	4,00	15	4	900.060.00
8,00	6,00	3,60	3,20	100	-	-	4	900.080.00
10,00	6,00	5,40	4,30	100	-	-	4	900.100.00
12,00	6,00	7,00	5,00	100	-	-	4	900.120.00
16,00	10,00	6,00	8,00	100	-	-	4	900.160.00

Article-No. **903...**

90° degree solid carbide chamfer mill



TYP N

Universal

xyz

5-6

90°

15°

HA

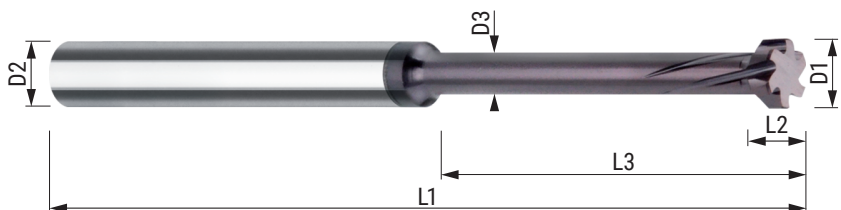
Norm

TIALN

D1	D2 h6	DS	L1	Z	Article-No.
3,00	3,00	1,00	50	5	903.030.00
4,00	4,00	1,50	50	6	903.040.00
6,00	6,00	2,00	50	6	903.060.00

Article-No. **904...**

90° solid carbide backward deburring tool



D1	D2 h6	L2	L1	D3	L3	Z	Article-No.
0,46	3,00	0,40	50	0,30	3,00	3	904.046.00
0,90	4,00	0,70	60	0,60	6,00	4	904.090.00
1,40	4,00	1,10	60	0,95	9,00	4	904.140.00
2,90	4,00	1,50	70	2,10	18,00	5	904.290.00
3,70	4,00	2,00	70	2,70	24,00	5	904.370.00
4,70	6,00	2,00	80	3,30	30,00	6	904.470.00

TYP N

Universal

xy

3-6

15°

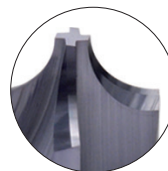
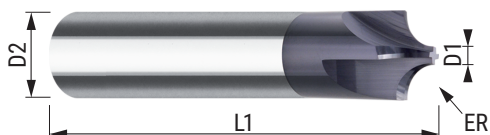
HA

Norm

TIALN

Article-No. **780...**

Solid carbide quadrant mill with corner radius



ER	D1	D2 h6	L1	Z	Article-No.	BLANK	TIALN
0,20	5,60	6,00	58	4	780.002...	.09	.00
0,30	5,40	6,00	58	4	780.003...	.09	.00
0,50	7,00	8,00	70	4	780.005...	.09	.00
1,00	6,00	8,00	70	4	780.010...	.09	.00
1,50	7,00	10,00	75	4	780.015...	.09	.00
2,00	6,00	10,00	75	4	780.020...	.09	.00
2,50	7,00	12,00	75	4	780.025...	.09	.00
3,00	6,00	12,00	75	4	780.030...	.09	.00
3,50	9,00	16,00	80	4	780.035...	.09	.00
4,00	8,00	16,00	80	4	780.040...	.09	.00
4,50	7,00	16,00	80	4	780.045...	.09	.00
5,00	10,00	20,00	80	4	780.050...	.09	.00
6,00	8,00	20,00	80	4	780.060...	.09	.00
8,00	9,00	25,00	100	4	780.080...	.09	.00
10,00	5,00	25,00	100	4	780.100...	.09	.00

TYP N

Universal

xy

4

ER

0°

HA

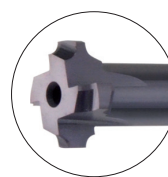
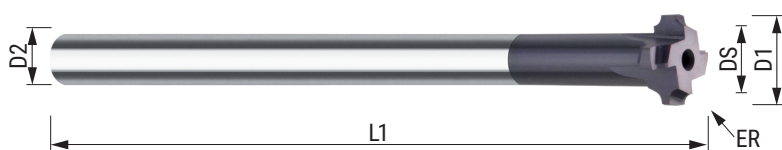
Norm

BLANK

TIALN

Article-No. **901...**

Solid carbide forward and backward quadrant mill with corner radius



D1	D2 h6	L1	DS	ER	Z	Article-No.
8,00	6,00	100	7,60	0,20	4	901.080.00
8,00	6,00	100	7,40	0,30	4	901.081.00
8,00	6,00	100	7,20	0,40	4	901.082.00
8,00	6,00	100	7,00	0,50	4	901.083.00
10,00	6,00	100	8,40	0,80	4	901.084.00
10,00	6,00	100	8,00	1,00	4	901.085.00
10,00	6,00	100	7,60	1,20	4	901.086.00
10,00	6,00	100	7,00	1,50	4	901.087.00

TYP N

Universal

xy

4

ER

0°

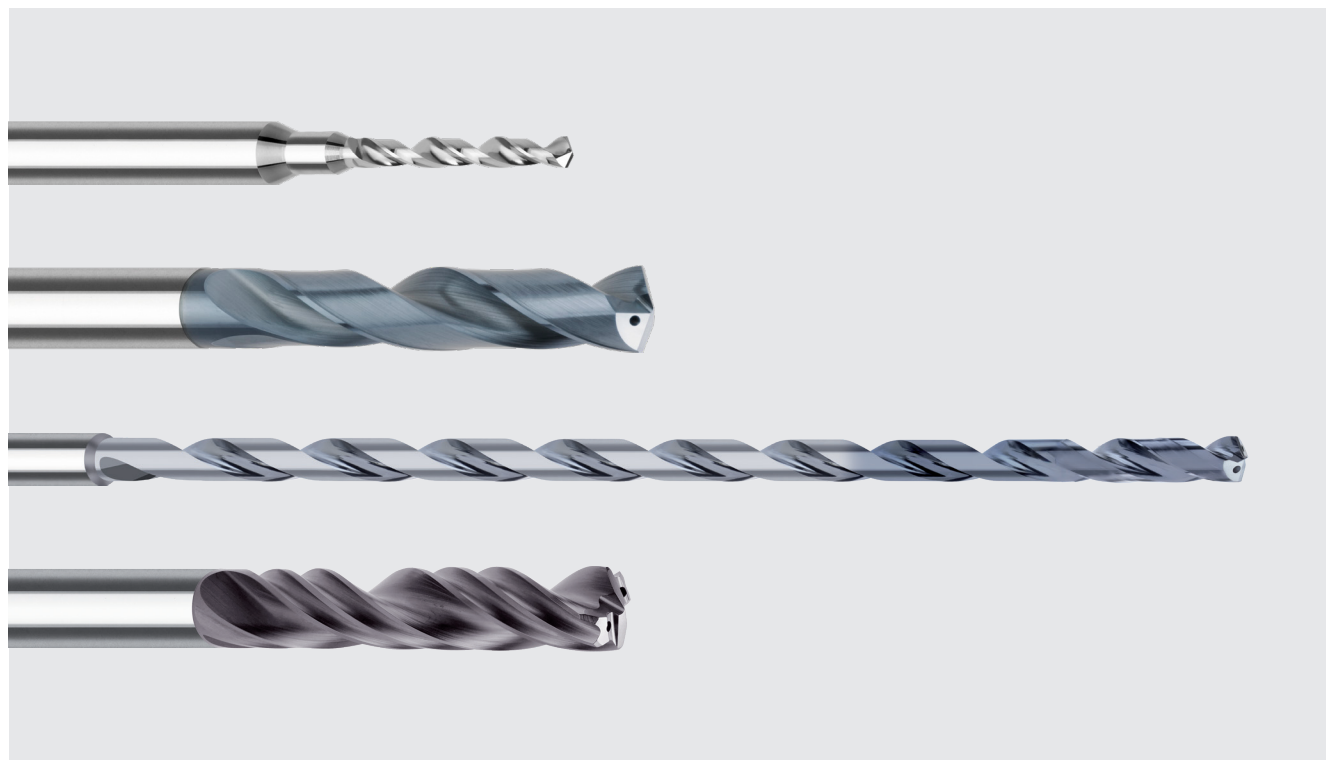
HA

Norm

TIALN



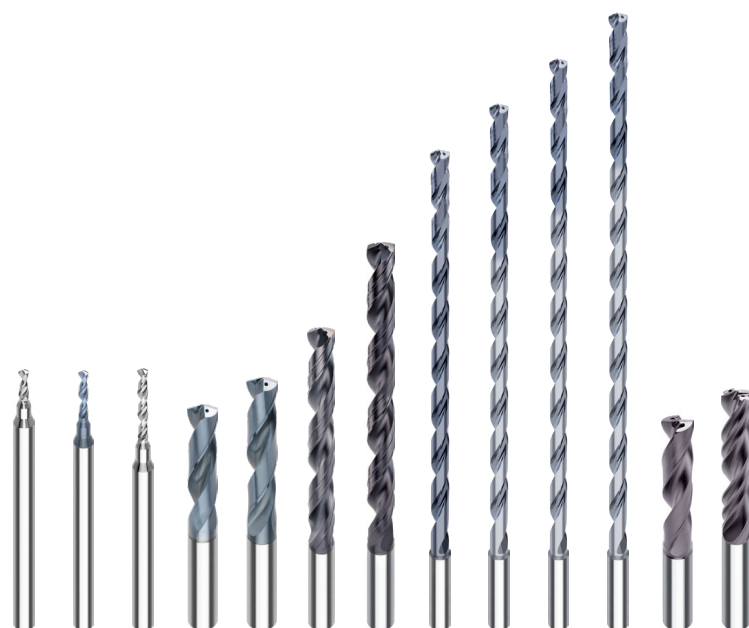




	Page
Overview, Field of application	98
Solid carbide drills	100



Solid carbide drills



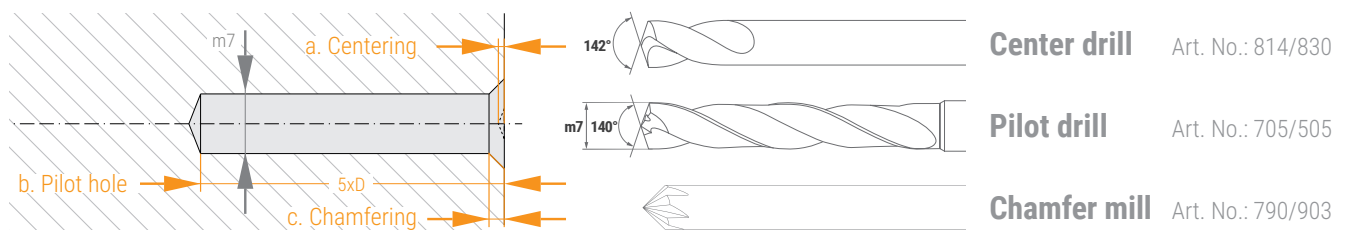
Z (no. of teeth)	2	2	2	2	2	2	2	2	2	2	2	2				
Coating	BLANK	NANOSIT	BLANK	VAROCON	VAROCON	TIALN	TIALN	VAROCON	VAROCON	VAROCON	VAROCON	TIALN	TIALN			
Technology	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI	UNI			
Page	100	101	108	112	114	116	118	120	122	123	124	125	127			
Article-No.	506	507	508	206	207	708	710	908	909	910	911	818	711			
Stahl steel	●	●	●	●	●	●	●	●	●	●	●	●	●			
HRC 45-55						○	○	○	○	○	○	●	○			
HRC 55-60												○				
HRC 60-65																
GG(G)	●	●	●	●	●	●	●	●	●	●	●	●	●			
ALU NE	●	●	●	○	○	○	○					○	○			
Kunststoff plastic																
GFK/CFK Graphit																
stainless steel	○	○	○	●	●	○	○	●	●	●	●	○				
INCONEL TITAN				○	○							○				
IK				●	●	●	●	●	●	●	●	●	●			
TYP	N-H	N-H	N-H	N-H	N-H	N	N	N	N	N	N	N	N			

Guidelines for deep hole drilling

When it comes to deep hole drilling, there are certain procedures and factors that are particularly important for ensuring reliable machining. The Deepmax is tailored to our 5xD **207 Series** standard drills, which are the ideal pilot drills.

1. Pilot hole

- Uneven surfaces must be faced or face milled prior to drilling the pilot hole.
We also recommend centering the workpiece.
- Use a two flute drilling tool with a 140° point angle and an m7 tolerance range.
Should you be using a third-party product as your pilot drill, please make sure pilot drill diameter is M7 tolerance.
- The pilot hole should ideally have a depth of 5xD or at least 1.5xD.
- Centering and subsequent chamfering is absolutely essential for horizontal machining.
- Any chips must be removed from the pilot hole prior to drilling the deep hole.



2. Deep hole

2.1. Entering the deep hole drill into the pilot hole

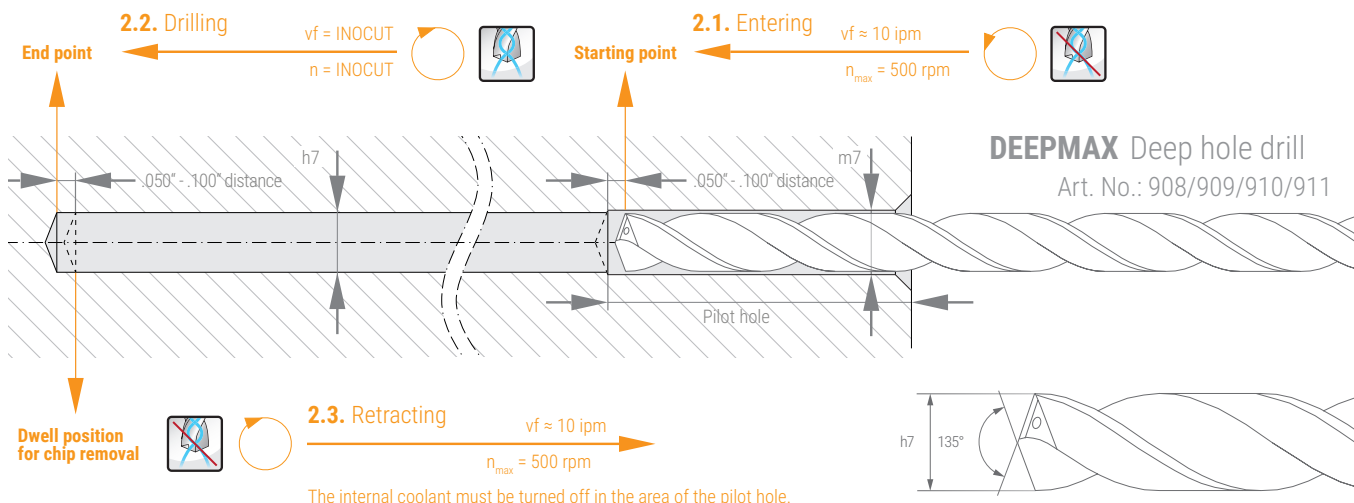
- The internal coolant must be turned off for this procedure.
- Set a maximum rotation speed of 500 rpm, preferably with anti-clockwise rotation, and a feed rate of around 10 ipm.
- Enter the drill to .050"-.100" short of the bottom of the pilot hole.

2.2. Deep hole drilling

- Please make sure you allow enough dwell time for the spindle to start and the internal coolant to build up pressure.
 - We recommend using our INOCUT cutting data without chip evacuation (pecking). It should not be necessary to retract the drill for holes up to 30xD. Should additional chip removal be required, we recommend retracting the drill to 3xD.
- When reaching intersecting holes or making through holes, reduce the feed rate by 50% prior to breakout.

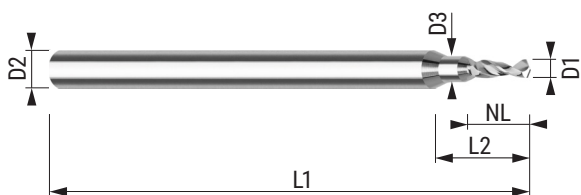
2.3. Retracting the deep hole drill

- After reaching the maximum depth, retract the deep hole drill by .050"-.100" (depending on the diameter) for chip removal.
- If the coolant pressure is too low, you might need to program some dwell time.
- Then reduce the rotation speed to a maximum of 500 rpm.
- Retract the drill out of the hole at a programmed feed rate of around 40 ipm max (not in rapid traverse).



