

PCD and Solid Carbide Cutting Tools for Aerospace



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PCD AND SOLID CARBIDE CUTTING TOOLS FOR AEROSPACE



Production plants and R&D facilities in Europe and North America enable Cruing to supply tested and award winning products worldwide.

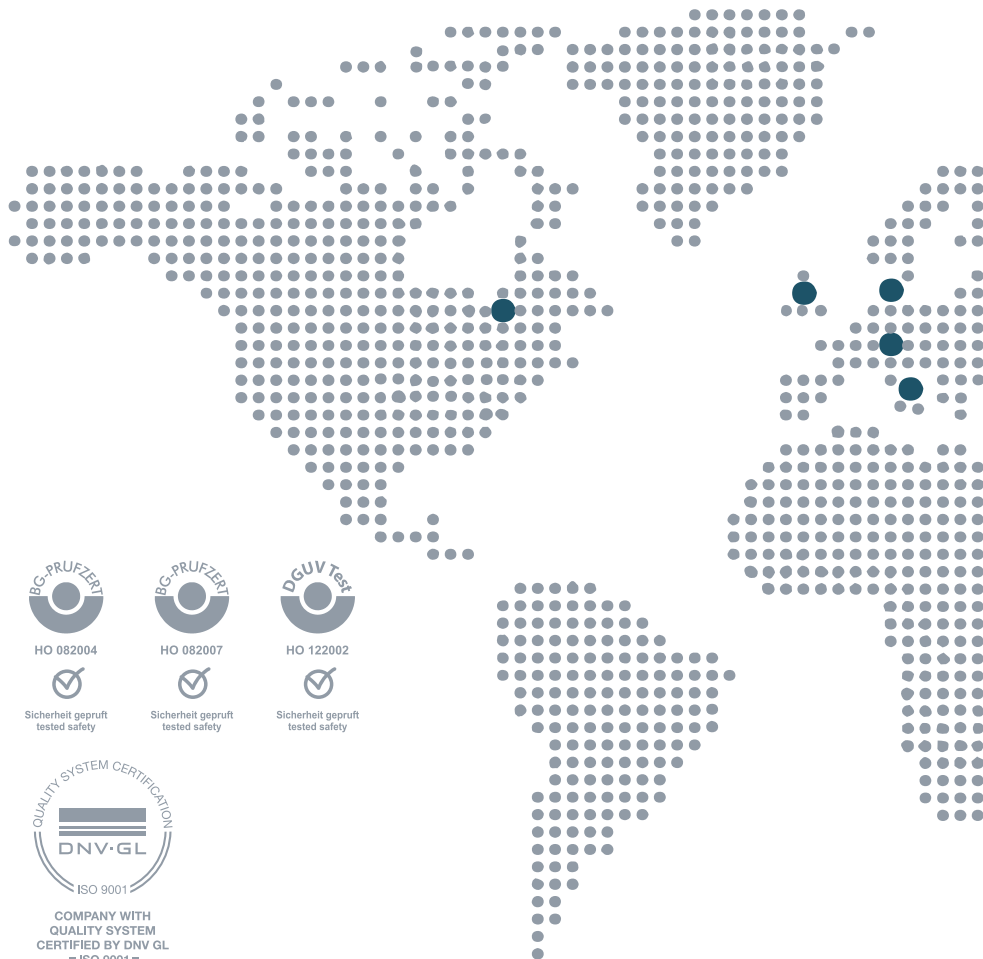


JEC Europe



JEC Americas

CHALLENGERS



HO 082004



Sicherheit geprüft
tested safety



HO 082007



Sicherheit geprüft
tested safety



HO 122002



Sicherheit geprüft
tested safety



COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

OUR EXPERIENCE TO OFFER ADVANCED SOLUTIONS

Thanks to its 50 years worth of experience, Cruing provides and suggests the latest solutions in composite machining and offers a wide range of PCD drills and mills tailored to specific customer needs.



Cruing is one of the most important groups for diamond cutting tools and works closely with many of the world's leading aerospace manufacturers, F1 racing teams and luxury yacht builders.





Aerotech® Air Cooled Dry Cutting

The Aerotech® System is a revolutionary tooling solution that thoroughly evacuates hot dust particles produced during cutting operations. By effectively air cooling the material and cutter, it significantly **reduces machining temperatures**.

This allows manufacturers of composite parts to consider dry cutting their components, providing a practical alternative to machining with coolants.

10 years in the field

First launched in 2008, the Aerotech® System has a proven track record of **precision and absolute reliability in demanding tier 1 production environments** producing CFRP components for aircraft OEMs.

Engineered for purpose

The Aerotech® System has been specifically researched & developed, designed and engineered for purpose. Cruing are the pioneers and leaders in these combined sectors: Air Cooled Dry Cutting & Dust Free Machining. **Aerotech® is the future in CNC machining of composite parts.**





Dust Free Machining

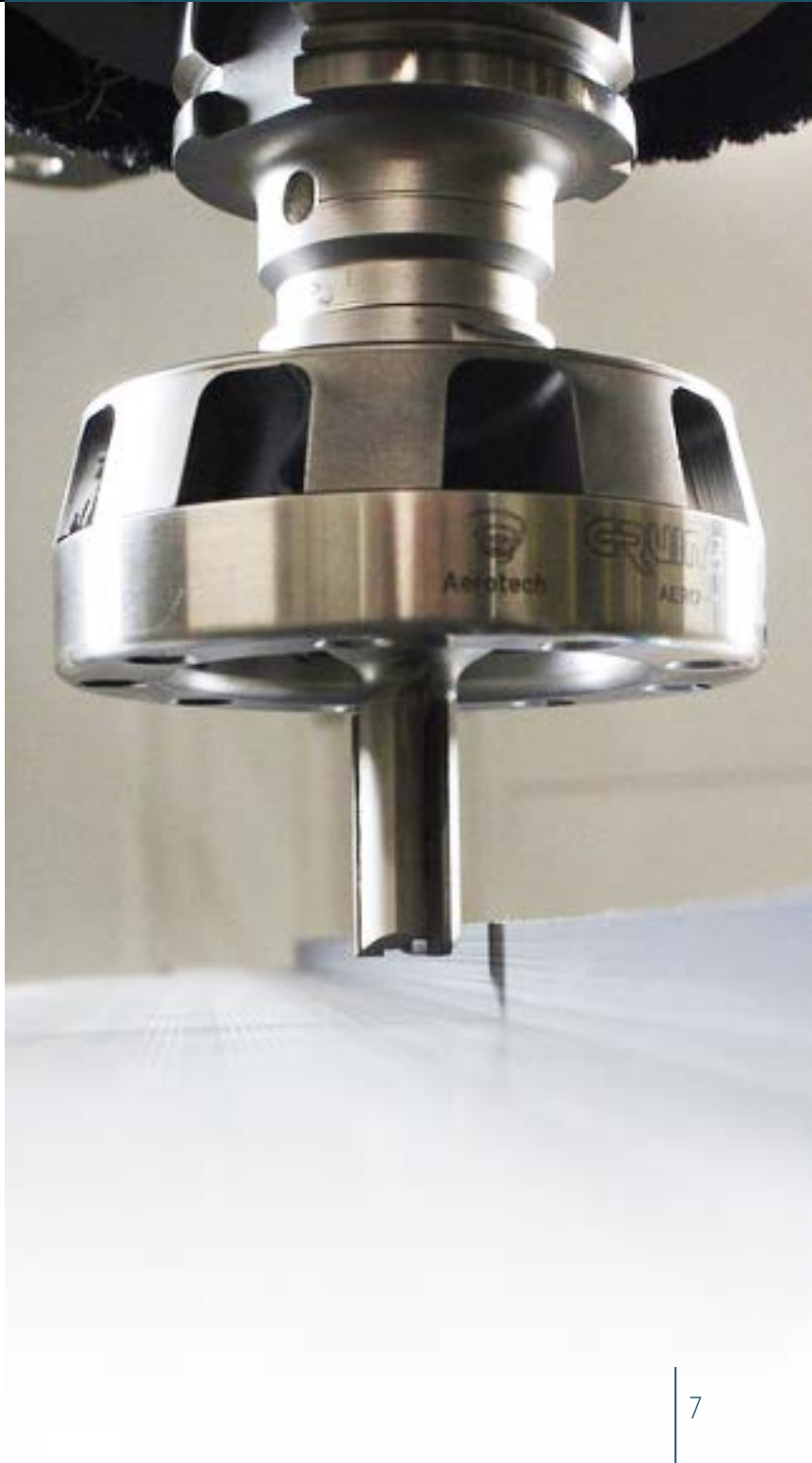
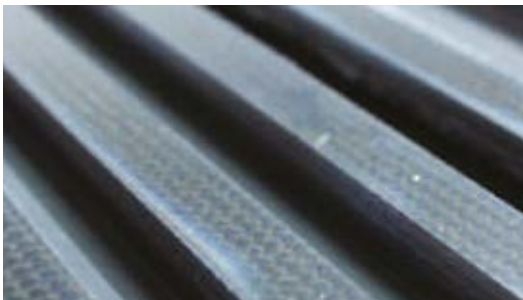
Health and Safety standards at the workplace advise that dust created through machining processes should be reduced at source and must fall within the Workplace Exposure Limits (WEL), this is where the Aerotech® System can help.