Article-No. **506...**

Solid carbide micro drill 3xD



D1 h6	D2	L2	L1	D3	NL	Article-No.
0,10	3,00	3,0	38	1,00	0,30	506.010.09
0,15	3,00	3,0	38	1,00	0,45	506.015.09
0,20	3,00	3,0	38	1,00	0,60	506.020.09
0,25	3,00	3,0	38	1,00	0,75	506.025.09
0,30	3,00	3,0	38	1,00	0,90	506.030.09
0,35	3,00	3,0	38	1,00	1,05	506.035.09
0,40	3,00	3,0	38	1,00	1,20	506.040.09
0,45	3,00	3,0	38	1,00	1,35	506.045.09
0,50	3,00	6,0	38	1,50	1,50	506.050.09
0,55	3,00	6,0	38	1,50	1,80	506.055.09
0,60	3,00	6,0	38	1,50	1,80	506.060.09
0,65	3,00	6,0	38	1,50	2,10	506.065.09
0,70	3,00	6,0	38	1,50	2,10	506.070.09
0,75	3,00	6,0	38	1,50	2,40	506.075.09
0,80	3,00	6,0	38	1,50	2,40	506.080.09
0,85	3,00	6,0	38	1,50	2,70	506.085.09
0,90	3,00	6,0	38	1,50	2,70	506.090.09
0,95	3,00	6,0	38	1,50	3,00	506.095.09
1,00	3,00	6,0	38	1,50	3,00	506.100.09
1,05	3,00	6,0	38	2,00	3,30	506.105.09
1,10	3,00	6,0	38	2,00	3,30	506.110.09
1,15	3,00	6,0	38	2,00	3,60	506.115.09
1,20	3,00	6,0	38	2,00	3,60	506.120.09
1,25	3,00	6,0	38	2,00	3,90	506.125.09
1,30	3,00	6,0	38	2,00	3,90	506.130.09
1,35	3,00	6,0	38	2,00	4,20	506.135.09
1,40	3,00	6,0	38	2,00	4,20	506.140.09
1,45	3,00	6,0	38	2,00	4,50	506.145.09
1,50	3,00	-	38	-	4,50	506.150.09
1,55	3,00	-	38	-	4,80	506.155.09
1,60	3,00	-	38	-	4,80	506.160.09
1,65	3,00	-	38	-	5,10	506.165.09
1,70	3,00	-	38	-	5,10	506.170.09
1,75	3,00	-	38	-	5,40	506.175.09
1,80	3,00	-	38	-	5,40	506.180.09
1,85	3,00	-	38	-	5,70	506.185.09
1,90	3,00	-	38	-	5,70	506.190.09
1,95	3,00	-	38	-	6,00	506.195.09
2,00	3,00	-	38	-	6,00	506.200.09
2,05	3,00	-	38	-	6,30	506.205.09
2,10	3,00	-	38	-	6,30	506.210.09
2,15	3,00	-	38	-	6,60	506.215.09
2,20	3,00	-	38	-	6,60	506.220.09
2,25	3,00	-	38	-	6,90	506.225.09



Article-No. **506...**

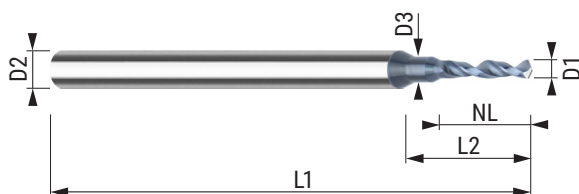
Solid carbide micro drill 3xD



D1 h6	D2	L2	L1	D3	NL	Article-No.
2,30	3,00	-	38	-	6,90	506.230.09
2,35	3,00	-	38	-	7,20	506.235.09
2,40	3,00	-	38	-	7,20	506.240.09
2,45	3,00	-	38	-	7,50	506.245.09
2,50	3,00	-	38	-	7,50	506.250.09
2,55	3,00	-	38	-	7,80	506.255.09
2,60	3,00	-	38	-	7,80	506.260.09
2,65	3,00	-	38	-	8,10	506.265.09
2,70	3,00	-	38	-	8,10	506.270.09
2,75	3,00	-	38	-	8,40	506.275.09
2,80	3,00	-	38	-	8,40	506.280.09
2,85	3,00	-	38	-	8,70	506.285.09
2,90	3,00	-	38	-	8,70	506.290.09
2,95	3,00	-	38	-	9,00	506.295.09
3,00	3,00	-	38	-	9,00	506.300.09


Article-No. **507...**

Solid carbide micro drill 5xD



D1 h6	D2	L2	L1	D3	NL	Article-No.	blank	NANOSIT
0,10	3,00	5,0	38	1,00	0,50	507.010...	.09	.00
0,11	3,00	5,0	38	1,00	0,60	507.011...	.09	-
0,12	3,00	5,0	38	1,00	0,70	507.012...	.09	-
0,13	3,00	5,0	38	1,00	0,80	507.013...	.09	-
0,14	3,00	5,0	38	1,00	0,90	507.014...	.09	-
0,15	3,00	5,0	38	1,00	1,00	507.015...	.09	.00
0,16	3,00	5,0	38	1,00	1,25	507.016...	.09	-
0,17	3,00	5,0	38	1,00	1,50	507.017...	.09	-
0,18	3,00	5,0	38	1,00	1,75	507.018...	.09	-
0,19	3,00	5,0	38	1,00	2,00	507.019...	.09	-
0,20	3,00	5,0	38	1,00	2,25	507.020...	.09	.00
0,21	3,00	5,0	38	1,00	2,25	507.021...	.09	-
0,22	3,00	5,0	38	1,00	2,25	507.022...	.09	-
0,23	3,00	5,0	38	1,00	2,25	507.023...	.09	-
0,24	3,00	5,0	38	1,00	2,25	507.024...	.09	-
0,25	3,00	5,0	38	1,00	2,25	507.025...	.09	.00
0,26	3,00	5,0	38	1,00	2,25	507.026...	.09	-
0,27	3,00	5,0	38	1,00	2,25	507.027...	.09	-
0,28	3,00	5,0	38	1,00	2,25	507.028...	.09	-
0,29	3,00	5,0	38	1,00	2,25	507.029...	.09	-



to be continued

Article-No. **507...**

Solid carbide micro drill 5xD



D1 h6	D2	L2	L1	D3	NL	Article-No.	blank	NANOSIT
0,30	3,00	5,0	38	1,00	2,25	507.030...	.09	.00
0,31	3,00	5,0	38	1,00	2,25	507.031...	.09	-
0,32	3,00	5,0	38	1,00	2,25	507.032...	.09	-
0,33	3,00	5,0	38	1,00	2,25	507.033...	.09	-
0,34	3,00	5,0	38	1,00	2,25	507.034...	.09	-
0,35	3,00	5,0	38	1,00	2,25	507.035...	.09	.00
0,36	3,00	5,0	38	1,00	2,25	507.036...	.09	-
0,37	3,00	5,0	38	1,00	2,25	507.037...	.09	-
0,38	3,00	5,0	38	1,00	2,25	507.038...	.09	-
0,39	3,00	5,0	38	1,00	2,25	507.039...	.09	-
0,40	3,00	5,0	38	1,00	2,25	507.040...	.09	.00
0,41	3,00	5,0	38	1,00	2,25	507.041...	.09	-
0,42	3,00	5,0	38	1,00	2,25	507.042...	.09	-
0,43	3,00	5,0	38	1,00	2,25	507.043...	.09	-
0,44	3,00	5,0	38	1,00	2,25	507.044...	.09	-
0,45	3,00	5,0	38	1,00	2,25	507.045...	.09	.00
0,46	3,00	5,0	38	1,00	2,25	507.046...	.09	-
0,47	3,00	5,0	38	1,00	2,25	507.047...	.09	-
0,48	3,00	5,0	38	1,00	2,25	507.048...	.09	-
0,49	3,00	5,0	38	1,00	2,25	507.049...	.09	-
0,50	3,00	10,0	38	1,50	2,50	507.050...	.09	.00
0,51	3,00	10,0	38	1,50	3,00	507.051...	.09	-
0,52	3,00	10,0	38	1,50	3,00	507.052...	.09	-
0,53	3,00	10,0	38	1,50	3,00	507.053...	.09	-
0,54	3,00	10,0	38	1,50	3,00	507.054...	.09	-
0,55	3,00	10,0	38	1,50	3,00	507.055...	.09	.00
0,56	3,00	10,0	38	1,50	3,00	507.056...	.09	-
0,57	3,00	10,0	38	1,50	3,00	507.057...	.09	-
0,58	3,00	10,0	38	1,50	3,00	507.058...	.09	-
0,59	3,00	10,0	38	1,50	3,00	507.059...	.09	-
0,60	3,00	10,0	38	1,50	3,00	507.060...	.09	.00
0,61	3,00	10,0	38	1,50	3,50	507.061...	.09	-
0,62	3,00	10,0	38	1,50	3,50	507.062...	.09	-
0,63	3,00	10,0	38	1,50	3,50	507.063...	.09	-
0,64	3,00	10,0	38	1,50	3,50	507.064...	.09	-
0,65	3,00	10,0	38	1,50	3,50	507.065...	.09	.00
0,66	3,00	10,0	38	1,50	3,50	507.066...	.09	-
0,67	3,00	10,0	38	1,50	3,50	507.067...	.09	-
0,68	3,00	10,0	38	1,50	3,50	507.068...	.09	-
0,69	3,00	10,0	38	1,50	3,50	507.069...	.09	-
0,70	3,00	10,0	38	1,50	3,50	507.070...	.09	.00
0,71	3,00	10,0	38	1,50	4,00	507.071...	.09	-
0,72	3,00	10,0	38	1,50	4,00	507.072...	.09	-
0,73	3,00	10,0	38	1,50	4,00	507.073...	.09	-
0,74	3,00	10,0	38	1,50	4,00	507.074...	.09	-
0,75	3,00	10,0	38	1,50	4,00	507.075...	.09	.00
0,76	3,00	10,0	38	1,50	4,00	507.076...	.09	-
0,77	3,00	10,0	38	1,50	4,00	507.077...	.09	-
0,78	3,00	10,0	38	1,50	4,00	507.078...	.09	-
0,79	3,00	10,0	38	1,50	4,00	507.079...	.09	-





D1 h6	D2	L2	L1	D3	NL	Article-No.	blank	NANOSIT
0,80	3,00	10,0	38	1,50	4,00	507.080...	.09	.00
0,81	3,00	10,0	38	1,50	4,50	507.081...	.09	-
0,82	3,00	10,0	38	1,50	4,50	507.082...	.09	-
0,83	3,00	10,0	38	1,50	4,50	507.083...	.09	-
0,84	3,00	10,0	38	1,50	4,50	507.084...	.09	-
0,85	3,00	10,0	38	1,50	4,50	507.085...	.09	.00
0,86	3,00	10,0	38	1,50	4,50	507.086...	.09	-
0,87	3,00	10,0	38	1,50	4,50	507.087...	.09	-
0,88	3,00	10,0	38	1,50	4,50	507.088...	.09	-
0,89	3,00	10,0	38	1,50	4,50	507.089...	.09	-
0,90	3,00	10,0	38	1,50	4,50	507.090...	.09	.00
0,91	3,00	10,0	38	1,50	5,00	507.091...	.09	-
0,92	3,00	10,0	38	1,50	5,00	507.092...	.09	-
0,93	3,00	10,0	38	1,50	5,00	507.093...	.09	-
0,94	3,00	10,0	38	1,50	5,00	507.094...	.09	-
0,95	3,00	10,0	38	1,50	5,00	507.095...	.09	.00
0,96	3,00	10,0	38	1,50	5,00	507.096...	.09	-
0,97	3,00	10,0	38	1,50	5,00	507.097...	.09	-
0,98	3,00	10,0	38	1,50	5,00	507.098...	.09	-
0,99	3,00	10,0	38	1,50	5,00	507.099...	.09	-
1,00	3,00	10,0	38	2,00	5,00	507.100...	.09	.00
1,01	3,00	10,0	38	2,00	5,50	507.101...	.09	-
1,02	3,00	10,0	38	2,00	5,50	507.102...	.09	-
1,03	3,00	10,0	38	2,00	5,50	507.103...	.09	-
1,04	3,00	10,0	38	2,00	5,50	507.104...	.09	-
1,05	3,00	10,0	38	2,00	5,50	507.105...	.09	.00
1,06	3,00	10,0	38	2,00	5,50	507.106...	.09	-
1,07	3,00	10,0	38	2,00	5,50	507.107...	.09	-
1,08	3,00	10,0	38	2,00	5,50	507.108...	.09	-
1,09	3,00	10,0	38	2,00	5,50	507.109...	.09	-
1,10	3,00	10,0	38	2,00	5,50	507.110...	.09	.00
1,11	3,00	10,0	38	2,00	6,00	507.111...	.09	-
1,12	3,00	10,0	38	2,00	6,00	507.112...	.09	-
1,13	3,00	10,0	38	2,00	6,00	507.113...	.09	-
1,14	3,00	10,0	38	2,00	6,00	507.114...	.09	-
1,15	3,00	10,0	38	2,00	6,00	507.115...	.09	.00
1,16	3,00	10,0	38	2,00	6,00	507.116...	.09	-
1,17	3,00	10,0	38	2,00	6,00	507.117...	.09	-
1,18	3,00	10,0	38	2,00	6,00	507.118...	.09	-
1,19	3,00	10,0	38	2,00	6,00	507.119...	.09	-
1,20	3,00	10,0	38	2,00	6,00	507.120...	.09	.00
1,21	3,00	10,0	38	2,00	6,00	507.121...	.09	-
1,22	3,00	10,0	38	2,00	6,00	507.122...	.09	-
1,23	3,00	10,0	38	2,00	6,00	507.123...	.09	-
1,24	3,00	10,0	38	2,00	6,00	507.124...	.09	-
1,25	3,00	10,0	38	2,00	6,00	507.125...	.09	.00



to be continued

Article-No. **507...**

Solid carbide micro drill 5xD



D1 h6	D2	L2	L1	D3	NL	Article-No.	blank	NANOSIT
1,26	3,00	10,0	38	2,00	6,00	507.126...	.09	-
1,27	3,00	10,0	38	2,00	6,00	507.127...	.09	-
1,28	3,00	10,0	38	2,00	6,00	507.128...	.09	-
1,29	3,00	10,0	38	2,00	6,00	507.129...	.09	-
1,30	3,00	10,0	38	2,00	6,00	507.130...	.09	.00
1,31	3,00	10,0	38	2,00	7,00	507.131...	.09	-
1,32	3,00	10,0	38	2,00	7,00	507.132...	.09	-
1,33	3,00	10,0	38	2,00	7,00	507.133...	.09	-
1,34	3,00	10,0	38	2,00	7,00	507.134...	.09	-
1,35	3,00	10,0	38	2,00	7,00	507.135...	.09	.00
1,36	3,00	10,0	38	2,00	7,00	507.136...	.09	-
1,37	3,00	10,0	38	2,00	7,00	507.137...	.09	-
1,38	3,00	10,0	38	2,00	7,00	507.138...	.09	-
1,39	3,00	10,0	38	2,00	7,00	507.139...	.09	-
1,40	3,00	10,0	38	2,00	7,00	507.140...	.09	.00
1,41	3,00	10,0	38	2,00	7,50	507.141...	.09	-
1,42	3,00	10,0	38	2,00	7,50	507.142...	.09	-
1,43	3,00	10,0	38	2,00	7,50	507.143...	.09	-
1,44	3,00	10,0	38	2,00	7,50	507.144...	.09	-
1,45	3,00	10,0	38	2,00	7,50	507.145...	.09	.00
1,46	3,00	10,0	38	2,00	7,50	507.146...	.09	-
1,47	3,00	10,0	38	2,00	7,50	507.147...	.09	-
1,48	3,00	10,0	38	2,00	7,50	507.148...	.09	-
1,49	3,00	10,0	38	2,00	7,50	507.149...	.09	-
1,50	3,00	-	38	-	7,50	507.150...	.09	.00
1,51	3,00	-	38	-	8,00	507.151...	.09	-
1,52	3,00	-	38	-	8,00	507.152...	.09	-
1,53	3,00	-	38	-	8,00	507.153...	.09	-
1,54	3,00	-	38	-	8,00	507.154...	.09	-
1,55	3,00	-	38	-	8,00	507.155...	.09	.00
1,56	3,00	-	38	-	8,00	507.156...	.09	-
1,57	3,00	-	38	-	8,00	507.157...	.09	-
1,58	3,00	-	38	-	8,00	507.158...	.09	-
1,59	3,00	-	38	-	8,00	507.159...	.09	-
1,60	3,00	-	38	-	8,00	507.160...	.09	.00
1,61	3,00	-	38	-	8,50	507.161...	.09	-
1,62	3,00	-	38	-	8,50	507.162...	.09	-
1,63	3,00	-	38	-	8,50	507.163...	.09	-
1,64	3,00	-	38	-	8,50	507.164...	.09	-
1,65	3,00	-	38	-	8,50	507.165...	.09	.00
1,66	3,00	-	38	-	8,50	507.166...	.09	-
1,67	3,00	-	38	-	8,50	507.167...	.09	-
1,68	3,00	-	38	-	8,50	507.168...	.09	-
1,69	3,00	-	38	-	8,50	507.169...	.09	-
1,70	3,00	-	38	-	8,50	507.170...	.09	.00
1,71	3,00	-	38	-	9,00	507.171...	.09	-
1,72	3,00	-	38	-	9,00	507.172...	.09	-
1,73	3,00	-	38	-	9,00	507.173...	.09	-
1,74	3,00	-	38	-	9,00	507.174...	.09	-
1,75	3,00	-	38	-	9,00	507.175...	.09	.00





D1 h6	D2	L2	L1	D3	NL	Article-No.	blank	NANOSIT
1,76	3,00	-	38	-	9,00	507.176...	.09	-
1,77	3,00	-	38	-	9,00	507.177...	.09	-
1,78	3,00	-	38	-	9,00	507.178...	.09	-
1,79	3,00	-	38	-	9,00	507.179...	.09	-
1,80	3,00	-	38	-	9,00	507.180...	.09	.00
1,81	3,00	-	38	-	9,50	507.181...	.09	-
1,82	3,00	-	38	-	9,50	507.182...	.09	-
1,83	3,00	-	38	-	9,50	507.183...	.09	-
1,84	3,00	-	38	-	9,50	507.184...	.09	-
1,85	3,00	-	38	-	9,50	507.185...	.09	.00
1,86	3,00	-	38	-	9,50	507.186...	.09	-
1,87	3,00	-	38	-	9,50	507.187...	.09	-
1,88	3,00	-	38	-	9,50	507.188...	.09	-
1,89	3,00	-	38	-	9,50	507.189...	.09	-
1,90	3,00	-	38	-	9,50	507.190...	.09	.00
1,91	3,00	-	38	-	10,00	507.191...	.09	-
1,92	3,00	-	38	-	10,00	507.192...	.09	-
1,93	3,00	-	38	-	10,00	507.193...	.09	-
1,94	3,00	-	38	-	10,00	507.194...	.09	-
1,95	3,00	-	38	-	10,00	507.195...	.09	.00
1,96	3,00	-	38	-	10,00	507.196...	.09	-
1,97	3,00	-	38	-	10,00	507.197...	.09	-
1,98	3,00	-	38	-	10,00	507.198...	.09	-
1,99	3,00	-	38	-	10,00	507.199...	.09	-
2,00	3,00	-	38	-	10,00	507.200...	.09	.00
2,01	3,00	-	38	-	10,50	507.201...	.09	-
2,02	3,00	-	38	-	10,50	507.202...	.09	-
2,03	3,00	-	38	-	10,50	507.203...	.09	-
2,04	3,00	-	38	-	10,50	507.204...	.09	-
2,05	3,00	-	38	-	10,50	507.205...	.09	.00
2,06	3,00	-	38	-	10,50	507.206...	.09	-
2,07	3,00	-	38	-	10,50	507.207...	.09	-
2,08	3,00	-	38	-	10,50	507.208...	.09	-
2,09	3,00	-	38	-	10,50	507.209...	.09	-
2,10	3,00	-	38	-	10,50	507.210...	.09	.00
2,11	3,00	-	38	-	11,00	507.211...	.09	-
2,12	3,00	-	38	-	11,00	507.212...	.09	-
2,13	3,00	-	38	-	11,00	507.213...	.09	-
2,14	3,00	-	38	-	11,00	507.214...	.09	-
2,15	3,00	-	38	-	11,00	507.215...	.09	.00
2,16	3,00	-	38	-	11,00	507.216...	.09	-
2,17	3,00	-	38	-	11,00	507.217...	.09	-
2,18	3,00	-	38	-	11,00	507.218...	.09	-
2,19	3,00	-	38	-	11,00	507.219...	.09	-
2,20	3,00	-	38	-	11,00	507.220...	.09	.00



to be continued



Article-No. **507...**

Solid carbide micro drill 5xD



D1 h6	D2	L2	L1	D3	NL	Article-No.	blank	NANOSIT
2,21	3,00	-	38	-	11,50	507.221...	.09	-
2,22	3,00	-	38	-	11,50	507.222...	.09	-
2,23	3,00	-	38	-	11,50	507.223...	.09	-
2,24	3,00	-	38	-	11,50	507.224...	.09	-
2,25	3,00	-	38	-	11,50	507.225...	.09	.00
2,26	3,00	-	38	-	11,50	507.226...	.09	-
2,27	3,00	-	38	-	11,50	507.227...	.09	-
2,28	3,00	-	38	-	11,50	507.228...	.09	-
2,29	3,00	-	38	-	11,50	507.229...	.09	-
2,30	3,00	-	38	-	11,50	507.230...	.09	.00
2,31	3,00	-	38	-	12,00	507.231...	.09	-
2,32	3,00	-	38	-	12,00	507.232...	.09	-
2,33	3,00	-	38	-	12,00	507.233...	.09	-
2,34	3,00	-	38	-	12,00	507.234...	.09	-
2,35	3,00	-	38	-	12,00	507.235...	.09	.00
2,36	3,00	-	38	-	12,00	507.236...	.09	-
2,37	3,00	-	38	-	12,00	507.237...	.09	-
2,38	3,00	-	38	-	12,00	507.238...	.09	-
2,39	3,00	-	38	-	12,00	507.239...	.09	-
2,40	3,00	-	38	-	12,00	507.240...	.09	.00
2,41	3,00	-	38	-	12,50	507.241...	.09	-
2,42	3,00	-	38	-	12,50	507.242...	.09	-
2,43	3,00	-	38	-	12,50	507.243...	.09	-
2,44	3,00	-	38	-	12,50	507.244...	.09	-
2,45	3,00	-	38	-	12,50	507.245...	.09	.00
2,46	3,00	-	38	-	12,50	507.246...	.09	-
2,47	3,00	-	38	-	12,50	507.247...	.09	-
2,48	3,00	-	38	-	12,50	507.248...	.09	-
2,49	3,00	-	38	-	12,50	507.249...	.09	-
2,50	3,00	-	38	-	12,50	507.250...	.09	.00
2,51	3,00	-	38	-	13,00	507.251...	.09	-
2,52	3,00	-	38	-	13,00	507.252...	.09	-
2,53	3,00	-	38	-	13,00	507.253...	.09	-
2,54	3,00	-	38	-	13,00	507.254...	.09	-
2,55	3,00	-	38	-	13,00	507.255...	.09	.00
2,56	3,00	-	38	-	13,00	507.256...	.09	-
2,57	3,00	-	38	-	13,00	507.257...	.09	-
2,58	3,00	-	38	-	13,00	507.258...	.09	-
2,59	3,00	-	38	-	13,00	507.259...	.09	-
2,60	3,00	-	38	-	13,00	507.260...	.09	.00
2,61	3,00	-	38	-	13,50	507.261...	.09	-
2,62	3,00	-	38	-	13,50	507.262...	.09	-
2,63	3,00	-	38	-	13,50	507.263...	.09	-
2,64	3,00	-	38	-	13,50	507.264...	.09	-
2,65	3,00	-	38	-	13,50	507.265...	.09	.00
2,66	3,00	-	38	-	13,50	507.266...	.09	-
2,67	3,00	-	38	-	13,50	507.267...	.09	-
2,68	3,00	-	38	-	13,50	507.268...	.09	-
2,69	3,00	-	38	-	13,50	507.269...	.09	-
2,70	3,00	-	38	-	13,50	507.270...	.09	.00



Article-No. **507...**

Solid carbide micro drill 5xD

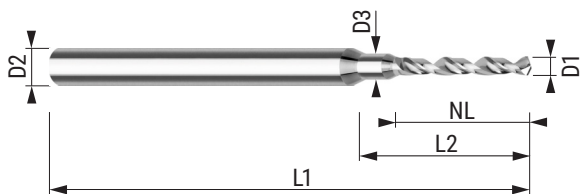


D1 h6	D2	L2	L1	D3	NL	Article-No.	blank	NANOSIT
2,71	3,00	-	38	-	14,00	507.271...	.09	-
2,72	3,00	-	38	-	14,00	507.272...	.09	-
2,73	3,00	-	38	-	14,00	507.273...	.09	-
2,74	3,00	-	38	-	14,00	507.274...	.09	-
2,75	3,00	-	38	-	14,00	507.275...	.09	.00
2,76	3,00	-	38	-	14,00	507.276...	.09	-
2,77	3,00	-	38	-	14,00	507.277...	.09	-
2,78	3,00	-	38	-	14,00	507.278...	.09	-
2,79	3,00	-	38	-	14,00	507.279...	.09	-
2,80	3,00	-	38	-	14,00	507.280...	.09	.00
2,81	3,00	-	38	-	14,50	507.281...	.09	-
2,82	3,00	-	38	-	14,50	507.282...	.09	-
2,83	3,00	-	38	-	14,50	507.283...	.09	-
2,84	3,00	-	38	-	14,50	507.284...	.09	-
2,85	3,00	-	38	-	14,50	507.285...	.09	.00
2,86	3,00	-	38	-	14,50	507.286...	.09	-
2,87	3,00	-	38	-	14,50	507.287...	.09	-
2,88	3,00	-	38	-	14,50	507.288...	.09	-
2,89	3,00	-	38	-	14,50	507.289...	.09	-
2,90	3,00	-	38	-	14,50	507.290...	.09	.00
2,91	3,00	-	38	-	15,00	507.291...	.09	-
2,92	3,00	-	38	-	15,00	507.292...	.09	-
2,93	3,00	-	38	-	15,00	507.293...	.09	-
2,94	3,00	-	38	-	15,00	507.294...	.09	-
2,95	3,00	-	38	-	15,00	507.295...	.09	.00
2,96	3,00	-	38	-	15,00	507.296...	.09	-
2,97	3,00	-	38	-	15,00	507.297...	.09	-
2,98	3,00	-	38	-	15,00	507.298...	.09	-
2,99	3,00	-	38	-	15,00	507.299...	.09	-
3,00	3,00	-	38	-	15,00	507.300...	.09	.00



Article-No. **508...**

Solid carbide micro drill 8xD



D1 h6	D2	L2	L1	D3	NL	Article-No.
0,10	3,00	5,0	38	1,00	0,80	508.010.09
0,11	3,00	5,0	38	1,00	1,00	508.011.09
0,12	3,00	5,0	38	1,00	1,00	508.012.09
0,13	3,00	5,0	38	1,00	1,20	508.013.09
0,14	3,00	5,0	38	1,00	1,20	508.014.09
0,15	3,00	5,0	38	1,00	1,30	508.015.09
0,16	3,00	5,0	38	1,00	1,30	508.016.09
0,17	3,00	5,0	38	1,00	1,50	508.017.09
0,18	3,00	5,0	38	1,00	1,50	508.018.09
0,19	3,00	5,0	38	1,00	1,60	508.019.09
0,20	3,00	7,0	38	1,00	1,60	508.020.09
0,21	3,00	7,0	38	1,00	2,00	508.021.09
0,22	3,00	7,0	38	1,00	2,00	508.022.09
0,23	3,00	7,0	38	1,00	2,00	508.023.09
0,24	3,00	7,0	38	1,00	2,00	508.024.09
0,25	3,00	7,0	38	1,00	2,00	508.025.09
0,26	3,00	7,0	38	1,00	2,40	508.026.09
0,27	3,00	7,0	38	1,00	2,40	508.027.09
0,28	3,00	7,0	38	1,00	2,40	508.028.09
0,29	3,00	7,0	38	1,00	2,40	508.029.09
0,30	3,00	7,0	38	1,00	2,40	508.030.09
0,31	3,00	7,0	38	1,00	2,80	508.031.09
0,32	3,00	7,0	38	1,00	2,80	508.032.09
0,33	3,00	7,0	38	1,00	2,80	508.033.09
0,34	3,00	7,0	38	1,00	2,80	508.034.09
0,35	3,00	7,0	38	1,00	2,80	508.035.09
0,36	3,00	7,0	38	1,00	3,20	508.036.09
0,37	3,00	7,0	38	1,00	3,20	508.037.09
0,38	3,00	7,0	38	1,00	3,20	508.038.09
0,39	3,00	7,0	38	1,00	3,20	508.039.09
0,40	3,00	7,0	38	1,00	3,20	508.040.09
0,41	3,00	7,0	38	1,00	3,60	508.041.09
0,42	3,00	7,0	38	1,00	3,60	508.042.09
0,43	3,00	7,0	38	1,00	3,60	508.043.09
0,44	3,00	7,0	38	1,00	3,60	508.044.09
0,45	3,00	7,0	38	1,00	3,60	508.045.09
0,46	3,00	7,0	38	1,00	4,00	508.046.09
0,47	3,00	7,0	38	1,00	4,00	508.047.09
0,48	3,00	7,0	38	1,00	4,00	508.048.09
0,49	3,00	7,0	38	1,00	4,00	508.049.09
0,50	3,00	15,0	38	1,50	4,00	508.050.09
0,51	3,00	15,0	38	1,50	4,80	508.051.09
0,52	3,00	15,0	38	1,50	4,80	508.052.09
0,53	3,00	15,0	38	1,50	4,80	508.053.09
0,54	3,00	15,0	38	1,50	4,80	508.054.09
0,55	3,00	15,0	38	1,50	4,80	508.055.09





D1 h6	D2	L2	L1	D3	NL	Article-No.
0,56	3,00	15,0	38	1,50	4,80	508.056.09
0,57	3,00	15,0	38	1,50	4,80	508.057.09
0,58	3,00	15,0	38	1,50	4,80	508.058.09
0,59	3,00	15,0	38	1,50	4,80	508.059.09
0,60	3,00	15,0	38	1,50	4,80	508.060.09
0,61	3,00	15,0	38	1,50	5,60	508.061.09
0,62	3,00	15,0	38	1,50	5,60	508.062.09
0,63	3,00	15,0	38	1,50	5,60	508.063.09
0,64	3,00	15,0	38	1,50	5,60	508.064.09
0,65	3,00	15,0	38	1,50	5,60	508.065.09
0,66	3,00	15,0	38	1,50	5,60	508.066.09
0,67	3,00	15,0	38	1,50	5,60	508.067.09
0,68	3,00	15,0	38	1,50	5,60	508.068.09
0,69	3,00	15,0	38	1,50	5,60	508.069.09
0,70	3,00	15,0	38	1,50	5,60	508.070.09
0,71	3,00	15,0	38	1,50	6,40	508.071.09
0,72	3,00	15,0	38	1,50	6,40	508.072.09
0,73	3,00	15,0	38	1,50	6,40	508.073.09
0,74	3,00	15,0	38	1,50	6,40	508.074.09
0,75	3,00	15,0	38	1,50	6,40	508.075.09
0,76	3,00	15,0	38	1,50	6,40	508.076.09
0,77	3,00	15,0	38	1,50	6,40	508.077.09
0,78	3,00	15,0	38	1,50	6,40	508.078.09
0,79	3,00	15,0	38	1,50	6,40	508.079.09
0,80	3,00	15,0	38	1,50	6,40	508.080.09
0,81	3,00	15,0	38	1,50	7,20	508.081.09
0,82	3,00	15,0	38	1,50	7,20	508.082.09
0,83	3,00	15,0	38	1,50	7,20	508.083.09
0,84	3,00	15,0	38	1,50	7,20	508.084.09
0,85	3,00	15,0	38	1,50	7,20	508.085.09
0,86	3,00	15,0	38	1,50	7,20	508.086.09
0,87	3,00	15,0	38	1,50	7,20	508.087.09
0,88	3,00	15,0	38	1,50	7,20	508.088.09
0,89	3,00	15,0	38	1,50	7,20	508.089.09
0,90	3,00	15,0	38	1,50	7,20	508.090.09
0,91	3,00	15,0	38	1,50	8,00	508.091.09
0,92	3,00	15,0	38	1,50	8,00	508.092.09
0,93	3,00	15,0	38	1,50	8,00	508.093.09
0,94	3,00	15,0	38	1,50	8,00	508.094.09
0,95	3,00	15,0	38	1,50	8,00	508.095.09
0,96	3,00	15,0	38	1,50	8,00	508.096.09
0,97	3,00	15,0	38	1,50	8,00	508.097.09
0,98	3,00	15,0	38	1,50	8,00	508.098.09
0,99	3,00	15,0	38	1,50	8,00	508.099.09
1,00	3,00	15,0	38	2,00	8,00	508.100.09
1,01	3,00	15,0	38	2,00	8,80	508.101.09
1,02	3,00	15,0	38	2,00	8,80	508.102.09
1,03	3,00	15,0	38	2,00	8,80	508.103.09
1,04	3,00	15,0	38	2,00	8,80	508.104.09