By capturing the dust at the point of cut and evacuating it directly into the CNC extraction shroud the **Aerotech® will greatly reduce, or even eliminate, airborne dust** that would otherwise pollute the work cell and contaminate the air.

Without Aerotech®



With Aerotech®



Aero Drill

Drilling solutions for perfect holes

Cruing AeroDrill series offers unique designs for **PCD Straight and Twist drills, Countersinks and One-shot drill and countersinks.**

Many leading producers of CFRP parts for the Aerospace industry have already qualified Cruing drills and are benefitting from the performances of one of the most cost-effective drills available today.



- Unique uninterrupted PCD point
- Special drill point geometry and side profile
- Cutting edge optimized for unidirectional and woven CFRP
- Enhanced hole quality, precision and surface finish
- No delamination at hole entry/exit
- Extreme wear resistance for long tool life
- With external and internal coolant supply

See the difference that the new AeroDrill 101-Uni provides on unidirectional CFRP.



Standard drill



AeroDrill 101-Uni specifically developed for unidirectional CFRP




Tool Programme Drilling



		Straight-Flute Series	Twist-Drill Series			Countersink Series	
		AeroDrill 101	AeroDrill ST2	AeroDrill NX2	AeroDrill ST3	AeroDrill 801	AeroDrill 802
Technical design	Diameters (mm)	3,0 - 20,0	2,5 - 4,5	4,5 - 16,0	2,5 - 9,0	2,0 - 20,0	2,0 - 20,0
	Number of cutting edges	2	2	2	3	2/3	2/3
	Helix angle	0°	25°	25°	25°	0°	0°
	Cutting material	PCD	PCD	PCD	PCD	PCD	PCD
	Shank	DIN 6535 form HA	DIN 6535 form HA	DIN 6535 form HA	DIN 6535 form HA	Thread	Thread
Application		CNC drilling	CNC drilling	CNC drilling	CNC drilling	Hand-held countersinking (integral pilot)	Hand-held countersinking (interchangeable pilot)
Tool body		Solid carbide	Solid carbide	Solid carbide	Solid carbide	Steel	Steel
Available with through coolant		●	●	●	●		
Page		10	12	13	15	17	20



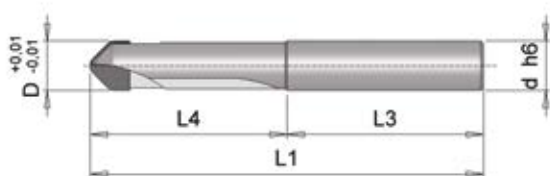
		One-shot Drill & Countersink Series		
		AeroDrill 101-V	AeroDrill ST2-V	AeroDrill NX2-V
Technical design	Drilling diameters (mm)	3,0 - 20,0	2,5 - 4,5	4,5 - 16,0
	Number of cutting edges	2+2	2+2	2+2
	Helix angle	0°	25°	25°
	Cutting material	PCD	PCD	PCD
	Shank	DIN 6535 form HA	DIN 6535 form HA	DIN 6535 form HA
Application		CNC one-shot drilling & countersinking	CNC one-shot drilling & countersinking	CNC one-shot drilling & countersinking
Tool body		Solid carbide	Solid carbide	Solid carbide
Available with through coolant		●	●	●
Page				

Straight-Flute Drill Series

AeroDrill 101

DP

RH



Technical features:

- High density PCD cutting edges: 2
- Solid carbide straight fluted body
- Helix angle: 0°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 3,0 to 20,0 mm
- Shank form: DIN 6535 HA
- Through coolant from 4,00 mm



Through coolant on request

Applications:

- For CNC automated drilling of CFRP and hard composite materials

D	d	L4	L1	L3	Z	code
3,00	4,00	30,00	60,00	30,00	2	AD101005
3,10	4,00	30,00	60,00	30,00	2	AD101010
3,18	3,18	25,40	63,50	38,10	2	AD101015
3,20	4,00	30,00	60,00	30,00	2	AD101020
3,30	4,00	30,00	60,00	30,00	2	AD101025
3,50	4,00	30,00	60,00	30,00	2	AD101030
3,80	4,00	30,00	60,00	30,00	2	AD101035
3,96	4,76	25,40	63,50	38,10	2	AD101040
4,00	4,00	30,00	60,00	30,00	2	AD101045
4,10	6,00	30,00	70,00	40,00	2	AD101050
4,20	6,00	30,00	70,00	40,00	2	AD101055
4,50	6,00	30,00	70,00	40,00	2	AD101060
4,76	4,76	31,75	76,20	44,45	2	AD101065
5,00	6,00	30,00	70,00	40,00	2	AD101070
5,10	6,00	30,00	70,00	40,00	2	AD101075
5,20	6,00	30,00	70,00	40,00	2	AD101080
5,50	6,00	30,00	70,00	40,00	2	AD101085
5,55	6,35	31,75	76,20	44,45	2	AD101090
5,80	6,00	30,00	70,00	40,00	2	AD101095
6,00	6,00	30,00	70,00	40,00	2	AD101100