to be continued

Article-No. **508...**

Solid carbide micro drill 8xD



D1 h6	D2	L2	L1	D3	NL	Article-No.
1,05	3,00	15,0	38	2,00	8,80	508.105.09
1,06	3,00	15,0	38	2,00	8,80	508.106.09
1,07	3,00	15,0	38	2,00	8,80	508.107.09
1,08	3,00	15,0	38	2,00	8,80	508.108.09
1,09	3,00	15,0	38	2,00	8,80	508.109.09
1,10	3,00	15,0	38	2,00	8,80	508.110.09
1,11	3,00	15,0	38	2,00	9,60	508.111.09
1,12	3,00	15,0	38	2,00	9,60	508.112.09
1,13	3,00	15,0	38	2,00	9,60	508.113.09
1,14	3,00	15,0	38	2,00	9,60	508.114.09
1,15	3,00	15,0	38	2,00	9,60	508.115.09
1,16	3,00	15,0	38	2,00	9,60	508.116.09
1,17	3,00	15,0	38	2,00	9,60	508.117.09
1,18	3,00	15,0	38	2,00	9,60	508.118.09
1,19	3,00	15,0	38	2,00	9,60	508.119.09
1,20	3,00	15,0	38	2,00	9,60	508.120.09
1,21	3,00	15,0	38	2,00	10,40	508.121.09
1,22	3,00	15,0	38	2,00	10,40	508.122.09
1,23	3,00	15,0	38	2,00	10,40	508.123.09
1,24	3,00	15,0	38	2,00	10,40	508.124.09
1,25	3,00	15,0	38	2,00	10,40	508.125.09
1,26	3,00	15,0	38	2,00	10,40	508.126.09
1,27	3,00	15,0	38	2,00	10,40	508.127.09
1,28	3,00	15,0	38	2,00	10,40	508.128.09
1,29	3,00	15,0	38	2,00	10,40	508.129.09
1,30	3,00	15,0	38	2,00	10,40	508.130.09
1,31	3,00	15,0	38	2,00	11,20	508.131.09
1,32	3,00	15,0	38	2,00	11,20	508.132.09
1,33	3,00	15,0	38	2,00	11,20	508.133.09
1,34	3,00	15,0	38	2,00	11,20	508.134.09
1,35	3,00	15,0	38	2,00	11,20	508.135.09
1,36	3,00	15,0	38	2,00	11,20	508.136.09
1,37	3,00	15,0	38	2,00	11,20	508.137.09
1,38	3,00	15,0	38	2,00	11,20	508.138.09
1,39	3,00	15,0	38	2,00	11,20	508.139.09
1,40	3,00	15,0	38	2,00	11,20	508.140.09
1,41	3,00	15,0	38	2,00	12,00	508.141.09
1,42	3,00	15,0	38	2,00	12,00	508.142.09
1,43	3,00	15,0	38	2,00	12,00	508.143.09
1,44	3,00	15,0	38	2,00	12,00	508.144.09
1,45	3,00	15,0	38	2,00	12,00	508.145.09
1,46	3,00	15,0	38	2,00	12,00	508.146.09
1,47	3,00	15,0	38	2,00	12,00	508.147.09
1,48	3,00	15,0	38	2,00	12,00	508.148.09
1,49	3,00	15,0	38	2,00	12,00	508.149.09
1,50	3,00	-	38	-	12,00	508.150.09
1,51	3,00	-	38	-	12,80	508.151.09
1,52	3,00	-	38	-	12,80	508.152.09
1,53	3,00	-	38	-	12,80	508.153.09
1,54	3,00	-	38	-	12,80	508.154.09
1,55	3,00	-	38	-	12,80	508.155.09



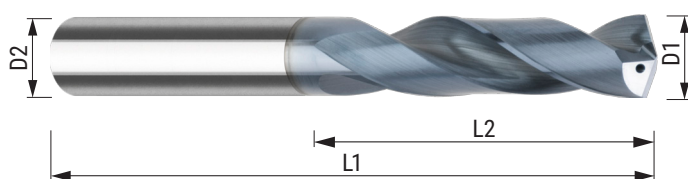


D1 h6	D2	L2	L1	D3	NL	Article-No.
1,56	3,00	-	38	-	12,80	508.156.09
1,57	3,00	-	38	-	12,80	508.157.09
1,58	3,00	-	38	-	12,80	508.158.09
1,59	3,00	-	38	-	12,80	508.159.09
1,60	3,00	-	38	-	12,80	508.160.09
1,61	3,00	-	38	-	13,60	508.161.09
1,62	3,00	-	38	-	13,60	508.162.09
1,63	3,00	-	38	-	13,60	508.163.09
1,64	3,00	-	38	-	13,60	508.164.09
1,65	3,00	-	38	-	13,60	508.165.09
1,66	3,00	-	38	-	13,60	508.166.09
1,67	3,00	-	38	-	13,60	508.167.09
1,68	3,00	-	38	-	13,60	508.168.09
1,69	3,00	-	38	-	13,60	508.169.09
1,70	3,00	-	38	-	13,60	508.170.09
1,71	3,00	-	38	-	14,40	508.171.09
1,72	3,00	-	38	-	14,40	508.172.09
1,73	3,00	-	38	-	14,40	508.173.09
1,74	3,00	-	38	-	14,40	508.174.09
1,75	3,00	-	38	-	14,40	508.175.09
1,76	3,00	-	38	-	14,40	508.176.09
1,77	3,00	-	38	-	14,40	508.177.09
1,78	3,00	-	38	-	14,40	508.178.09
1,79	3,00	-	38	-	14,40	508.179.09
1,80	3,00	-	38	-	14,40	508.180.09
1,81	3,00	-	38	-	15,20	508.181.09
1,82	3,00	-	38	-	15,20	508.182.09
1,83	3,00	-	38	-	15,20	508.183.09
1,84	3,00	-	38	-	15,20	508.184.09
1,85	3,00	-	38	-	15,20	508.185.09
1,86	3,00	-	38	-	15,20	508.186.09
1,87	3,00	-	38	-	15,20	508.187.09
1,88	3,00	-	38	-	15,20	508.188.09
1,89	3,00	-	38	-	15,20	508.189.09
1,90	3,00	-	38	-	15,20	508.190.09
1,91	3,00	-	38	-	16,00	508.191.09
1,92	3,00	-	38	-	16,00	508.192.09
1,93	3,00	-	38	-	16,00	508.193.09
1,94	3,00	-	38	-	16,00	508.194.09
1,95	3,00	-	38	-	16,00	508.195.09
1,96	3,00	-	38	-	16,00	508.196.09
1,97	3,00	-	38	-	16,00	508.197.09
1,98	3,00	-	38	-	16,00	508.198.09
1,99	3,00	-	38	-	16,00	508.199.09
2,00	3,00	-	38	-	16,00	508.200.09
2,01	3,00	-	38	-	16,80	508.201.09
2,02	3,00	-	38	-	16,80	508.202.09
2,03	3,00	-	38	-	16,80	508.203.09
2,04	3,00	-	38	-	16,80	508.204.09
2,05	3,00	-	38	-	16,80	508.205.09

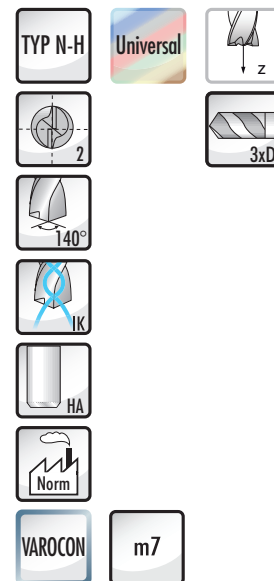


Article-No. **206...**

Solid carbide drill 3xD



D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
3,000		0,1181	6,00	20	62	206.030.00
3,175	1/8	0,1250	6,00	20	62	206.3175.00
3,100		0,1220	6,00	20	62	206.031.00
3,200		0,1260	6,00	20	62	206.032.00
3,250		0,1280	6,00	20	62	206.325.00
3,300		0,1299	6,00	20	62	206.033.00
3,400		0,1339	6,00	20	62	206.034.00
3,500		0,1378	6,00	20	62	206.035.00
3,572	9/64	0,1406	6,00	20	62	206.3572.00
3,600		0,1417	6,00	20	62	206.036.00
3,700		0,1457	6,00	20	62	206.037.00
3,800		0,1496	6,00	24	66	206.038.00
3,900		0,1535	6,00	24	66	206.039.00
3,969	5/32	0,1563	6,00	24	66	206.3969.00
4,000		0,1575	6,00	24	66	206.040.00
4,100		0,1614	6,00	24	66	206.041.00
4,200		0,1654	6,00	24	66	206.042.00
4,300		0,1693	6,00	24	66	206.043.00
4,366	11/64	0,1719	6,00	24	66	206.4366.00
4,400		0,1732	6,00	24	66	206.044.00
4,500		0,1772	6,00	24	66	206.045.00
4,600		0,1811	6,00	24	66	206.046.00
4,650		0,1831	6,00	24	66	206.465.00
4,700		0,1850	6,00	24	66	206.047.00
4,763	3/16	0,1875	6,00	28	66	206.4763.00
4,800		0,1890	6,00	28	66	206.048.00
4,900		0,1929	6,00	28	66	206.049.00
5,000		0,1969	6,00	28	66	206.050.00
5,100		0,2008	6,00	28	66	206.051.00
5,159	13/64	0,2031	6,00	28	66	206.5159.00
5,200		0,2047	6,00	28	66	206.052.00
5,300		0,2087	6,00	28	66	206.053.00
5,400		0,2126	6,00	28	66	206.054.00
5,500		0,2165	6,00	28	66	206.055.00
5,550		0,2185	6,00	28	66	206.555.00
5,556	7/32	0,2187	6,00	28	66	206.5556.00
5,600		0,2205	6,00	28	66	206.056.00
5,700		0,2244	6,00	28	66	206.057.00
5,800		0,2283	6,00	28	66	206.058.00
5,900		0,2323	6,00	28	66	206.059.00
6,000		0,2362	6,00	28	66	206.060.00
6,100		0,2402	8,00	34	79	206.061.00
6,200		0,2441	8,00	34	79	206.062.00
6,300		0,2480	8,00	34	79	206.063.00

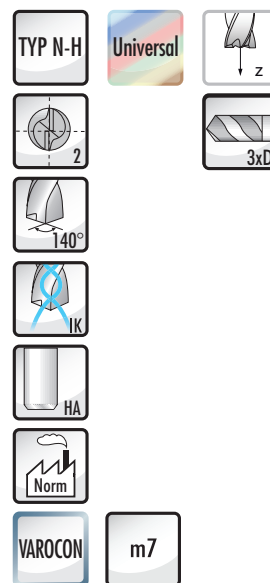


D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
6,350	1/4	0,2500	8,00	34	79	206.6350.00
6,400		0,2520	8,00	34	79	206.064.00
6,500		0,2559	8,00	34	79	206.065.00
6,600		0,2598	8,00	34	79	206.066.00
6,700		0,2638	8,00	34	79	206.067.00
6,747	17/64	0,2656	8,00	34	79	206.6747.00
6,800		0,2677	8,00	34	79	206.068.00
6,900		0,2717	8,00	34	79	206.069.00
7,000		0,2756	8,00	34	79	206.070.00
7,100		0,2795	8,00	41	79	206.071.00
7,144	9/32	0,2813	8,00	41	79	206.7144.00
7,200		0,2835	8,00	41	79	206.072.00
7,300		0,2874	8,00	41	79	206.073.00
7,400		0,2913	8,00	41	79	206.074.00
7,500		0,2953	8,00	41	79	206.075.00
7,541	19/64	0,2969	8,00	41	79	206.7541.00
7,600		0,2992	8,00	41	79	206.076.00
7,700		0,3031	8,00	41	79	206.077.00
7,800		0,3071	8,00	41	79	206.078.00
7,900		0,3110	8,00	41	79	206.079.00
7,938	5/16	0,3125	8,00	41	79	206.7938.00
8,000		0,3150	8,00	41	79	206.080.00
8,100		0,3189	10,00	47	89	206.081.00
8,200		0,3228	10,00	47	89	206.082.00
8,300		0,3268	10,00	47	89	206.083.00
8,400		0,3307	10,00	47	89	206.084.00
8,500		0,3346	10,00	47	89	206.085.00
8,600		0,3386	10,00	47	89	206.086.00
8,700		0,3425	10,00	47	89	206.087.00
8,731	11/32	0,3437	10,00	47	89	206.8731.00

Article-No. **206...**

Solid carbide drill 3xD

D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
8,800		0,3465	10,00	47	89	206.088.00
8,900		0,3504	10,00	47	89	206.089.00
9,000		0,3543	10,00	47	89	206.090.00
9,100		0,3583	10,00	47	89	206.091.00
9,128	23/64	0,3594	10,00	47	89	206.9128.00
9,200		0,3622	10,00	47	89	206.092.00
9,300		0,3661	10,00	47	89	206.093.00
9,400		0,3701	10,00	47	89	206.094.00
9,500		0,3740	10,00	47	89	206.095.00
9,525	3/8	0,3750	10,00	47	89	206.9525.00
9,600		0,3780	10,00	47	89	206.096.00
9,700		0,3819	10,00	47	89	206.097.00
9,800		0,3858	10,00	47	89	206.098.00
9,900		0,3898	10,00	47	89	206.099.00
9,922	25/64	0,3906	10,00	47	89	206.9922.00
10,000		0,3937	10,00	47	89	206.100.00
10,100		0,3976	12,00	55	102	206.101.00
10,200		0,4016	12,00	55	102	206.102.00
10,300		0,4055	12,00	55	102	206.103.00
10,319	13/32	0,4063	12,00	55	102	206.10319.00
10,400		0,4094	12,00	55	102	206.104.00
10,500		0,4134	12,00	55	102	206.105.00
10,600		0,4173	12,00	55	102	206.106.00
10,700		0,4213	12,00	55	102	206.107.00
10,716	27/64	0,4219	12,00	55	102	206.10716.00
10,800		0,4252	12,00	55	102	206.108.00
10,900		0,4291	12,00	55	102	206.109.00
11,000		0,4331	12,00	55	102	206.110.00
11,100		0,4370	12,00	55	102	206.111.00
11,113	7/16	0,4375	12,00	55	102	206.11113.00
11,200		0,4409	12,00	55	102	206.112.00
11,300		0,4449	12,00	55	102	206.113.00
11,400		0,4488	12,00	55	102	206.114.00
11,500		0,4528	12,00	55	102	206.115.00
11,509	29/64	0,4531	12,00	55	102	206.11509.00
11,600		0,4567	12,00	55	102	206.116.00
11,700		0,4606	12,00	55	102	206.117.00
11,800		0,4646	12,00	55	102	206.118.00
11,900		0,4685	12,00	55	102	206.119.00
11,906	15/32	0,4687	12,00	55	102	206.11906.00
12,000		0,4724	12,00	55	102	206.120.00
12,200		0,4803	14,00	60	107	206.122.00
12,300		0,4843	14,00	60	107	206.123.00
12,303	31/64	0,4844	14,00	60	107	206.12303.00
12,500		0,4921	14,00	60	107	206.125.00
12,700	1/2	0,5000	14,00	60	107	206.12700.00
12,800		0,5039	14,00	60	107	206.128.00
13,000		0,5118	14,00	60	107	206.130.00

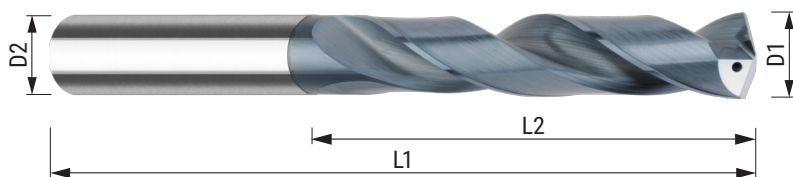


D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
13,494	17/32	0,5313	14,00	60	107	206.13494.00
13,500		0,5315	14,00	60	107	206.135.00
13,800		0,5433	14,00	60	107	206.138.00
14,000		0,5512	14,00	60	107	206.140.00
14,200		0,5591	16,00	65	115	206.142.00
14,288	9/16	0,5625	16,00	65	115	206.14288.00
14,500		0,5709	16,00	65	115	206.145.00
14,800		0,5827	16,00	65	115	206.148.00
15,000		0,5906	16,00	65	115	206.150.00
15,100		0,5945	16,00	65	115	206.151.00
15,200		0,5984	16,00	65	115	206.152.00
15,500		0,6102	16,00	65	115	206.155.00
15,800		0,6220	16,00	65	115	206.158.00
15,875	5/8	0,6250	16,00	65	115	206.15875.00
16,000		0,6299	16,00	65	115	206.160.00
16,500		0,6496	18,00	73	123	206.165.00
16,800		0,6614	18,00	73	123	206.168.00
17,000		0,6693	18,00	73	123	206.170.00
17,300		0,6811	18,00	73	123	206.173.00
17,500		0,6890	18,00	73	123	206.175.00
17,700		0,6969	18,00	73	123	206.177.00
17,800		0,7008	18,00	73	123	206.178.00
18,000		0,7087	18,00	73	123	206.180.00
18,500		0,7283	20,00	79	131	206.185.00
19,000		0,7480	20,00	79	131	206.190.00
19,500		0,7677	20,00	79	131	206.193.00
19,500		0,7677	20,00	79	131	206.195.00
19,800		0,7795	20,00	79	131	206.198.00
20,000		0,7874	20,00	79	131	206.200.00