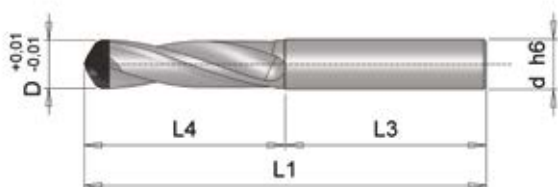
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6,50	8,00	40,00	80,00	40,00	2	AD101115
6,80	8,00	40,00	80,00	40,00	2	AD101120
7,00	8,00	40,00	80,00	40,00	2	AD101125
7,10	8,00	40,00	80,00	40,00	2	AD101130
7,50	8,00	40,00	80,00	40,00	2	AD101135
7,80	8,00	40,00	80,00	40,00	2	AD101140
7,93	7,93	38,10	82,55	44,45	2	AD101145
8,00	8,00	40,00	80,00	40,00	2	AD101150
8,10	10,00	40,00	80,00	40,00	2	AD101155
8,50	10,00	40,00	80,00	40,00	2	AD101160
8,80	10,00	40,00	80,00	40,00	2	AD101165
9,00	10,00	40,00	80,00	40,00	2	AD101170
9,10	10,00	40,00	80,00	40,00	2	AD101175
9,50	10,00	40,00	80,00	40,00	2	AD101180
9,53	9,53	38,10	82,55	44,45	2	AD101185
10,00	10,00	40,00	80,00	40,00	2	AD101190
10,20	12,00	40,00	80,00	40,00	2	AD101195
10,50	12,00	40,00	80,00	40,00	2	AD101200
10,80	12,00	40,00	80,00	40,00	2	AD101205
11,00	12,00	40,00	80,00	40,00	2	AD101210
11,20	12,00	40,00	80,00	40,00	2	AD101215
11,50	12,00	40,00	80,00	40,00	2	AD101220
11,80	12,00	40,00	80,00	40,00	2	AD101225
12,00	12,00	40,00	80,00	40,00	2	AD101230
12,20	14,00	40,00	80,00	40,00	2	AD101235
12,50	14,00	40,00	80,00	40,00	2	AD101240
12,70	12,70	38,10	82,55	44,45	2	AD101245
12,80	14,00	40,00	80,00	40,00	2	AD101250
13,00	14,00	40,00	80,00	40,00	2	AD101255
13,20	14,00	40,00	80,00	40,00	2	AD101260
13,50	14,00	40,00	80,00	40,00	2	AD101265
13,80	14,00	40,00	80,00	40,00	2	AD101270
14,00	14,00	40,00	80,00	40,00	2	AD101275
14,20	16,00	40,00	80,00	40,00	2	AD101280
14,50	16,00	40,00	80,00	40,00	2	AD101285
14,80	16,00	40,00	80,00	40,00	2	AD101290
15,00	16,00	40,00	80,00	40,00	2	AD101295
15,20	16,00	40,00	80,00	40,00	2	AD101300
15,50	16,00	40,00	80,00	40,00	2	AD101305
15,80	16,00	40,00	80,00	40,00	2	AD101310
15,88	16,00	38,10	82,55	44,45	2	AD101315
16,00	16,00	40,00	80,00	40,00	2	AD101320

Twist-Drill Series

AeroDrill ST2

DP

RH



Technical features:

- High density PCD cutting edges: 2
- Solid carbide twist body
- Helix angle: 25°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 2,5 to 4,0 mm
- Shank form: DIN 6535 HA
- Through coolant from 4,00 mm



Through coolant on request

Applications:

- For CNC automated drilling of CFRP and hard composite materials

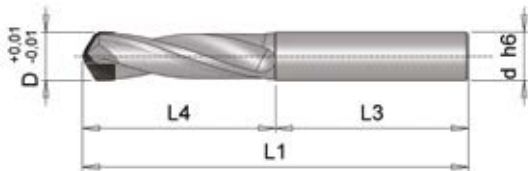
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3,10	4,00	30,00	60,00	30,00	2	ADST2015
3,18	3,18	25,40	63,50	38,10	2	ADST2020
3,50	4,00	30,00	60,00	30,00	2	ADST2025
3,80	4,00	30,00	60,00	30,00	2	ADST2030
3,96	4,76	25,40	63,50	38,10	2	ADST2035
4,00	4,00	30,00	60,00	30,00	2	ADST2040
4,10	6,00	30,00	60,00	30,00	2	ADST2045
4,50	6,00	30,00	60,00	30,00	2	ADST2050

Twist-Drill Series

AeroDrill NX2

DP

RH



Technical features:

- High density PCD cutting edges: 2
- Solid carbide twist body
- Helix angle: 25°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 4,76 to 10 mm
- Shank form: DIN 6535 HA
- Through coolant from 4,00 mm



Through coolant on request

Applications:

- For CNC automated drilling of CFRP and hard composite materials

D	d	L4	L1	L3	Z	code
4,76	4,76	25,40	63,50	38,10	2	ADNX2005
4,80	6,00	30,00	70,00	40,00	2	ADNX2010
5,00	6,00	30,00	70,00	40,00	2	ADNX2015
5,20	6,00	30,00	70,00	40,00	2	ADNX2020
5,50	6,00	30,00	70,00	40,00	2	ADNX2025
5,55	6,35	31,75	76,20	44,45	2	ADNX2030
5,80	6,00	30,00	70,00	40,00	2	ADNX2035
6,00	6,00	30,00	70,00	40,00	2	ADNX2040
6,20	8,00	40,00	80,00	40,00	2	ADNX2045
6,35	6,35	38,10	76,20	38,10	2	ADNX2050
6,50	8,00	40,00	80,00	40,00	2	ADNX2055
6,80	8,00	40,00	80,00	40,00	2	ADNX2060
7,00	8,00	40,00	80,00	40,00	2	ADNX2065
7,20	8,00	40,00	80,00	40,00	2	ADNX2070
7,50	8,00	40,00	80,00	40,00	2	ADNX2075
7,80	8,00	40,00	80,00	40,00	2	ADNX2080

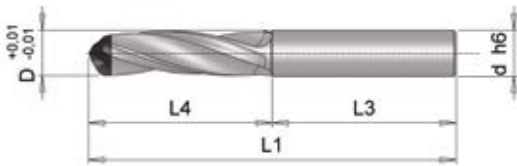
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8,20	10,00	40,00	80,00	40,00	2	ADNX2095
8,50	10,00	40,00	80,00	40,00	2	ADNX2100
8,80	10,00	40,00	80,00	40,00	2	ADNX2105
9,00	10,00	40,00	80,00	40,00	2	ADNX2110
9,20	10,00	40,00	80,00	40,00	2	ADNX2115
9,50	10,00	40,00	80,00	40,00	2	ADNX2120
9,53	9,53	38,10	82,55	44,45	2	ADNX2125
9,80	10,00	40,00	80,00	40,00	2	ADNX2130
10,00	10,00	40,00	80,00	40,00	2	ADNX2135

Twist-Drill Series

AeroDrill ST3

DP

RH



Technical features:

- High density PCD cutting edges: **3**
- Solid carbide twist body
- Helix angle: **25°**
- Cutting tolerance: **+/- 0,01**
- Balance: **G2,5 < 1 gr/mm**
- Diameters range: **from 3,0 to 10,0 mm**
- Shank form: **DIN 6535 HA**



Through coolant on request

Applications:

- For CNC automated drilling of CFRP and hard composite materials
- **Extended tool-life** and **lower delamination**
- Available with through coolant from 4,0 mm diameters

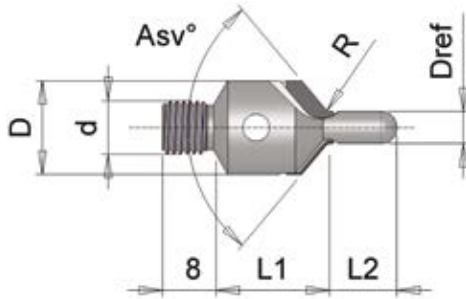
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3,50	4,00	30,00	60,00	30,00	3	ADST3015
4,00	4,00	30,00	60,00	30,00	3	ADST3020
4,50	6,00	30,00	60,00	30,00	3	ADST3025
4,76	4,76	25,40	63,50	38,10	3	ADST3030
5,00	6,00	40,00	70,00	30,00	3	ADST3035
5,50	6,00	40,00	70,00	30,00	3	ADST3040
6,00	6,00	40,00	70,00	30,00	3	ADST3045
6,35	6,35	38,10	76,20	38,10	3	ADST3050
6,50	8,00	40,00	80,00	40,00	3	ADST3055
7,00	8,00	40,00	80,00	40,00	3	ADST3060
7,50	8,00	40,00	80,00	40,00	3	ADST3065
7,93	7,93	38,10	82,55	44,45	3	ADST3070
8,00	8,00	40,00	80,00	40,00	3	ADST3075
8,50	10,00	40,00	80,00	40,00	3	ADST3080
9,00	10,00	40,00	80,00	40,00	3	ADST3085
9,50	10,00	40,00	80,00	40,00	3	ADST3090
9,53	9,53	38,10	82,55	44,45	3	ADST3095
10,00	10,00	40,00	80,00	40,00	3	ADST3100

Countersink Series

AeroDrill 801

DP

RH



Technical features:



Through coolant on request

- HSS body
- High density PCD cutting edges: 2/3
- Helix angle: 0°
- Cutting tolerance: +/- 0.05
- Balance: G2,5 < 1 gr/mm
- Pilot diameters from 2.5 to 8.0 mm on request
- Shank form: thread (metric or imperial)
- Diameters: from 10.00 to 31.75 mm on request
- Available for 100° and 130° countersinking
- Available with customized pilot

Applications:

- For CFRP
- Hard composites/metallic stack materials

D	Dref	Asv	L1	R	L2	d	Z	code
10	3	100	19	0,25	5	M6x1,0	2	AD801005
12	3	100	19	0,5	6	M6x1,0	2	AD801010
14	3	100	19	0,5	6	M8x1,0	2	AD801015
17	4	100	20	0,75	7	M8x1,0	2	AD801020
19	6	100	25	0,75	7	M8x1,0	2	AD801025
22	8	100	25	1	10	M8x1,0	2	AD801030
25	8	100	25	0,25	10	M8x1,0	2	AD801035
10	3	100	19	0,25	5	M6x1,0	3	AD801040
12	3	100	19	0,5	6	M6x1,0	3	AD801045
14	3	100	19	0,5	6	M8x1,0	3	AD801050
17	4	100	20	0,75	7	M8x1,0	3	AD801055
19	6	100	25	0,75	7	M8x1,0	3	AD801060
22	8	100	25	1	10	M8x1,0	3	AD801065
25	8	100	25	0,25	10	M8x1,0	3	AD801070

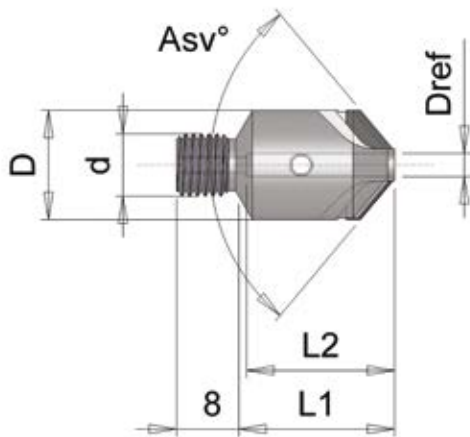
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12	3	130	19	0,5	6	M6x1,0	2	AD801080
14	3	130	19	0,5	6	M8x1,0	2	AD801085
17	4	130	20	0,75	7	M8x1,0	2	AD801090
19	6	130	25	0,75	7	M8x1,0	2	AD801095
22	8	130	25	1	10	M8x1,0	2	AD801100
25	8	130	25	0,25	10	M8x1,0	2	AD801105
10	3	130	19	0,25	5	M6x1,0	3	AD801110
12	3	130	19	0,5	6	M6x1,0	3	AD801115
14	3	130	19	0,5	6	M8x1,0	3	AD801120
17	4	130	20	0,75	7	M8x1,0	3	AD801125
19	6	130	25	0,75	7	M8x1,0	3	AD801130
22	8	130	25	1	10	M8x1,0	3	AD801135
25	8	130	25	0,25	10	M8x1,0	3	AD801140
9,52	3,17	100	19,05	0,254	5,33	1/4-28	2	AD801145
9,52	3,25	100	19,05	0,254	5,33	1/4-28	2	AD801150
11,1	3,96	100	19,05	0,508	6,35	1/4-28	2	AD801155
11,1	4,75	100	19,05	0,508	6,35	1/4-28	2	AD801160
12,7	3,17	100	19,05	0,508	6,35	1/4-28	2	AD801165
12,7	3,25	100	19,05	0,508	6,35	1/4-28	2	AD801170
12,7	6,07	100	19,05	0,508	6,35	1/4-28	2	AD801175
15,87	4,85	100	20,32	0,762	7,62	1/4-28	2	AD801180
15,87	6,35	100	20,32	0,762	7,62	1/4-28	2	AD801185
19,05	7,92	100	25,4	0,762	7,62	3/8-24	2	AD801190
22,22	7,92	100	25,4	1,016	9,525	3/8-24	2	AD801195
25,4	7,92	100	25,4	1,016	9,525	7/16-20	2	AD801200
31,7	7,92	100	31	1,27	9,525	7/16-20	2	AD801205
9,52	3,17	100	19,05	0,254	5,33	1/4-28	3	AD801210
9,52	3,25	100	19,05	0,254	5,33	1/4-28	3	AD801215
11,1	3,96	100	19,05	0,508	6,35	1/4-28	3	AD801220
11,1	4,75	100	19,05	0,508	6,35	1/4-28	3	AD801225
12,7	3,17	100	19,05	0,508	6,35	1/4-28	3	AD801230
12,7	3,25	100	19,05	0,508	6,35	1/4-28	3	AD801235
12,7	6,07	100	19,05	0,508	6,35	1/4-28	3	AD801240
15,87	4,85	100	20,32	0,762	7,62	1/4-28	3	AD801245
15,87	6,35	100	20,32	0,762	7,62	1/4-28	3	AD801250
19,05	7,92	100	25,4	0,762	7,62	3/8-24	3	AD801255
22,22	7,92	100	25,4	1,016	9,525	3/8-24	3	AD801260
25,4	7,92	100	25,4	1,016	9,525	7/16-20	3	AD801265
31,7	7,92	100	31	1,27	9,525	7/16-20	3	AD801270
9,52	3,17	130	19,05	0,254	5,33	1/4-28	2	AD801275
9,52	3,25	130	19,05	0,254	5,33	1/4-28	2	AD801280
11,1	3,96	130	19,05	0,508	6,35	1/4-28	2	AD801285
11,1	4,75	130	19,05	0,508	6,35	1/4-28	2	AD801290