Article-No. **207...**

Solid carbide drill 5xD



D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
1,000		0,0394	3,00	10	55	207.010.00
1,100		0,0433	3,00	12	55	207.011.00
1,200		0,0472	3,00	12	55	207.012.00
1,300		0,0512	3,00	12	55	207.013.00
1,400		0,0551	3,00	12	55	207.014.00
1,500		0,0591	3,00	12	55	207.015.00
1,600		0,0630	3,00	16	55	207.016.00
1,700		0,0669	3,00	16	55	207.017.00
1,800		0,0709	3,00	16	55	207.018.00
1,900		0,0748	3,00	16	55	207.019.00
2,000		0,0787	3,00	16	57	207.020.00
2,100		0,0827	3,00	21	57	207.021.00
2,200		0,0866	3,00	21	57	207.022.00
2,300		0,0906	3,00	21	57	207.023.00
2,400		0,0945	3,00	21	57	207.024.00
2,500		0,0984	3,00	21	57	207.025.00
2,600		0,1024	3,00	21	57	207.026.00
2,700		0,1063	3,00	21	57	207.027.00
2,800		0,1102	3,00	21	57	207.028.00
2,900		0,1142	3,00	21	57	207.029.00
3,000		0,1181	6,00	28	66	207.030.00
3,100		0,1220	6,00	28	66	207.031.00
3,175	1/8	0,1250	6,00	28	66	207.3175.00
3,200		0,1260	6,00	28	66	207.032.00
3,250		0,1280	6,00	28	66	207.325.00
3,300		0,1299	6,00	28	66	207.033.00
3,400		0,1339	6,00	28	66	207.034.00
3,500		0,1378	6,00	28	66	207.035.00
3,572	9/64	0,1406	6,00	28	66	207.3572.00
3,600		0,1417	6,00	28	66	207.036.00
3,650		0,1437	6,00	28	66	207.365.00
3,700		0,1457	6,00	28	66	207.037.00
3,800		0,1496	6,00	36	74	207.038.00
3,900		0,1535	6,00	36	74	207.039.00
3,969	5/32	0,1563	6,00	36	74	207.3969.00
4,100		0,1614	6,00	36	74	207.041.00
4,200		0,1654	6,00	36	74	207.042.00
4,300		0,1693	6,00	36	74	207.043.00
4,366	11/64	0,1719	6,00	36	74	207.4366.00
4,400		0,1732	6,00	36	74	207.044.00
4,500		0,1772	6,00	36	74	207.045.00
4,600		0,1811	6,00	36	74	207.046.00
4,650		0,1831	6,00	36	74	207.465.00
4,700		0,1850	6,00	36	74	207.047.00
4,763	3/16	0,1875	6,00	44	82	207.4763.00
4,800		0,1890	6,00	44	82	207.048.00

D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
4,900		0,1929	6,00	44	82	207.049.00
5,000		0,1969	6,00	44	82	207.050.00
5,100		0,2008	6,00	44	82	207.051.00
5,159	13/64	0,2031	6,00	44	82	207.5159.00
5,200		0,2047	6,00	44	82	207.052.00
5,250		0,2067	6,00	44	82	207.5250.00
5,300		0,2087	6,00	44	82	207.053.00
5,400		0,2126	6,00	44	82	207.054.00
5,500		0,2165	6,00	44	82	207.055.00
5,550		0,2185	6,00	44	82	207.555.00
5,556	7/32	0,2187	6,00	44	82	207.5556.00
5,600		0,2205	6,00	44	82	207.056.00
5,700		0,2244	6,00	44	82	207.057.00
5,800		0,2283	6,00	44	82	207.058.00
5,900		0,2323	6,00	44	82	207.059.00
6,000		0,2362	6,00	44	82	207.060.00
6,100		0,2402	8,00	53	91	207.061.00
6,200		0,2441	8,00	53	91	207.062.00
6,300		0,2480	8,00	53	91	207.063.00
6,350	1/4	0,2500	8,00	53	91	207.6350.00
6,400		0,2520	8,00	53	91	207.064.00
6,500		0,2559	8,00	53	91	207.065.00
6,600		0,2598	8,00	53	91	207.066.00
6,700		0,2638	8,00	53	91	207.067.00
6,747	17/64	0,2656	8,00	53	91	207.6747.00
6,800		0,2677	8,00	53	91	207.068.00
6,900		0,2717	8,00	53	91	207.069.00
7,000		0,2756	8,00	53	91	207.070.00
7,100		0,2795	8,00	53	91	207.071.00
7,144	9/32	0,2813	8,00	53	91	207.7144.00
7,200		0,2835	8,00	53	91	207.072.00
7,300		0,2874	8,00	53	91	207.073.00
7,400		0,2913	8,00	53	91	207.074.00
7,500		0,2953	8,00	53	91	207.075.00
7,541	19/64	0,2969	8,00	53	91	207.7541.00

TYP N-H

Universal

z

2

5xD

140°

IK

HA

Norm

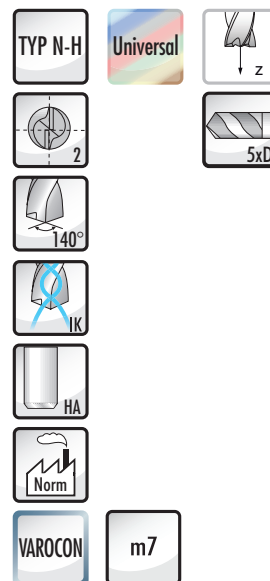
VAROCON

m7

Article-No. **207...**

Solid carbide drill 5xD

D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
7,600		0,2992	8,00	53	91	207.076.00
7,700		0,3031	8,00	53	91	207.077.00
7,800		0,3071	8,00	53	91	207.078.00
7,900		0,3110	8,00	53	91	207.079.00
7,938	5/16	0,3125	8,00	53	91	207.7938.00
8,000		0,3150	8,00	53	91	207.080.00
8,100		0,3189	10,00	61	103	207.081.00
8,200		0,3228	10,00	61	103	207.082.00
8,300		0,3268	10,00	61	103	207.083.00
8,400		0,3307	10,00	61	103	207.084.00
8,500		0,3346	10,00	61	103	207.085.00
8,600		0,3386	10,00	61	103	207.086.00
8,700		0,3425	10,00	61	103	207.087.00
8,731	11/32	0,3437	10,00	61	103	207.8731.00
8,800		0,3465	10,00	61	103	207.088.00
8,900		0,3504	10,00	61	103	207.089.00
9,000		0,3543	10,00	61	103	207.090.00
9,100		0,3583	10,00	61	103	207.091.00
9,128	23/64	0,3594	10,00	61	103	207.9128.00
9,200		0,3622	10,00	61	103	207.092.00
9,300		0,3661	10,00	61	103	207.093.00
9,400		0,3701	10,00	61	103	207.094.00
9,500		0,3740	10,00	61	103	207.095.00
9,525	3/8	0,3750	10,00	61	103	207.9525.00
9,600		0,3780	10,00	61	103	207.096.00
9,700		0,3819	10,00	61	103	207.097.00
9,800		0,3858	10,00	61	103	207.098.00
9,900		0,3898	10,00	61	103	207.099.00
9,922	25/64	0,3906	10,00	61	103	207.9922.00
10,000		0,3937	10,00	61	103	207.100.00
10,100		0,3976	12,00	71	118	207.101.00
10,200		0,4016	12,00	71	118	207.102.00
10,300		0,4055	12,00	71	118	207.103.00
10,319	13/32	0,4063	12,00	71	118	207.10319.00
10,400		0,4094	12,00	71	118	207.104.00
10,500		0,4134	12,00	71	118	207.105.00
10,600		0,4173	12,00	71	118	207.106.00
10,700		0,4213	12,00	71	118	207.107.00
10,716	27/64	0,4219	12,00	71	118	207.10716.00
10,800		0,4252	12,00	71	118	207.108.00
10,900		0,4291	12,00	71	118	207.109.00
11,000		0,4331	12,00	71	118	207.110.00
11,100		0,4370	12,00	71	118	207.111.00
11,113	7/16	0,4375	12,00	71	118	207.11113.00
11,200		0,4409	12,00	71	118	207.112.00
11,300		0,4449	12,00	71	118	207.113.00
11,400		0,4488	12,00	71	118	207.114.00
11,500		0,4528	12,00	71	118	207.115.00
11,509	29/64	0,4531	12,00	71	118	207.11509.00
11,550		0,4547	12,00	71	118	207.1155.00
11,600		0,4567	12,00	71	118	207.116.00
11,700		0,4606	12,00	71	118	207.117.00

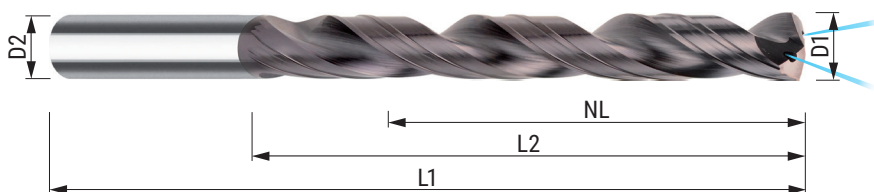


D1 m7	Inch	Decimal Equivalent	D2 h6	L2	L1	Article-No.
11,800		0,4646	12,00	71	118	207.118.00
11,900		0,4685	12,00	71	118	207.119.00
11,906	15/32	0,4687	12,00	71	118	207.11906.00
12,000		0,4724	12,00	71	118	207.120.00
12,200		0,4803	14,00	77	124	207.122.00
12,300		0,4843	14,00	77	124	207.123.00
12,303	31/64	0,4844	14,00	77	124	207.12303.00
12,500		0,4921	14,00	77	124	207.125.00
12,700	1/2	0,5000	14,00	77	124	207.12700.00
12,800		0,5039	14,00	77	124	207.128.00
13,000		0,5118	14,00	77	124	207.130.00
13,494	17/32	0,5313	10,00	77	124	207.13494.00
13,500		0,5315	10,00	77	124	207.135.00
13,800		0,5433	14,00	77	124	207.138.00
14,000		0,5512	14,00	77	124	207.140.00
14,200		0,5591	14,00	83	133	207.142.00
14,288	9/16	0,5625	16,00	83	133	207.14288.00
14,500		0,5709	16,00	83	133	207.145.00
15,000		0,5906	16,00	83	133	207.150.00
15,500		0,6102	16,00	83	133	207.152.00
15,500		0,6102	16,00	83	133	207.15210
15,500		0,6102	16,00	83	133	207.155.00
15,800		0,6220	16,00	83	133	207.158.00
15,875	5/8	0,6250	16,00	83	133	207.15875.00
16,000		0,6299	16,00	83	133	207.160.00
16,500		0,6496	18,00	93	143	207.165.00
16,800		0,6614	18,00	93	143	207.168.00
17,000		0,6693	18,00	93	143	207.170.00
17,500		0,6890	18,00	93	143	207.175.00
17,800		0,7008	18,00	93	143	207.178.00
18,000		0,7087	18,00	93	143	207.180.00
18,500		0,7283	18,00	101	153	207.185.00
19,000		0,7480	20,00	101	153	207.190.00
19,500		0,7677	20,00	101	153	207.195.00
20,000		0,7874	20,00	101	153	207.200.00



Article-No. **708...**

Solid carbide drill with internal coolant hole 8xD



D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
1,000		0,0394	3,00	11	55	9,0	708.010
1,100		0,0433	3,00	17	55	13,5	708.011
1,200		0,0472	3,00	17	55	13,5	708.012
1,300		0,0512	3,00	17	55	13,5	708.013
1,400		0,0551	3,00	17	55	13,5	708.014
1,500		0,0591	3,00	22	65	17,5	708.015
1,600		0,0630	3,00	22	65	17,5	708.016
1,700		0,0669	3,00	22	65	17,5	708.017
1,800		0,0709	3,00	22	65	17,5	708.018
1,900		0,0748	3,00	22	65	17,5	708.019
2,000		0,0787	3,00	28	74	22,5	708.020
2,100		0,0827	3,00	28	74	22,5	708.021
2,200		0,0866	3,00	28	74	22,5	708.022
2,300		0,0906	3,00	28	74	22,5	708.023
2,400		0,0945	3,00	28	74	22,5	708.024
2,500		0,0984	3,00	28	81	22,5	708.025
2,600		0,1024	3,00	32	81	22,5	708.026
2,700		0,1063	3,00	32	81	22,5	708.027
2,800		0,1102	3,00	32	81	22,5	708.028
2,900		0,1142	3,00	32	81	22,5	708.029
3,000		0,1181	6,00	34	72	27,0	708.030
3,100		0,1220	6,00	34	72	27,0	708.031
3,175	1/8	0,1250	6,00	34	72	27,0	708.3175
3,200		0,1260	6,00	34	72	27,0	708.032
3,300		0,1299	6,00	34	72	27,0	708.033
3,400		0,1339	6,00	34	72	27,0	708.034
3,500		0,1378	6,00	34	72	27,0	708.035
3,572	9/64	0,1406	6,00	34	72	27,0	708.3572
3,600		0,1417	6,00	34	72	27,0	708.036
3,700		0,1457	6,00	34	72	27,0	708.037
3,800		0,1496	6,00	43	86	35,0	708.038
3,900		0,1535	6,00	43	86	35,0	708.039
3,969	5/32	0,1563	6,00	43	86	35,0	708.3969
4,000		0,1575	6,00	43	86	35,0	708.040
4,100		0,1614	6,00	43	86	35,0	708.041
4,200		0,1654	6,00	43	86	35,0	708.042
4,300		0,1693	6,00	43	86	35,0	708.043
4,366	11/64	0,1719	6,00	43	86	35,0	708.4366
4,400		0,1732	6,00	43	86	35,0	708.044
4,500		0,1772	6,00	43	86	35,0	708.045
4,600		0,1811	6,00	43	86	35,0	708.046
4,700		0,1850	6,00	57	95	45,0	708.047
4,763	3/16	0,1875	6,00	57	95	45,0	708.4763
4,800		0,1890	6,00	57	95	45,0	708.048
4,900		0,1929	6,00	57	95	45,0	708.049
5,000		0,1969	6,00	57	95	45,0	708.050

.00 HA Schaft/Shank
.10 HB Schaft/Shank
.20 HE Schaft/Shank

D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
5,100		0,2008	6,00	57	95	45,0	708.051
5,159	13/64	0,2031	6,00	57	95	45,0	708.5159
5,200		0,2047	6,00	57	95	45,0	708.052
5,300		0,2087	6,00	57	95	45,0	708.053
5,400		0,2126	6,00	57	95	45,0	708.054
5,500		0,2165	6,00	57	95	45,0	708.055
5,556	7/32	0,2187	6,00	57	95	45,0	708.5556
5,600		0,2205	6,00	57	95	45,0	708.056
5,700		0,2244	6,00	57	95	45,0	708.057
5,800		0,2283	6,00	57	95	45,0	708.058
5,900		0,2323	6,00	57	95	45,0	708.059
6,000		0,2362	6,00	57	95	45,0	708.060
6,100		0,2402	8,00	76	114	52,0	708.061
6,200		0,2441	8,00	76	114	52,0	708.062
6,300		0,2480	8,00	76	114	52,0	708.063
6,350	1/4	0,2500	8,00	76	114	52,0	708.6350
6,400		0,2520	8,00	76	114	52,0	708.064
6,500		0,2559	8,00	76	114	52,0	708.065
6,600		0,2598	8,00	76	114	52,0	708.066
6,700		0,2638	8,00	76	114	52,0	708.067
6,747	17/64	0,2656	8,00	76	114	52,0	708.6747
6,800		0,2677	8,00	76	114	52,0	708.068
6,900		0,2717	8,00	76	114	52,0	708.069
7,000		0,2756	8,00	76	114	52,0	708.070
7,100		0,2795	8,00	76	114	52,0	708.071
7,144	9/32	0,2813	8,00	76	114	52,0	708.7144
7,200		0,2835	8,00	76	114	52,0	708.072
7,300		0,2874	8,00	76	114	52,0	708.073
7,400		0,2913	8,00	76	114	52,0	708.074
7,500		0,2953	8,00	76	114	52,0	708.075