D	Dref	Asv	L1	R	L2	d	Z	code
12,7	3,17	130	19,05	0,508	6,35	1/4-28	2	AD801295
12,7	3,25	130	19,05	0,508	6,35	1/4-28	2	AD801300
12,7	6,07	130	19,05	0,508	6,35	1/4-28	2	AD801305
15,87	4,85	130	20,32	0,762	7,62	1/4-28	2	AD801310
15,87	6,35	130	20,32	0,762	7,62	1/4-28	2	AD801315
19,05	7,92	130	25,4	0,762	7,62	3/8-24	2	AD801320
22,22	7,92	130	25,4	1,016	9,525	3/8-24	2	AD801325
25,4	7,92	130	25,4	1,016	9,525	7/16-20	2	AD801330
31,7	7,92	130	31	1,27	9,525	7/16-20	2	AD801335
9,52	3,17	130	19,05	0,254	5,33	1/4-28	3	AD801340
9,52	3,25	130	19,05	0,254	5,33	1/4-28	3	AD801345
11,1	3,96	130	19,05	0,508	6,35	1/4-28	3	AD801350
11,1	4,75	130	19,05	0,508	6,35	1/4-28	3	AD801355
12,7	3,17	130	19,05	0,508	6,35	1/4-28	3	AD801360
12,7	3,25	130	19,05	0,508	6,35	1/4-28	3	AD801365
12,7	6,07	130	19,05	0,508	6,35	1/4-28	3	AD801370
15,87	4,85	130	20,32	0,762	7,62	1/4-28	3	AD801375
15,87	6,35	130	20,32	0,762	7,62	1/4-28	3	AD801380
19,05	7,92	130	25,4	0,762	7,62	3/8-24	3	AD801385
22,22	7,92	130	25,4	1,016	9,525	3/8-24	3	AD801390
25,4	7,92	130	25,4	1,016	9,525	7/16-20	3	AD801395
31,7	7,92	130	31	1,27	9,525	7/16-20	3	AD801400

Countersink Series

AeroDrill 802

DP RH



Technical features:

- PCD cutting edges: 2/3
- Straight flutes
- Helix angle: 0°
- Pilot tolerance: +/- 0,05
- Balance: G2,5 < 1 gr/mm
- Pilot diameters hole: from 2,5 to 4,77 mm
- Shank form: thread



Through coolant on request

Applications:

- For hand-held drilling of CFRP and hard composite/metallic stack materials
- With **integral** (801) or **interchangeable** (802) pilot
- Available for 100° and 130° countersinking
- Available with **customised pilot on request**

D	Dref	Asv	L1	L2	d	Z	code
10	25	100	19	18	M6x1,0	2	AD802005
12	3	100	19	18	M6x1,0	2	AD802010
14	3	100	20	19	M8x1,0	2	AD802015
17	3	100	20	19	M8x1,0	2	AD802020
19	4	100	25	24	M8x1,0	2	AD802025
21	4	100	25	24	M8x1,0	2	AD802030
10	25	100	19	18	M6x1,0	3	AD802035
12	3	100	19	18	M6x1,0	3	AD802040
14	3	100	20	19	M8x1,0	3	AD802045
17	3	100	20	19	M8x1,0	3	AD802050
19	4	100	25	24	M8x1,0	3	AD802055
21	4	100	25	24	M8x1,0	3	AD802060
10	25	130	19	18	M6x1,0	2	AD802065
12	3	130	19	18	M6x1,0	2	AD802070
14	3	130	20	19	M8x1,0	2	AD802075

D	Dref	Asv	L1	L2	d	Z	code
17	3	130	20	19	M8x1,0	2	AD802080
19	4	130	25	24	M8x1,0	2	AD802085
21	4	130	25	24	M8x1,0	2	AD802090
10	2,5	130	19	18	M6x1,0	3	AD802095
12	3	130	19	18	M6x1,0	3	AD802100
14	3	130	20	19	M8x1,0	3	AD802105
17	3	130	20	19	M8x1,0	3	AD802110
19	4	130	25	24	M8x1,0	3	AD802115
21	4	130	25	24	M8x1,0	3	AD802120
9,525	3,175	100	19,05	17,78	1/4-28	2	AD802125
12,7	3,175	100	19,05	17,78	1/4-28	2	AD802130
15,875	3,175	100	20,32	19,05	1/4-28	2	AD802135
19,05	4,775	100	25,4	24,13	3/8-24	2	AD802140
22,225	4,775	100	25,4	24,13	3/8-24	2	AD802145
25,4	4,775	100	25,4	24,13	7/16-20	2	AD802150
31,75	4,775	100	30,99	27,94	7/16-20	2	AD802155
9,525	3,175	130	19,05	17,78	1/4-28	3	AD802160
12,7	3,175	130	19,05	17,78	1/4-28	3	AD802165
15,875	3,175	130	20,32	19,05	1/4-28	3	AD802170
19,05	4,775	130	25,4	24,13	3/8-24	3	AD802175
22,225	4,775	130	25,4	24,13	3/8-24	3	AD802180
25,4	4,775	130	25,4	24,13	7/16-20	3	AD802185
31,75	4,775	130	30,99	27,94	7/16-20	3	AD802190
9,525	3,175	130	19,05	17,78	1/4-28	2	AD802195
12,7	3,175	130	19,05	17,78	1/4-28	2	AD802200
15,875	3,175	130	20,32	19,05	1/4-28	2	AD802205
19,05	4,775	130	25,4	24,13	3/8-24	2	AD802210
22,225	4,775	130	25,4	24,13	3/8-24	2	AD802215
25,4	4,775	130	25,4	24,13	7/16-20	2	AD802220
31,75	4,775	130	30,99	27,94	7/16-20	2	AD802225
9,525	3,175	130	19,05	17,78	1/4-28	3	AD802230
12,7	3,175	130	19,05	17,78	1/4-28	3	AD802235
15,875	3,175	130	20,32	19,05	1/4-28	3	AD802240
19,05	4,775	130	25,4	24,13	3/8-24	3	AD802245
22,225	4,775	130	25,4	24,13	3/8-24	3	AD802250
25,4	4,775	130	25,4	24,13	7/16-20	3	AD802255
31,75	4,775	130	30,99	27,94	7/16-20	3	AD802260

Aero Mill High-performance milling



Cruing AeroMill series offers **PCD cutters designed for milling CFRP, composites and light alloys.**

AeroMill series covers the complete range of cutting tools commonly used within the Aerospace and composite industries. **Edge milling, ball-nose and face milling solutions**, all qualified by leading manufacturers cutting CFRP parts.



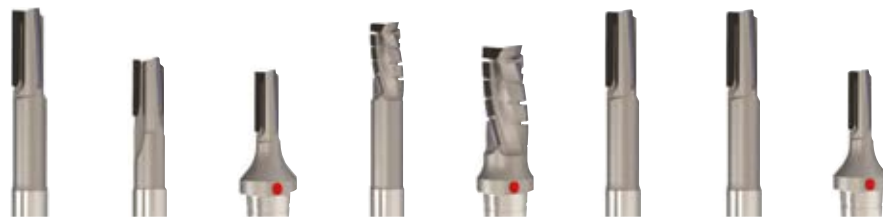
- No chatter and vibration
- Increased edge retention
- No delamination
- Super-fine surface finish
- Low Ra values
- Solid-carbide or heavy metal tungsten alloy body
- With external and internal coolant supply

AeroMill cutters are also available with **HSK20C cones** for use with the **Aerotech®**, **Basic®** & **Reach® holders**. This allows users of HSK20C cutters the possibility to **utilize the same cutter across various applications**, thus reducing the assortment of cutters required and increasing the potential to cover emergencies.


HSK20C cutters connect to their holders both radially and axially for full metal-to-metal contact and **provide a fixed zero point**, allowing the CNC machine operator to maintain a constant setting of the machines Z axis after changing between similar tools.



Tool Programme Milling




End-Mill Series

Technical design		AeroMill M11	AeroMill M12	AeroMill M13	AeroMill M18	AeroMill M19	AeroMill M31	AeroMill M33	AeroMill M32
	Diameters (mm)	6,0 - 25,0	3,0 - 25,0	9,525 - 25,0	12,0 - 20,0	12,0 - 20,0	6,0 - 25,0	6,0 - 25,0	12,0 - 25,0
	Number of cutting edges	2/3	1/2/3	2/3	3	3	2/3	2/3	2/3
	Helix angle	0° - 5°	0° - 5°	0° - 5°	0° - 25°	0° - 25°	0° - 5°	0° - 5°	0° - 5°
	Cutting material	PCD	PCD	PCD	PCD	PCD	PCD	PCD	PCD
	Shank	DIN 6535	DIN 6535	HSK20C	DIN 6535	HSK20C	DIN 6535	DIN 6535	HSK20C
Application		CNC finishing	CNC finishing	CNC finishing	CNC pre-finishing & large volume removal	CNC pre-finishing & large volume removal	CNC edge finishing & inside corner rounding	CNC edge finishing & inside corner rounding	CNC edge finishing & inside corner rounding
Tool body		Heavy metal tungsten alloy	Solid carbide	Heavy metal tungsten alloy	Heavy metal tungsten alloy	Heavy metal tungsten alloy	Heavy metal tungsten alloy	Solid carbide	Heavy metal tungsten alloy
Available with through coolant		●	●		●		●	●	
Air cooled dry cutting (with Aerotech System)				●					●
Page		24	25	27	28	29	30	31	32



Ball-Nose Series

Face-Mill Series

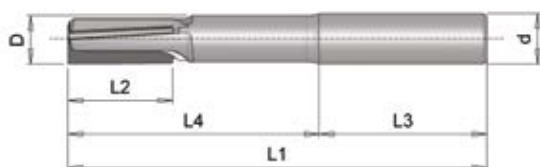
Technical design		AeroMill M21	AeroMill M22	AeroMill M23	AeroMill M28	AeroMill M29	AeroMill M41	AeroMill M42
	Diameters (mm)	10,0 - 25,0	3,0 - 25,0	10,0 - 25,0	20,0 - 40,0	25,0 - 40,0	25,0 - 80,0	25,0 - 50,0
	Number of cutting edges	2/3	1/2/3	2/3	2+2	2+2	4/8	4/5
	Helix angle	0° - 5°	0° - 5°	0° - 5°	10° - 25°	10° - 25°	0° - 10°	0° - 10°
	Cutting material	PCD	PCD	PCD	PCD	PCD	PCD	PCD
	Shank	DIN 6535 form HA	DIN 6535 form HA	Thread	DIN 6535 form HA	Thread	DIN 6535 form HA	HSK20C
Application		CNC slotting & profiling	CNC slotting & profiling	CNC slotting & profiling	CNC profiling & pre-finishing	CNC profiling & pre-finishing	CNC high-speed facing	CNC high-speed facing
Tool body		Heavy metal tungsten alloy	Solid carbide	Heavy metal tungsten alloy	Heavy metal tungsten alloy	Heavy metal tungsten alloy	Heavy metal tungsten alloy	Heavy metal tungsten alloy
Available with through coolant		●	●		●	●	●	
Air cooled dry cutting (with Aerotech System)								●
Page		33	34	35	36	37	38	39

End-Mill Series

AeroMill M11

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 2/3
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 6,35 to 12,7 mm
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for **finishing** operations
- **Customised finishing cutters** available on request

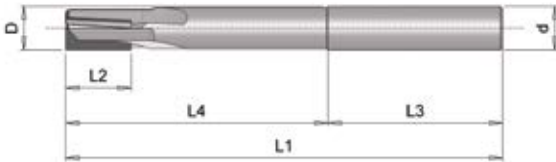
D	d	L2	L1	L3	Z	Rot.	code
6,35	6,35	15,875	63,5	38,1	2	RH	AM11010
6,35	6,35	15,875	63,5	38,1	3	RH	AM11020
9,525	9,525	15,875	76,2	50,8	2	RH	AM11030
9,525	9,525	15,875	76,2	50,8	3	RH	AM11040
10	10	15	75	40	2	RH	AM11050
10	10	15	75	40	3	RH	AM11060
10	10	20	100	40	2	RH	AM11070
10	10	20	100	40	3	RH	AM11080
12	12	15	75	40	2	RH	AM11090
12	12	15	75	40	3	RH	AM11100
12	12	20	100	40	2	RH	AM11110
12	12	20	100	40	3	RH	AM11120
12,7	12,7	15,875	88,9	50,8	2	RH	AM11130
12,7	12,7	15,875	88,9	50,8	3	RH	AM11140

End-Mill Series

AeroMill M12

DP

RH



Technical features:

- Solid carbide body
- High density PCD cutting edges: 2/3
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- • Diameters range: from 3,0 to 20,0 mm
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for **finishing** operations
- **Customised finishing cutters** available on request

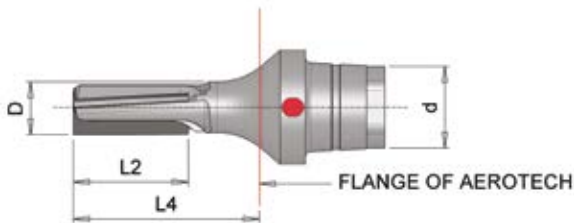
D	d	L2	L1	L3	Z	code
3,00	4	6	50	30	1	AM12010
3,175	3,175	6,35	38,1	25,4	1	AM12025
4	6	6	60	30	1	AM12040
4,76	4,76	6,35	44,45	31,75	1	AM12055
6	6	15	60	30	2	AM12070
6	6	15	60	30	3	AM12085
6	6	20	100	40	2	AM12100
6	6	20	100	40	3	AM12115
6,35	6,35	15,875	63,5	38,1	2	AM12130
6,35	6,35	15,875	63,5	38,1	3	AM12145
8	8	15	60	30	2	AM12160
8	8	15	60	30	3	AM12175
8	8	20	100	40	2	AM12190
8	8	20	100	40	3	AM12205

D	d	L2	L1	L3	Z	code
9,525	9,525	15,875	76,2	50,8	2	AM12220
9,525	9,525	15,875	76,2	50,8	3	AM12235
10	10	15	75	40	2	AM12250
10	10	15	75	40	3	AM12265
10	10	20	100	40	2	AM12280
10	10	20	100	40	3	AM12295
12	12	15	75	40	2	AM12310
12	12	15	75	40	3	AM12325
12	12	20	100	40	2	AM12340
12	12	20	100	40	3	AM12355
12,7	12,7	15,875	88,9	50,8	2	AM12370
12,7	12,7	15,875	88,9	50,8	3	AM12385
15,875	15,875	19,05	101,6	50,8	2	AM12400
15,875	15,875	19,05	101,6	50,8	3	AM12415
19,05	19,05	25,4	101,6	50,8	2	AM12430
19,05	19,05	25,4	101,6	50,8	3	AM12445
20	20	20	100	45	2	AM12460
20	20	20	100	45	3	AM12475

End-Mill Series

AeroMill M13

DP RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 2/3
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 9,525 to 12,7 mm
- Shank form: HSK20C



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for **finishing** operations
- Available with through coolant, if operating with Basic and Reach tool holders
- For use with Aerotech System for **air cooled dry cutting**
- **Customised finishing cutters** available on request