TYP N

Universal



Article-No. **708...**

Solid carbide drill with internal coolant hole 8xD



D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
7,541	19/64	0,2969	8,00	76	114	52,0	708.7541
7,600		0,2992	8,00	76	114	52,0	708.076
7,700		0,3031	8,00	76	114	52,0	708.077
7,800		0,3071	8,00	76	114	52,0	708.078
7,900		0,3110	8,00	76	114	52,0	708.079
7,938	5/16	0,3125	10,00	76	114	52,0	708.7938
8,000		0,3150	10,00	76	114	52,0	708.080
8,100		0,3189	10,00	95	142	76,0	708.081
8,200		0,3228	10,00	95	142	76,0	708.082
8,300		0,3268	10,00	95	142	76,0	708.083
8,400		0,3307	10,00	95	142	76,0	708.084
8,500		0,3346	10,00	95	142	76,0	708.085
8,600		0,3386	10,00	95	142	76,0	708.086
8,700		0,3425	10,00	95	142	76,0	708.087
8,731	11/32	0,3437	10,00	95	142	76,0	708.8731
8,800		0,3465	10,00	95	142	76,0	708.088
8,900		0,3504	10,00	95	142	76,0	708.089
9,000		0,3543	10,00	95	142	76,0	708.090
9,100		0,3583	10,00	95	142	76,0	708.091
9,128	23/64	0,3594	10,00	95	142	76,0	708.9128
9,200		0,3622	10,00	95	142	76,0	708.092
9,300		0,3661	10,00	95	142	76,0	708.093
9,400		0,3701	10,00	95	142	76,0	708.094
9,500		0,3740	10,00	95	142	76,0	708.095
9,525	3/8	0,3750	10,00	95	142	76,0	708.9525
9,600		0,3780	10,00	95	142	76,0	708.096
9,700		0,3819	10,00	95	142	76,0	708.097
9,800		0,3858	10,00	95	142	76,0	708.098
9,900		0,3898	10,00	95	142	76,0	708.099
9,922	25/64	0,3906	10,00	95	142	76,0	708.9922
10,000		0,3937	10,00	95	142	76,0	708.100
10,100		0,3976	12,00	114	162	90,0	708.101
10,200		0,4016	12,00	114	162	90,0	708.102
10,300		0,4055	12,00	114	162	90,0	708.103
10,319	13/32	0,4063	12,00	114	162	90,0	708.10319
10,400		0,4094	12,00	114	162	90,0	708.104
10,500		0,4134	12,00	114	162	90,0	708.105
10,600		0,4173	12,00	114	162	90,0	708.106
10,700		0,4213	12,00	114	162	90,0	708.107
10,716	27/64	0,4219	12,00	114	162	90,0	708.10716
10,800		0,4252	12,00	114	162	90,0	708.108
10,900		0,4291	12,00	114	162	90,0	708.109
11,000		0,4331	12,00	114	162	90,0	708.110
11,100		0,4370	12,00	114	162	90,0	708.111
11,113	7/16	0,4375	12,00	114	162	90,0	708.11113
11,200		0,4409	12,00	114	162	90,0	708.112
11,300		0,4449	12,00	114	162	90,0	708.113
11,400		0,4488	12,00	114	162	90,0	708.114
11,500		0,4528	12,00	114	162	90,0	708.115
11,509	29/64	0,4531	12,00	114	162	90,0	708.11509

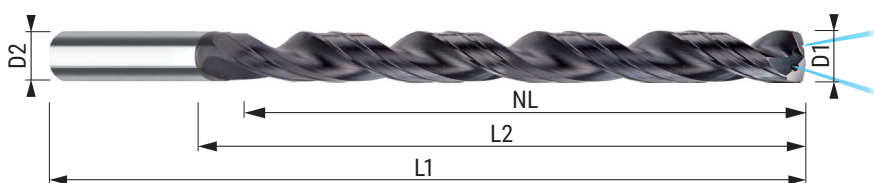


D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
11,600		0,4567	12,00	114	162	90,0	708.116
11,700		0,4606	12,00	114	162	90,0	708.117
11,800		0,4646	12,00	114	162	90,0	708.118
11,900		0,4685	12,00	114	162	90,0	708.119
11,906	15/32	0,4687	12,00	114	162	90,0	708.11906
12,000		0,4724	12,00	114	162	90,0	708.120
12,200		0,4803	14,00	133	184	106,0	708.122
12,303	31/64	0,4844	14,00	133	184	106,0	708.12303
12,500		0,4921	14,00	133	184	106,0	708.125
12,700	1/2	0,5000	14,00	133	184	106,0	708.12700
12,800		0,5039	14,00	133	184	106,0	708.128
13,000		0,5118	14,00	133	184	106,0	708.130
13,494	17/32	0,5313	14,00	133	184	106,0	708.13494
13,500		0,5315	14,00	133	184	106,0	708.135
14,000		0,5512	14,00	133	184	106,0	708.140
14,288	9/16	0,5625	16,00	152	203	122,0	708.14288
14,500		0,5709	16,00	152	203	122,0	708.145
15,000		0,5906	16,00	152	203	122,0	708.150
15,500		0,6102	16,00	152	203	122,0	708.155
15,800		0,6102	16,00	152	203	122,0	708.158
15,875	5/8	0,6250	16,00	152	203	122,0	708.15875
16,000		0,6299	16,00	152	203	122,0	708.160
16,500		0,6496	18,00	171	222	150,0	708.165
17,000		0,6693	18,00	171	222	150,0	708.170
17,500		0,6890	18,00	171	222	150,0	708.175
18,000		0,7087	18,00	171	222	150,0	708.180
18,500		0,7283	20,00	190	243	170,0	708.185
19,000		0,7480	20,00	190	243	170,0	708.190
20,000		0,7874	20,00	190	243	170,0	708.200



Article-No. **710...**

Solid carbide drill with internal coolant hole 12xD



D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
1,00		0,0394	3,00	15	55	12,0	710.010..00
1,10		0,0433	3,00	23	55	18,5	710.011.00
1,20		0,0472	3,00	23	55	18,5	710.012.00
1,30		0,0512	3,00	23	55	18,5	710.013.00
1,40		0,0551	3,00	23	55	18,5	710.014.00
1,50		0,0591	3,00	30	65	24,0	710.015.00
1,60		0,0630	3,00	30	65	24,0	710.016.00
1,70		0,0669	3,00	30	65	24,0	710.017.00
1,80		0,0709	3,00	30	65	24,0	710.018.00
1,90		0,0748	3,00	30	65	24,0	710.019.00
2,00		0,0787	3,00	38	74	30,5	710.020..00
2,10		0,0827	3,00	38	74	30,5	710.021.00
2,20		0,0866	3,00	38	74	30,5	710.022.00
2,30		0,0906	3,00	38	74	30,5	710.023.00
2,40		0,0945	3,00	38	74	30,5	710.024.00
2,50		0,0984	3,00	44	81	30,5	710.025.00
2,60		0,1024	3,00	44	81	30,5	710.026.00
2,70		0,1063	3,00	44	81	30,5	710.027.00
2,80		0,1102	3,00	44	81	30,5	710.028.00
2,90		0,1142	3,00	44	81	30,5	710.029.00
3,00		0,1181	6,00	54	92	48,0	710.030...
3,10		0,1220	6,00	54	92	48,0	710.031...
3,175	1/8	0,1250	6,00	54	92	48,0	710.3175...
3,200		0,1260	6,00	54	92	48,0	710.032...
3,300		0,1299	6,00	54	92	48,0	710.033...
3,400		0,1339	6,00	54	92	48,0	710.034...
3,500		0,1378	6,00	54	92	48,0	710.035...
3,572	9/64	0,1406	6,00	54	92	48,0	710.3572...
3,600		0,1417	6,00	54	92	48,0	710.036...
3,700		0,1457	6,00	54	92	48,0	710.037...
3,800		0,1496	6,00	64	102	58,0	710.038...
3,900		0,1535	6,00	64	102	58,0	710.039...
3,969	5/32	0,1563	6,00	64	102	58,0	710.3969...
4,000		0,1575	6,00	64	102	58,0	710.040...
4,100		0,1614	6,00	64	102	58,0	710.041...
4,200		0,1654	6,00	64	102	58,0	710.042...
4,300		0,1693	6,00	64	102	58,0	710.043...
4,366	11/64	0,1719	6,00	64	102	58,0	710.4366...
4,400		0,1732	6,00	64	102	58,0	710.044...
4,500		0,1772	6,00	64	102	58,0	710.045...
4,600		0,1811	6,00	64	102	58,0	710.046...
4,700		0,1850	6,00	64	102	58,0	710.047...
4,763	3/16	0,1875	6,00	78	118	70,0	710.4763...
4,800		0,1890	6,00	78	118	70,0	710.048...
4,900		0,1929	6,00	78	118	70,0	710.049...
5,000		0,1969	6,00	78	118	70,0	710.050...
5,100		0,2008	6,00	78	118	70,0	710.051...

.00 HA Schaft/Shank
.10 HB Schaft/Shank
.20 HE Schaft/Shank

TYP N

Universal



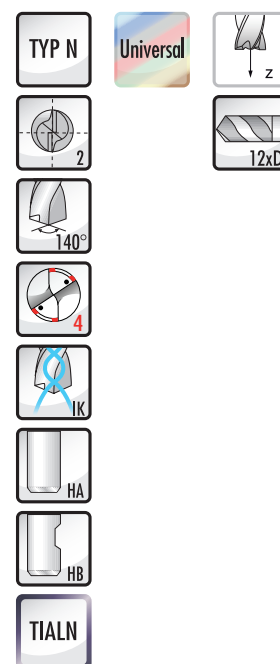
D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
5,159	13/64	0,2031	6,00	78	118	70,0	710.5159...
5,200		0,2047	6,00	78	118	70,0	710.052...
5,300		0,2087	6,00	78	118	70,0	710.053...
5,400		0,2126	6,00	78	118	70,0	710.054...
5,500		0,2165	6,00	78	118	70,0	710.055...
5,556	7/32	0,2187	6,00	78	118	70,0	710.5556...
5,600		0,2205	6,00	78	118	70,0	710.056...
5,700		0,2244	6,00	78	118	70,0	710.057...
5,800		0,2283	6,00	78	118	70,0	710.058...
5,900		0,2323	6,00	78	118	70,0	710.059...
6,000		0,2362	6,00	78	118	70,0	710.060...
6,100		0,2402	8,00	108	146	94,0	710.061...
6,200		0,2441	8,00	108	146	94,0	710.062...
6,300		0,2480	8,00	108	146	94,0	710.063...
6,350	1/4	0,2500	8,00	108	146	94,0	710.6350...
6,400		0,2520	8,00	108	146	94,0	710.064...
6,500		0,2559	8,00	108	146	94,0	710.065...
6,600		0,2598	8,00	108	146	94,0	710.066...
6,700		0,2638	8,00	108	146	94,0	710.067...
6,747	17/64	0,2656	8,00	108	146	94,0	710.6747...
6,800		0,2677	8,00	108	146	94,0	710.068...
6,900		0,2717	8,00	108	146	94,0	710.069...
7,000		0,2756	8,00	108	146	94,0	710.070...
7,100		0,2795	8,00	108	146	94,0	710.071...
7,144	9/32	0,2813	8,00	108	146	94,0	710.7144...
7,200		0,2835	8,00	108	146	94,0	710.072...
7,300		0,2874	8,00	108	146	94,0	710.073...
7,400		0,2913	8,00	108	146	94,0	710.074...
7,500		0,2953	8,00	108	146	94,0	710.075...
7,541	19/64	0,2969	8,00	108	146	94,0	710.7541...
7,600		0,2992	8,00	108	146	94,0	710.076...

Article-No. **710...**

Solid carbide drill with internal coolant hole 12xD



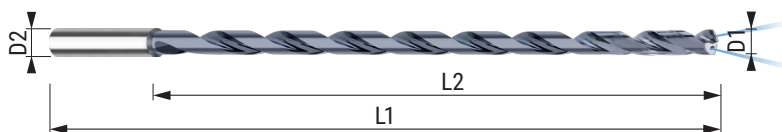
D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
7,700		0,3031	8,00	108	146	94,0	710.077...
7,800		0,3071	8,00	108	146	94,0	710.078...
7,900		0,3110	8,00	108	146	94,0	710.079...
7,938	5/16	0,3125	8,00	108	146	94,0	710.7938...
8,000		0,3150	8,00	108	146	94,0	710.080...
8,100		0,3189	10,00	120	162	110,0	710.081...
8,200		0,3228	10,00	120	162	110,0	710.082...
8,300		0,3268	10,00	120	162	110,0	710.083...
8,400		0,3307	10,00	120	162	110,0	710.084...
8,500		0,3346	10,00	120	162	110,0	710.085...
8,600		0,3386	10,00	120	162	110,0	710.086...
8,700		0,3425	10,00	120	162	110,0	710.087...
8,731	11/32	0,3437	10,00	120	162	110,0	710.8731...
8,800		0,3465	10,00	120	162	110,0	710.088...
8,900		0,3504	10,00	120	162	110,0	710.089...
9,000		0,3543	10,00	120	162	110,0	710.090...
9,100		0,3583	10,00	120	162	110,0	710.091...
9,128	23/64	0,3594	10,00	120	162	110,0	710.9128...
9,200		0,3622	10,00	120	162	110,0	710.092...
9,300		0,3661	10,00	120	162	110,0	710.093...
9,400		0,3701	10,00	120	162	110,0	710.094...
9,500		0,3740	10,00	120	162	110,0	710.095...
9,525	3/8	0,3750	10,00	120	162	110,0	710.9525...
9,600		0,3780	10,00	120	162	110,0	710.096...
9,700		0,3819	10,00	120	162	110,0	710.097...
9,800		0,3858	10,00	120	162	110,0	710.098...
9,900		0,3898	10,00	120	162	110,0	710.099...
9,922	25/64	0,3906	10,00	120	162	110,0	710.9922...
10,000		0,3937	10,00	120	162	110,0	710.1.....
10,100		0,3976	12,00	156	204	142,0	710.101...
10,200		0,4016	12,00	156	204	142,0	710.102...
10,300		0,4055	12,00	156	204	142,0	710.103...
10,319	13/32	0,4063	12,00	156	204	142,0	710.10319...
10,400		0,4094	12,00	156	204	142,0	710.104...
10,500		0,4134	12,00	156	204	142,0	710.105...
10,600		0,4173	12,00	156	204	142,0	710.106...
10,700		0,4213	12,00	156	204	142,0	710.107...
10,716	27/64	0,4219	12,00	156	204	142,0	710.10716...
10,800		0,4252	12,00	156	204	142,0	710.108...
10,900		0,4291	12,00	156	204	142,0	710.109...
11,000		0,4331	12,00	156	204	142,0	710.110...
11,100		0,4370	12,00	156	204	142,0	710.111...
11,113	7/16	0,4375	12,00	156	204	142,0	710.11113...
11,200		0,4409	12,00	156	204	142,0	710.112...
11,300		0,4449	12,00	156	204	142,0	710.113...
11,400		0,4488	12,00	156	204	142,0	710.114...
11,500		0,4528	12,00	156	204	142,0	710.115...
11,509	29/64	0,4531	12,00	156	204	142,0	710.11509...
11,600		0,4567	12,00	156	204	142,0	710.116...
11,700		0,4606	12,00	156	204	142,0	710.117...
11,800		0,4646	12,00	156	204	142,0	710.118...
11,900		0,4685	12,00	156	204	142,0	710.119...



D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
11,906	15/32	0,4687	12,00	156	204	142,0	710.11906...
12,000		0,4724	12,00	156	204	142,0	710.120...
12,303	31/64	0,4844	14,00	182	230	166,0	710.12303...
12,500		0,4921	14,00	182	230	166,0	710.125...
12,700	1/2	0,5000	14,00	182	230	166,0	710.127.....
12,800		0,5039	14,00	182	230	166,0	710.128...
13,000		0,5118	14,00	182	230	166,0	710.130...
13,494	17/32	0,5313	14,00	182	230	166,0	710.13494...
13,500		0,5315	14,00	182	230	166,0	710.135...
13,800		0,5433	14,00	182	230	166,0	710.138...
14,000		0,5512	14,00	182	230	166,0	710.140...
14,288	9/16	0,5625	16,00	208	260	192,0	710.14288...
14,500		0,5709	16,00	208	260	192,0	710.145...
14,800		0,5827	16,00	208	260	192,0	710.148...
15,000		0,5906	16,00	208	260	192,0	710.150...
15,500		0,6102	16,00	208	260	192,0	710.155...
15,800		0,6220	16,00	208	260	192,0	710.158...
15,875	5/8	0,6250	16,00	208	260	192,0	710.15875...
16,000		0,6299	16,00	208	260	192,0	710.160...
16,500		0,6496	18,00	234	285	216,0	710.165...
16,800		0,6614	18,00	234	285	216,0	710.168...
17,000		0,6693	18,00	234	285	216,0	710.170...
17,500		0,6890	18,00	234	285	216,0	710.175...
17,800		0,7008	18,00	234	285	216,0	710.178...
18,000		0,7087	18,00	234	285	216,0	710.180...
18,500		0,7283	20,00	258	310	238,0	710.185...
18,800		0,7402	20,00	258	310	238,0	710.188...
19,000		0,7480	20,00	258	310	238,0	710.190...
19,500		0,7677	20,00	258	310	238,0	710.195...
19,800		0,7795	20,00	258	310	238,0	710.198...
20,000		0,7874	20,00	258	310	238,0	710.200...



Article-No. **908...**

Solid carbide deep hole drill **DEEPMAX 15xD**


D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
1,000		0,0394	3,00	18,2	60	18	908.010.00
1,100		0,0433	3,00	20,2	60	20	908.011.00
1,200		0,0472	3,00	24,2	60	24	908.012.00
1,300		0,0512	3,00	24,2	60	24	908.013.00
1,400		0,0551	3,00	27,2	60	27	908.014.00
1,500		0,0591	3,00	27,2	60	27	908.015.00
1,600		0,0630	3,00	30,2	65	30	908.016.00
1,700		0,0669	3,00	30,2	65	30	908.017.00
1,800		0,0709	3,00	35,2	65	35	908.018.00
1,900		0,0748	3,00	35,2	65	35	908.019.00
2,000		0,0787	4,00	35,5	65	35	908.020.00
2,100		0,0827	4,00	40,5	75	40	908.021.00
2,200		0,0866	4,00	40,5	75	40	908.022.00
2,300		0,0906	4,00	40,5	75	40	908.023.00
2,400		0,0945	4,00	45,5	75	45	908.024.00
2,500		0,0984	4,00	45,5	75	45	908.025.00
2,600		0,1024	4,00	48,5	80	48	908.026.00
2,700		0,1063	4,00	48,5	80	48	908.027.00
2,800		0,1102	4,00	50,5	80	50	908.028.00
2,900		0,1142	4,00	50,5	80	50	908.029.00
3,000		0,1181	6,00	55,5	100	55	908.030.00
3,100		0,1220	6,00	55,5	100	55	908.031.00
3,175	1/8	0,1250	6,00	60,5	100	60	908.3175.00
3,200		0,1260	6,00	60,5	100	60	908.032.00
3,300		0,1299	6,00	60,5	100	60	908.033.00
3,400		0,1339	6,00	60,5	100	60	908.034.00
3,500		0,1378	6,00	65,5	100	65	908.035.00
3,572	9/64	0,1406	6,00	65,5	100	65	908.3572.00
3,600		0,1417	6,00	65,5	108	65	908.036.00
3,700		0,1457	6,00	70,5	108	70	908.037.00
3,800		0,1496	6,00	70,5	108	70	908.038.00
3,900		0,1535	6,00	70,5	108	70	908.039.00
3,969	5/32	0,1563	6,00	75,5	115	75	908.3969.00
4,000		0,1575	6,00	75,5	115	75	908.040.00
4,100		0,1614	6,00	75,5	115	75	908.041.00
4,200		0,1654	6,00	75,5	115	75	908.042.00
4,300		0,1693	6,00	80,5	115	80	908.043.00
4,400		0,1732	6,00	80,5	115	80	908.044.00
4,500		0,1772	6,00	80,5	115	80	908.045.00
4,600		0,1811	6,00	80,5	130	85	908.046.00
4,700		0,1850	6,00	80,5	130	85	908.047.00
4,763	3/16	0,1875	6,00	90,5	130	90	908.4763.00
4,800		0,1890	6,00	90,5	130	90	908.048.00
4,900		0,1929	6,00	90,5	130	90	908.049.00


Recommendation:

Maximum drilling depth: Flute length (see table) minus 1.5 x nominal diameter

Article-No. **908...**Solid carbide deep hole drill **DEEPMAX 15xD**

D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
5,000		0,1969	6,00	90,5	130	90	908.050.00
5,100		0,2008	6,00	95,5	130	95	908.051.00
5,200		0,2047	6,00	95,5	130	95	908.052.00
5,300		0,2087	6,00	95,5	130	95	908.053.00
5,400		0,2126	6,00	95,5	130	95	908.054.00
5,500		0,2165	6,00	100,5	145	100	908.055.00
5,556	7/32	0,2187	6,00	100,5	145	100	908.5556.00
5,600		0,2205	6,00	100,5	145	100	908.056.00
5,700		0,2244	6,00	100,5	145	100	908.057.00
5,800		0,2283	6,00	100,5	145	100	908.058.00
5,900		0,2323	6,00	100,5	145	100	908.059.00
6,000		0,2362	6,00	100,5	145	100	908.060.00
6,100		0,2402	8,00	107,0	145	104	908.061.00
6,200		0,2441	8,00	107,0	145	104	908.062.00
6,300		0,2480	8,00	107,0	145	104	908.063.00
6,350	1/4	0,2500	8,00	107,0	145	104	908.6350.00
6,400		0,2520	8,00	107,0	145	104	908.064.00
6,500		0,2559	8,00	121,0	160	118	908.065.00
6,600		0,2598	8,00	121,0	160	118	908.066.00
6,700		0,2638	8,00	131,0	170	128	908.067.00
6,800		0,2677	8,00	131,0	170	128	908.068.00
6,900		0,2717	8,00	131,0	170	128	908.069.00
7,000		0,2756	8,00	131,0	170	128	908.070.00
7,144	9/32	0,2813	8,00	131,0	170	128	908.7144.00
7,500		0,2953	8,00	131,0	170	128	908.075.00
7,800		0,3071	8,00	141,0	180	138	908.078.00
7,938	5/16	0,3125	8,00	141,0	180	138	908.7938.00
8,000		0,3150	8,00	141,0	180	138	908.080.00
8,500		0,3346	10,00	155,0	198	152	908.085.00
8,731	11/32	0,3437	10,00	165,0	208	162	908.8731.00
8,800		0,3465	10,00	165,0	208	162	908.088.00
9,000		0,3543	10,00	165,0	208	162	908.090.00
9,500		0,3740	10,00	165,0	208	162	908.095.00
9,525	3/8	0,3750	10,00	165,0	208	162	908.9525.00
9,800		0,3858	10,00	165,0	208	162	908.098.00
10,000		0,3937	10,00	175,0	218	172	908.1.00.00
10,200		0,4016	12,00	187,0	235	184	908.102.00
10,319	13/32	0,4063	12,00	187,0	235	184	908.10319.00
10,500		0,4134	12,00	197,0	245	194	908.105.00
10,800		0,4252	12,00	197,0	245	194	908.108.00
11,000		0,4331	12,00	197,0	245	194	908.110.00
11,113	7/16	0,4375	12,00	197,0	245	194	908.11113.00
11,200		0,4409	12,00	197,0	245	194	908.112.00
11,500		0,4528	12,00	197,0	245	194	908.115.00
11,800		0,4646	12,00	207,0	255	204	908.118.00
11,906	15/32	0,4687	12,00	207,0	255	204	908.11906.00
12,000		0,4724	12,00	207,0	255	204	908.120.00

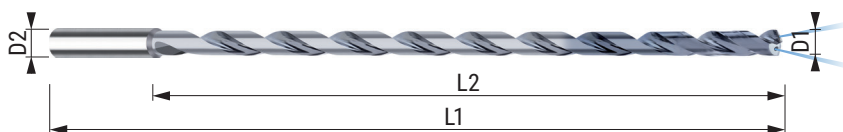
**Recommendation:**

Maximum drilling depth: Flute length (see table) minus 1.5 x nominal diameter



Article-No. **909...**

Solid carbide deep hole drill **DEEPMAX 20xD**



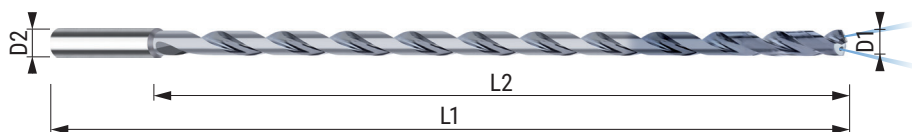
D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
2,000		0,0787	4,00	45,50	95	45	909.020.00
2,100		0,0827	4,00	50,50	95	50	909.021.00
2,200		0,0866	4,00	50,50	95	50	909.022.00
2,300		0,0906	4,00	55,50	95	55	909.023.00
2,400		0,0945	4,00	55,50	95	55	909.024.00
2,500		0,0984	4,00	60,50	108	60	909.025.00
2,600		0,1024	4,00	60,50	108	60	909.026.00
2,700		0,1063	4,00	65,50	108	65	909.027.00
2,800		0,1102	4,00	65,50	108	65	909.028.00
2,900		0,1142	4,00	68,50	112	68	909.029.00
3,000		0,1181	6,00	68,50	112	68	909.030.00
3,175	1/8	0,1250	6,00	75,50	120	75	909.3175.00
3,200		0,1260	6,00	75,50	120	75	909.032.00
3,300		0,1299	6,00	75,50	120	75	909.033.00
3,500		0,1378	6,00	80,50	130	80	909.035.00
3,572	9/64	0,1406	6,00	80,50	130	80	909.3572.00
3,800		0,1496	6,00	90,50	140	90	909.038.00
3,969	5/32	0,1563	6,00	95,50	140	95	909.3969.00
4,000		0,1575	6,00	95,50	140	95	909.040.00
4,200		0,1654	6,00	95,50	140	95	909.042.00
4,500		0,1772	6,00	110,50	160	110	909.045.00
4,600		0,1811	6,00	110,50	160	110	909.046.00
4,763	3/16	0,1875	6,00	115,50	160	115	909.4763.00
4,800		0,1890	6,00	115,50	160	115	909.048.00
5,000		0,1969	6,00	115,50	160	115	909.050.00
5,500		0,2165	6,00	140,50	185	140	909.055.00
5,556	7/32	0,2187	6,00	140,50	185	140	909.5556.00
5,800		0,2283	6,00	140,50	185	140	909.058.00
6,000		0,2362	6,00	140,50	185	140	909.060.00
6,350	1/4	0,2500	8,00	150,00	190	147	909.6350.00
6,500		0,2559	8,00	150,00	190	147	909.065.00
6,800		0,2677	8,00	160,00	200	157	909.068.00
7,000		0,2756	8,00	170,00	210	167	909.070.00
7,144	9/32	0,2813	8,00	170,00	210	167	909.7144.00
7,500		0,2953	8,00	170,00	210	167	909.075.00
7,800		0,3071	8,00	190,00	230	187	909.078.00
7,938	5/16	0,3125	8,00	190,00	230	187	909.7938.00
8,000		0,3150	8,00	190,00	230	187	909.080.00
8,500		0,3346	10,00	196,00	240	193	909.085.00
8,731	11/32	0,3437	10,00	216,00	260	213	909.8731.00
8,800		0,3465	10,00	216,00	260	213	909.088.00
9,000		0,3543	10,00	216,00	260	213	909.090.00
9,525	3/8	0,3750	10,00	236,00	280	233	909.9525.00
9,800		0,3858	10,00	236,00	280	233	909.098.00
10,000		0,3937	10,00	236,00	280	233	909.1.00.00
10,200		0,4016	12,00	241,00	290	238	909.102.00
10,319	13/32	0,4063	12,00	241,00	290	238	909.10319.00
10,800		0,4252	12,00	266,00	315	263	909.108.00
11,113	7/16	0,4375	12,00	266,00	315	263	909.11113.00
11,800		0,4646	12,00	266,00	315	263	909.118.00
11,906	15/32	0,4687	12,00	266,00	315	263	909.11906.00
12,000		0,4724	12,00	266,00	315	263	909.120.00



Recommendation:

Maximum drilling depth: Flute length (see table) minus 1.5 x nominal diameter

Article-No. **910...**

Solid carbide deep hole drill **DEEPMAX 25xD**


D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
3,000		0,1181	6,00	85,5	130	85	910.030.00
3,175	1/8	0,1250	6,00	95,5	140	95	910.3175.00
3,200		0,1260	6,00	95,5	140	95	910.032.00
3,300		0,1299	6,00	95,5	140	95	910.033.00
3,500		0,1378	6,00	100,5	150	100	910.035.00
3,572	9/64	0,1406	6,00	100,5	150	100	910.3572.00
3,800		0,1496	6,00	105,5	150	105	910.038.00
3,969	5/32	0,1563	6,00	110,5	160	110	910.3969.00
4,000		0,1575	6,00	110,5	160	110	910.040.00
4,200		0,1654	6,00	120,5	170	120	910.042.00
4,500		0,1772	6,00	130,5	180	130	910.045.00
4,763	3/16	0,1875	6,00	140,5	190	140	910.4763.00
4,800		0,1890	6,00	140,5	190	140	910.048.00
5,000		0,1969	6,00	140,5	190	140	910.050.00
5,500		0,2165	6,00	160,5	210	160	910.055.00
5,556	7/32	0,2187	6,00	160,5	210	160	910.5556.00
5,800		0,2283	6,00	160,5	210	160	910.058.00
6,000		0,2362	6,00	170,5	220	170	910.060.00
6,350	1/4	0,2500	8,00	191,0	230	188	910.6350.00
6,500		0,2559	8,00	191,0	230	188	910.065.00
6,800		0,2677	8,00	191,0	230	188	910.068.00
7,000		0,2756	8,00	201,0	240	198	910.070.00
7,144	9/32	0,2813	8,00	201,0	240	198	910.7144.00
7,500		0,2953	8,00	214,0	250	211	910.075.00
7,800		0,3071	8,00	224,0	260	221	910.078.00
7,938	5/16	0,3125	8,00	224,0	260	221	910.7938.00
8,000		0,3150	8,00	224,0	260	221	910.080.00
8,500		0,3346	10,00	237,0	280	234	910.085.00
8,731	11/32	0,3437	10,00	247,0	290	244	910.8731.00
8,800		0,3465	10,00	247,0	290	244	910.088.00
9,000		0,3543	10,00	247,0	290	244	910.090.00
9,500		0,3740	10,00	267,0	310	264	910.095.00
9,525	3/8	0,3750	10,00	267,0	310	264	910.9525.00
9,800		0,3858	10,00	267,0	310	264	910.098.00
10,000		0,3937	10,00	267,0	310	264	910.100.00
10,200		0,4016	12,00	292,0	340	289	910.102.00
10,319	13/32	0,4063	12,00	292,0	340	289	910.10319.00
10,800		0,4252	12,00	302,0	350	299	910.108.00
11,113	7/16	0,4375	12,00	302,0	350	299	910.11113.00
11,800		0,4646	12,00	327,0	375	324	910.118.00
11,906	15/32	0,4687	12,00	327,0	375	324	910.11906.00
12,000		0,4724	12,00	327,0	375	324	910.120.00

1st
CHOICE

TYP N

Universal



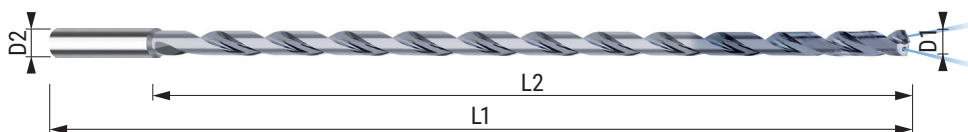
h7


Recommendation:

Maximum drilling depth: Flute length (see table) minus 1.5 x nominal diameter



Article-No. **911...**

Solid carbide deep hole drill **DEEPMAX 30xD**


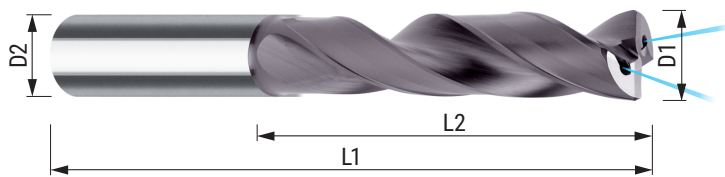
D1 h7	Inch	Decimal Equivalent	D2 h6	L2	L1	NL	Article-No.
2,000		0,0787	4,00	65,5	105	65	911.020.00
2,200		0,0866	4,00	75,5	115	75	911.022.00
2,300		0,0906	4,00	75,5	115	75	911.023.00
2,400		0,0945	4,00	85,5	130	85	911.024.00
2,500		0,0984	4,00	85,5	130	85	911.025.00
2,700		0,1063	4,00	95,5	140	95	911.027.00
2,800		0,1102	4,00	95,5	140	95	911.028.00
2,900		0,1142	4,00	95,5	140	95	911.029.00
3,000		0,1181	6,00	105,5	150	105	911.030.00
3,175	1/8	0,1250	6,00	105,5	150	105	991.3175.00
3,200		0,1260	6,00	105,5	150	105	911.032.00
3,300		0,1299	6,00	115,5	160	115	911.033.00
3,500		0,1378	6,00	115,5	160	115	911.035.00
3,572	9/64	0,1406	6,00	115,5	160	115	911.3572.00
3,800		0,1496	6,00	125,5	175	125	911.038.00
3,969	5/32	0,1563	6,00	135,5	185	135	911.3969.00
4,000		0,1575	6,00	135,5	185	135	911.040.00
4,200		0,1654	6,00	135,5	185	135	911.042.00
4,500		0,1772	6,00	145,5	195	145	911.045.00
4,600		0,1811	6,00	155,5	205	155	911.046.00
4,763	3/16	0,1875	6,00	165,5	210	165	911.4763.00
4,800		0,1890	6,00	165,5	210	165	911.048.00
5,000		0,1969	6,00	165,5	210	165	911.050.00
5,500		0,2165	6,00	180,5	240	180	911.055.00
5,556	7/32	0,2187	6,00	180,5	240	180	911.5556.00
5,800		0,2283	6,00	190,5	240	190	911.058.00
6,000		0,2362	6,00	190,5	240	190	911.060.00
6,350	1/4	0,2500	6,00	190,5	240	190	911.6350.00
6,500		0,2559	8,00	222,0	260	219	911.065.00
6,800		0,2677	8,00	222,0	260	219	911.068.00
7,000		0,2756	8,00	232,0	270	229	911.070.00
7,144	9/32	0,2813	8,00	232,0	270	229	911.7144.00
7,500		0,2953	8,00	252,0	290	249	911.075.00
7,800		0,3071	8,00	262,0	300	259	911.078.00
7,938	5/16	0,3125	8,00	267,0	305	265	911.7938.00
8,000		0,3150	8,00	267,0	305	265	911.080.00
8,500		0,3346	10,00	278,0	320	276	911.085.00
8,731	11/32	0,3437	10,00	298,0	340	296	911.8731.00
8,800		0,3465	10,00	298,0	340	296	911.088.00
9,000		0,3543	10,00	298,0	340	296	911.090.00
9,500		0,3740	10,00	318,0	360	316	911.095.00
9,525	3/8	0,3750	10,00	318,0	360	316	911.9525.00
9,800		0,3858	10,00	338,0	380	336	911.098.00
10,000		0,3937	10,00	338,0	380	336	911.100.00