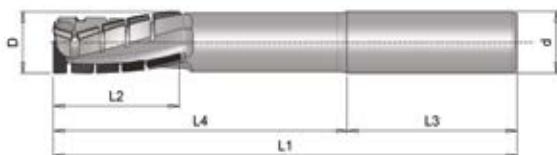
D	d	L2	L4	Z	code
9,525	HSK20C	15,875	20,875	2	AM13010
9,525	HSK20C	15,875	20,875	3	AM13020
10	HSK20C	15	20	2	AM13030
10	HSK20C	15	20	3	AM13040
12	HSK20C	15	20	2	AM13050
12	HSK20C	15	20	3	AM13060
12,7	HSK20C	15,875	20,875	2	AM13070
12,7	HSK20C	15,875	20,875	3	AM13080

End-Mill Series

AeroMill M18

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 3
- Helix angle: 0° - 25°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 12,0 to 12,7
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for pre-finishing and large volume removal operations
- "Easy-Flow" design for more efficient dust and chip evacuation
- Customised pre-finishing cutters available on request

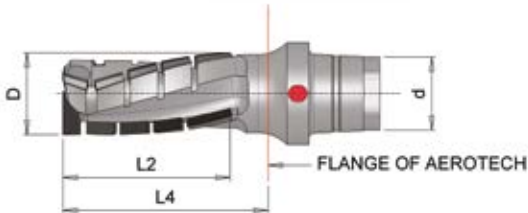
D	d	L2	L1	L3	Z	code
12	12	15	75	40	3+3	AM18010
12,7	12,7	15,875	76,2	44,45	3+3	AM18015

End-Mill Series

AeroMill M19

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 3
- Helix angle: 0° - 25°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 12,0 to 12,7
- Shank form: HSK20C



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for pre-finishing and large volume removal operations
- "Easy-Flow" design for more efficient dust and chip evacuation
- Available with through coolant, if operating with Basic and Reach tool holders
- For use with Aerotech System for air cooled dry cutting
- Customised pre-finishing cutters available on request

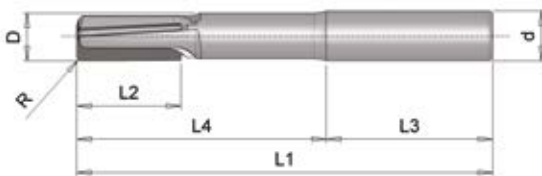
D	d	L2	L4	Z	code
12	HSK20C	15	20	3	AM19010
12,7	HSK20C	15,875	20,875	3	AM19020

End-Mill Series

AeroMill M31

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 2/3
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 6,35 to 19,05 mm
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for simultaneous edge finishing and inside corner rounding operations
- Customised "bull nose" finishing cutters available on request

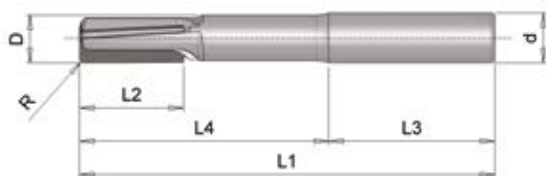
D	d	L2	L1	L3	Z	R	code
6,35	6,35	15,875	63,5	38,1	2	0,317	AM31010
6,35	6,35	15,875	63,5	38,1	3	0,317	AM31020
9,525	9,525	15,875	76,2	50,8	2	0,635	AM31030
9,525	9,525	15,875	76,2	50,8	3	0,635	AM31040
10	10	15	75	40	2	0,5	AM31050
10	10	15	75	40	3	0,5	AM31060
10	10	20	100	40	2	0,5	AM31070
10	10	20	100	40	3	0,5	AM31080
12	12	15	75	40	2	0,75	AM31090
12	12	15	75	40	3	0,75	AM31100
12	12	20	100	40	2	0,75	AM31110
12	12	20	100	40	3	0,75	AM310120
12,7	12,7	15,875	88,9	50,8	2	0,76	AM31130
12,7	12,7	15,875	88,9	50,8	3	0,76	AM31140
15,875	15,875	19,05	101,6	50,8	2	1,016	AM31150
15,875	15,875	19,05	101,6	50,8	3	1,016	AM31160
19,05	19,05	25,4	101,6	50,8	2	1,016	AM31170
19,05	19,05	25,4	101,6	50,8	3	1,016	AM31180

End-Mill Series

AeroMill M33

DP

RH



Technical features:

- Solid carbide body
- High density PCD cutting edges: 2/3
- Helix angle: 0°-5°
- Cutting tolerance: +/- 0.01
- Balance: G2.5 < 1 gr/mm
- Shank form: HA (DIN 6535)
- Diameters: from 6,35 to 15,875 mm on request



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for simultaneous edge finishing and inside corner rounding operations
- Customised "bull nose" finishing cutters available on request

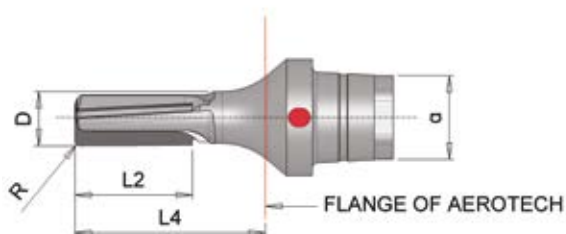
D	d	L2	L1	L3	Z	R	code
6,35	6,35	15,875	63,5	38,1	2	0,317	AM33010
6,35	6,35	15,875	63,5	38,1	3	0,317	AM33025
9,525	9,525	15,875	76,2	50,8	2	0,635	AM33040
9,525	9,525	15,875	76,2	50,8	3	0,635	AM33055
10	10	15	75	40	2	0,5	AM33070
10	10	15	75	40	3	0,5	AM33085
10	10	20	100	40	2	0,5	AM33100
10	10	20	100	40	3	0,5	AM33115
12	12	15	75	40	2	0,75	AM33130
12	12	15	75	40	3	0,75	AM33145
12	12	20	100	40	2	0,75	AM33160
12	12	20	100	40	3	0,75	AM33175
12,7	12,7	15,875	88,9	63,5	2	0,76	AM33190
12,7	12,7	15,875	88,9	63,5	3	0,76	AM33205
15,875	15,875	19,05	101,6	50,8	2	1,016	AM33220
15,875	15,875	19,05	101,6	50,8	3	1,016	AM33235
19,05	19,05	25,4	101,6	50,8	2	1,016	AM33250
19,05	19,05	25,4	101,6	50,8	3	1,016	AM33265
20	20	20	100	45	2	1	AM33280
20	20	20	100	45	3	1	AM33295

End-Mill Series

AeroMill M32

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 2/3
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 12 to 12,7 mm
- Shank form: HSK20C



Through coolant on request

Applications:

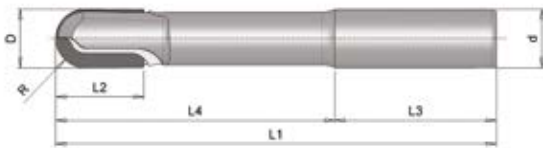
- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for simultaneous edge finishing and inside corner rounding operations
- Available with through coolant, if operating with Basic and Reach tool holders
- For use with Aerotech System for air cooled dry cutting
- Customised "bull nose" finishing cutters available on request

D	d	L2	L4	Z	R	L4	code
12	HSK20C	15	20	2	0,75	20	AM32015
12	HSK20C	15	20	3	0,75	20	AM32035
12	HSK20C	20	25	2	0,75	25	AM32055
12	HSK20C	20	25	3	0,75	25	AM32075
12,7	HSK20C	15,875	20,875	2	0,76	20,875	AM32095
12,7	HSK20C	15,875	20,875	3	0,76	20,875	AM32115
12,7	HSK20C	19,05	24,05	2	0,76	24,05	AM32135
12,7	HSK20C	19,05	24,05	3	0,76	24,05	AM32155