Recommendation:

Maximum drilling depth: Flute length (see table) minus 1.5 x nominal diameter

Article-No. **818...**

Solid carbide flat drill with internal coolant hole



D1 m7	D2 h6	L2	L1	Z	Article-No.
3,00	6,00	28	66	2	818.030...
3,10	6,00	28	66	2	818.031...
3,20	6,00	28	66	2	818.032...
3,30	6,00	28	66	2	818.033...
3,40	6,00	28	66	2	818.034...
3,50	6,00	28	66	2	818.035...
3,60	6,00	28	66	2	818.036...
3,70	6,00	28	66	2	818.037...
3,80	6,00	36	74	2	818.038...
3,90	6,00	36	74	2	818.039...
4,00	6,00	36	74	2	818.040...
4,10	6,00	36	74	2	818.041...
4,20	6,00	36	74	2	818.042...
4,30	6,00	36	74	2	818.043...
4,40	6,00	36	74	2	818.044...
4,50	6,00	36	74	2	818.045...
4,60	6,00	36	74	2	818.046...
4,65	6,00	36	74	2	818.0465...
4,70	6,00	36	74	2	818.047...
4,80	6,00	44	82	2	818.048...
4,90	6,00	44	82	2	818.049...
5,00	6,00	44	82	2	818.050...
5,10	6,00	44	82	2	818.051...
5,20	6,00	44	82	2	818.052...
5,30	6,00	44	82	2	818.053...
5,40	6,00	44	82	2	818.054...
5,50	6,00	44	82	2	818.055...
5,55	6,00	44	82	2	818.0555...
5,60	6,00	44	82	2	818.056...
5,70	6,00	44	82	2	818.057...
5,80	6,00	44	82	2	818.058...
5,90	6,00	44	82	2	818.059...
6,00	6,00	44	82	2	818.060...
6,10	8,00	53	91	2	818.061...
6,20	8,00	53	91	2	818.062...
6,30	8,00	53	91	2	818.063...
6,40	8,00	53	91	2	818.064...
6,50	8,00	53	91	2	818.065...
6,60	8,00	53	91	2	818.066...
6,70	8,00	53	91	2	818.067...
6,80	8,00	53	91	2	818.068...
6,90	8,00	53	91	2	818.069...
7,00	8,00	53	91	2	818.070...
7,10	8,00	53	91	2	818.071...
7,20	8,00	53	91	2	818.072...

.00 HA Schaft/Shank
.10 HB Schaft/Shank
.20 HE Schaft/Shank

TYP N

Universal



D1 m7	D2 h6	L2	L1	Z	Article-No.
7,30	8,00	53	91	2	818.073...
7,40	8,00	53	91	2	818.074...
7,50	8,00	53	91	2	818.075...
7,60	8,00	53	91	2	818.076...
7,70	8,00	53	91	2	818.077...
7,80	8,00	53	91	2	818.078...
7,90	8,00	53	91	2	818.079...
8,00	8,00	53	91	2	818.080...
8,10	10,00	61	103	2	818.081...
8,20	10,00	61	103	2	818.082...
8,30	10,00	61	103	2	818.083...
8,40	10,00	61	103	2	818.084...
8,50	10,00	61	103	2	818.085...
8,60	10,00	61	103	2	818.086...
8,70	10,00	61	103	2	818.087...
8,80	10,00	61	103	2	818.088...
8,90	10,00	61	103	2	818.089...
9,00	10,00	61	103	2	818.090...
9,10	10,00	61	103	2	818.091...
9,20	10,00	61	103	2	818.092...
9,30	10,00	61	103	2	818.093...
9,40	10,00	61	103	2	818.094...
9,50	10,00	61	103	2	818.095...

to be continued

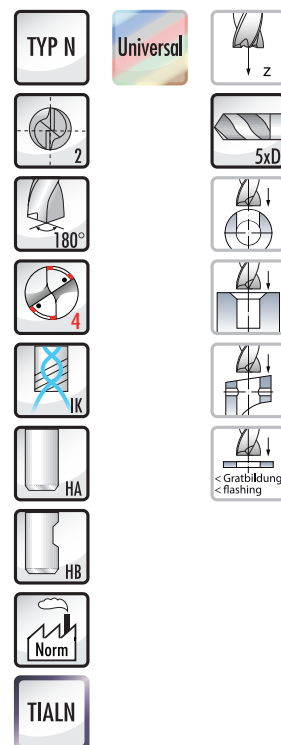


Article-No. **818...**

Solid carbide flat drill with internal coolant hole



D1 m7	D2 h6	L2	L1	Z	Article-No.
9,60	10,00	61	103	2	818.096...
9,70	10,00	61	103	2	818.097...
9,80	10,00	61	103	2	818.098...
9,90	10,00	61	103	2	818.099...
10,00	10,00	61	103	2	818.100...
10,10	12,00	69	116	2	818.101...
10,20	12,00	69	116	2	818.102...
10,30	12,00	69	116	2	818.103...
10,40	12,00	69	116	2	818.104...
10,50	12,00	69	116	2	818.105...
10,60	12,00	69	116	2	818.106...
10,70	12,00	69	116	2	818.107...
10,80	12,00	69	116	2	818.108...
10,90	12,00	69	116	2	818.109...
11,00	12,00	69	116	2	818.110...
11,10	12,00	69	116	2	818.111...
11,20	12,00	69	116	2	818.112...
11,30	12,00	69	116	2	818.113...
11,40	12,00	69	116	2	818.114...
11,50	12,00	69	116	2	818.115...
11,60	12,00	69	116	2	818.116...
11,70	12,00	69	116	2	818.117...
11,80	12,00	69	116	2	818.118...
11,90	12,00	69	116	2	818.119...
12,00	12,00	69	116	2	818.120...
12,50	14,00	75	122	2	818.125...
12,80	14,00	75	122	2	818.128...
13,00	14,00	75	122	2	818.130...
13,50	14,00	75	122	2	818.135...
13,80	14,00	75	122	2	818.138...
14,00	14,00	75	122	2	818.140...
14,50	16,00	81	131	2	818.145...
14,80	16,00	81	131	2	818.148...
15,00	16,00	81	131	2	818.150...
15,50	16,00	81	131	2	818.155...
15,80	16,00	81	131	2	818.158...
16,00	16,00	81	131	2	818.160...
16,50	18,00	91	141	2	818.165...
16,80	18,00	91	141	2	818.168...
17,00	18,00	91	141	2	818.170...
17,50	18,00	91	141	2	818.175...
17,80	18,00	91	141	2	818.178...
18,00	18,00	91	141	2	818.180...
18,50	20,00	99	151	2	818.185...
18,80	20,00	99	151	2	818.188...
19,00	20,00	99	151	2	818.190...
19,50	20,00	99	151	2	818.195...
19,80	20,00	99	151	2	818.198...
20,00	20,00	99	151	2	818.200...



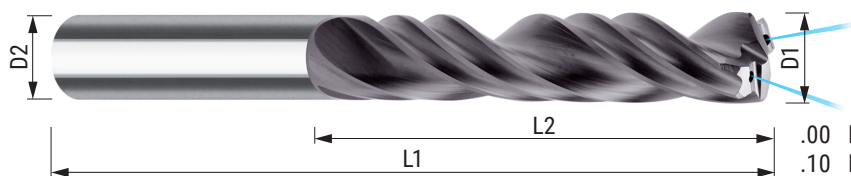
Multiply feed rate f (mm per turn) with the factor during spot drilling to a length of $0.25 \times D1$.

Feed rate factor for f (mm per turn) during spot drilling

Pitch of component part surface	Factor
0°	0,4
15°	0,25
30°	not recommendable
45°	not recommendable

Article-No. **711...**

Solid carbide drill reamer with internal coolant hole 5xD

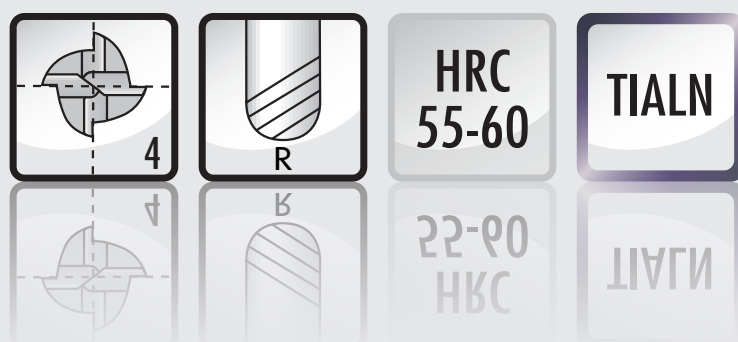


.00 HA Schaft/Shank
.10 HB Schaft/Shank
.20 HE Schaft/Shank

D1 H7	D2 h6	L2	L1	Artikel-Nr./ Article-No.
5,98	6,00	44	81	711.051...
5,99	6,00	44	81	711.052...
6,00	6,00	44	81	711.060...
6,01	6,00	44	81	711.061...
6,02	6,00	44	81	711.062...
7,98	8,00	53	91	711.070...
7,99	8,00	53	91	711.071...
8,00	8,00	53	91	711.080...
8,01	8,00	53	91	711.081...
8,02	8,00	53	91	711.082...
9,98	10,00	61	103	711.090...
9,99	10,00	61	103	711.091...
10,00	10,00	61	103	711.092...
10,01	10,00	61	103	711.100...
10,02	10,00	61	103	711.101...
11,98	12,00	71	118	711.110...
11,99	12,00	71	118	711.111...
12,00	12,00	71	118	711.120...
12,01	12,00	71	118	711.121...
12,02	12,00	71	118	711.122...
14,00	14,00	77	124	711.140...
16,00	16,00	83	133	711.160...
18,00	18,00	93	143	711.180...
20,00	20,00	101	153	711.200...







	Page
Pictograms tool data	130
Pictograms tool capabilities	131
Pictograms tool recommendations	132
Pictograms tool coatings	133



Icon	Name	Icon	Name
	Material: Solid carbide		Internal cooling with frontal outlet Y-IC
	Material: Hard metal		Internal cooling with frontal outlet
	Material: Steel		Internal cooling with frontal outlet at the drill bit
	Polished surface		Without internal cooling
	Geometry for hard materials		Shank design
	Geometry for normal materials (UNI)		Shank form INOSCREW - Shank to screw in
	Geometry for soft materials		Ausführungslänge
	Geometry for materials hard to normal		Works standard
	Geometry for materials normal to hard		Diameter tolerance
	Geometry for materials normal to soft		Tolerance for rotation accuracy 0,005 mm
	Geometry for materials soft to normal		Tolerance
	Number of flutes		Radius tolerance
	Tool face design: Sharp-edged		
	Tool face design: Protection chamfer		
	Tool face design: Corner radius		
	Tool face design: Ballnose		
	Tool face design: Frontal radius		
	Tool face design: Forward and backward deburring tool 90°		
	Tool face design: Quadrant mill		
	Tool face design: Quadrant mill		
	Point angle 140°		
	Four-margin design		
	Spiral angle 30°		
	Unequal division		

Icon	Name	Application								
	Machining direction: xy	Only horizontal direction XY is allowed								
	Machining direction: xy(z)	Machining in direction XY and limited in Z direction								
	Machining direction: xyz	Machining in all directions is allowed								
	Machining direction: z	Only machining in Z direction is allowed								
	Application: Slot milling									
	Application: Side milling									
	Application: Finishing									
	Application: Trochoidal speed cutting	Trochoidal milling strategy for efficient machining of complex contours.								
	Application: Profiling	Profile cutting $ae=ap$								
	Application: Helical interpolation; Plunge angle up to 45°									
	Application: Article 900 - chamfering	Forward and backward deburring								
	Application: Article 904	Backward deburring								
	Application: Edge rounding									
	Application: Article 901 - radius	Forward and backward quadrant machining								
	Application: Chamfer	Chamfering or deburring								
	Application: Doublechamfer	Both sides chamfering or deburring								
	Application: Profile multimill	Side milling and chamfering								
	Application: Prism	Milling a prism								
	Application: Circle profile multimill	Circular - side milling and chamfering								
	Application: Side milling	Side milling								
	Application: Sheetdrilling	Smaller burr in clearance holes								
	Application: Difficult drilling	Difficult holes like crossholes, angular entry and outlet								
	Application: Tube hole drilling									
	Application: Blind hole	Blind hole with straight ground								
										Drilling length/ min. using length



Icon	Name	Application
	Manufacturing technology: High Performance Cutting	Highest cutting volume
	Manufacturing technology: High Speed Cutting	High-speed machining and hard machining
	Manufacturing technology: Trochoidal Speed Cutting	Modern milling strategy for complex contours
	Universally applicable	
	Cooling by compressed-air processing	
	Cooling by cutting fluid	
	Material: Universal	
	Material: Aluminium / non-ferrous metal	
	Material: Fibreglass/carbonfibre plastics/graphite	
	Material: Plastic	
    	Hard machining	
	Material: Cast iron	
	Material: Rost and acid constant steel	
	Material: Inconel	
	Material: Inconel / titanium alloy	
	Material: Steel	

Icon	Coating name	Color	Application	Tech data
	Coating ALTiN	anthracite-black	Hard machining and HSC (high aluminium content, hardness and oxidation resistance)	3800 HV
	Coating diamond	grey	Graphite- and copper machining (multilayer coating)	10000 HV
	Coating diamond 6+2 micrometer	grey	Graphite- and copper machining (multilayer coating)	lamination strength 6 + 2 micrometer/10000 HV
	Coating diamond 10+2 micrometer	grey	Graphite- and copper machining (multilayer coating)	lamination strength 10 + 2 micrometer/10000 HV
	Coating naco blue	blue	High performance chipping / hard machining (Nanocomposite coating with very high hardness and oxidation resistance)	4500 HV
	Coating Ta-C	rainbow	Non-ferrous metals, plastics, GRP / CRP (carbon high-performance thin-layer)	6000 HV
	Coating TIALN	violet-anthracite	Universal standard coating for roughing and finishing	3500 HV
	Coating Varocon	anthracite-black	High performance cutting of Inox/alloyed steels (high oxidation resistance, intrinsic hardness and warmth hardness)	3800 HV
	Coating ZrN	white gold	Aluminum and titanium alloys (Monolayer coating for reduced built-up edges)	2000 HV
	Coating NanoCon	blue	High performance cutting / hard machining	4000 HV
	Coating Nanosit	bronze	Universal standard coating for roughing and finishing	3500 HV
	Uncoated			







Headquarter GERMANY

Inovatools Eckerle & Ertel GmbH
Im Hüttental 3-6
85125 Kinding - Haunstetten
Tel: +49 (0) 84 67 / 84 00-0
Fax: +49 (0) 84 67 / 796
info@inovatools.eu
www.inovatools.eu

InovaTools®
GERMAN TOOLS GROUP

Fullerton Tool Company West

11489 Sunshine Ct.
Saginaw, MI 48609
Tel: +989 799 4550
fullertontool.com

Fullerton Tool Company East

121 Perry St.
Saginaw, MI 48602
Tel: +989 799 4550
fullertontool.com

Fullerton Logistics Warehouse

M.C. Sales & Marketing
15178 Transistor Ln.
Huntington Beach, CA 92649
Tel: +714 901 8589
mcsalesmarketing.com



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