Ball-Nose Series

AeroMill M21

DP RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 2/3
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 10,0 to 20,0 mm
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for high speed precision machining of 3-dimensional contoured shaped components (slotting & profiling)
- Customised ball nose cutters available on request

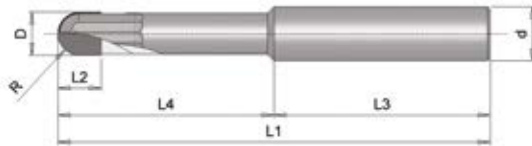
D	d	L2	L1	L3	Z	code
10	10	8	100	45	2	AM21020
12	12	9	100	50	2	AM21030
12	12	9	100	50	3	AM21040
16	16	10	100	50	2	AM21050
16	16	10	100	50	3	AM21060
20	20	12	100	50	2	AM21070
20	20	12	100	50	3	AM21080

Ball-Nose Series

AeroMill M22

DP

RH



Technical features:

- Solid carbide body
- High density PCD cutting edges: 1/2/3
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 4,0 to 20 mm
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for high speed precision machining of 3-dimensional contoured shaped components (slotting & profiling)
- Customised ball nose cutters available on request

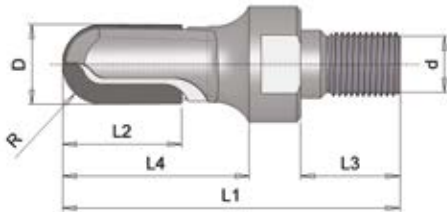
D	d	L2	L1	L3	Z	code
4	6	6	50	30	1	AM22010
6	6	6	100	40	2	AM22025
6,35	6,35	15,875	63,5	38,1	2	AM22040
8	8	7	100	40	2	AM22055
9,525	9,525	15,875	76,2	50,8	2	AM22070
10	10	8	100	40	2	AM22085
12	12	9	100	50	2	AM22100
12	12	9	100	50	3	AM22115
12,7	12,7	15,875	88,9	50,8	2	AM22130
12,7	12,7	15,875	88,9	50,8	3	AM22145
15,875	15,875	19,05	101,6	50,8	2	AM22160
15,875	15,875	19,05	101,6	50,8	3	AM22175
16	16	10	100	50	2	AM22190
16	16	10	100	50	3	AM22205
19,05	19,05	25,4	101,6	50,8	2	AM22220
19,05	19,05	25,4	101,6	50,8	3	AM22235
20	20	12	100	50	2	AM22250
20	20	12	100	50	3	AM22265

Ball-Nose Series

AeroMill M23

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 1/2
- Helix angle: 0° - 5°
- Cutting tolerance: +/- 0,01
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 10,0 to 16,0 mm
- Shank form: thread



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for high speed precision machining of 3-dimensional contoured shaped components (slotting & profiling)
- Customised ball nose cutters available on request

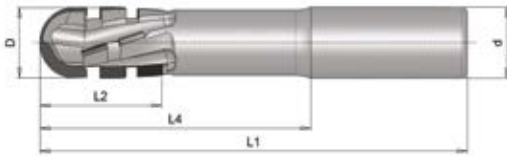
D	d	L2	L1	Z	code
10	M16	12	78	2	AM23010
12	M16	16	78	2	AM23015
12	M16	16	78	3	AM23020
12,7	M16	15,875	76,2	2	AM23025
12,7	M16	15,875	76,2	3	AM23030
16	M16	20	78	2	AM23035
16	M16	20	78	3	AM23040
10	M16	12	118	2	AM23045
12	M16	16	118	2	AM23050
12	M16	16	118	3	AM23055
15,875	M16	19,05	117,47	2	AM23060
15,875	M16	19,05	117,47	3	AM23065
16	M16	20	118	2	AM23070
16	M16	20	118	3	AM23075

Ball-Nose Series

AeroMill M28

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 2+2
- Helix angle: 10° - 25°
- Cutting tolerance: +/- 0,02
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 19,05 to 32,0 mm
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for multi-role operations of profiling and pre-finishing (ball nose cutter w/out axial angle and prefinishing cutter with converging axial angle)
- "Easy-Flow" design for more efficient dust and chip evacuation
- Customised multi-role cutters available on request

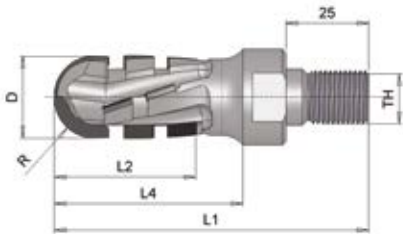
D	d	L2	L1	L3	Z	code
20	20	30	150	50	2+2	AM28010
25	25	50	150	50	2+2	AM28015
32	25	50	150	50	2+2	AM28020
19,05	19,05	30	152,4	50,8	2+2	AM28025

Ball-Nose Series

AeroMill M29

DP

RH



Technical features:

- Heavy metal tungsten alloy body
- High density PCD cutting edges: 2+2
- Helix angle: 10° - 25°
- Cutting tolerance: +/- 0,02
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 25,0 to 40,0 mm
- Shank form: thread



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for multi-role operations of profiling and pre-finishing (ball nose cutter w/out axial angle and prefinishing cutter with converging axial angle)
- "Easy-Flow" design for more efficient dust and chip evacuation
- Customised multi-role cutters available on request

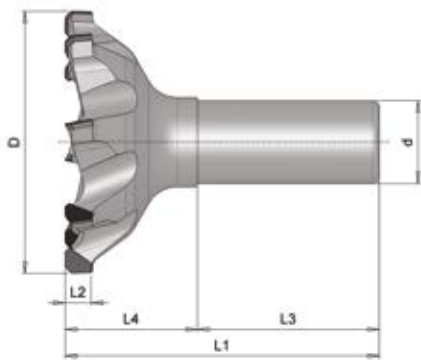
D	d	L2	L1	Z	code
25	M16	50	103	2+2	AM29010
32	M16	50	103	2+2	AM29015
40	M16	30	83	2+2	AM29020

Face-Mill Series

AeroMill M41

DP

RH



Technical features:

- Heavy metal tungsten alloy body (up to 40 mm)
- Case hardened body (over 40 mm)
- High density PCD cutting edges: 4/8
- Helix angle: 0° - 10°
- Cutting tolerance: +/- 0,02
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 25,0 to 80,0 mm
- Shank form: DIN 6535 HA



Through coolant on request

Applications:

- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for high speed facing operations
- "Easy-Flow" design for more efficient dust and chip evacuation
- Profiled "GlideCut" edges to reduce cutting pressure
- End-cut-to-centre design available up to 40 mm diameters
- Customised multi-role cutters available on request

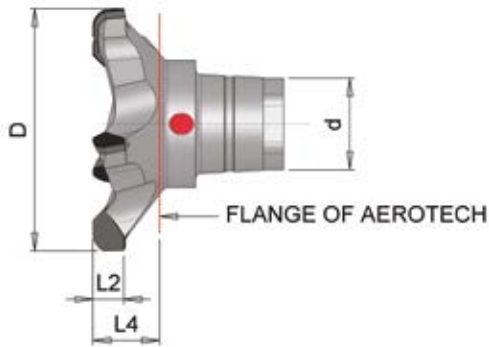
D	d	L2	L1	L3	Z	code
25	25	10	100	55	4	AM41010
32	25	10	100	55	4	AM41015
40	25	10	100	55	5	AM41020
60	25	10	100	55	8	AM41025
70	25	10	100	55	8	AM41030
80	25	10	100	55	8	AM41035

Face-Mill Series

AeroMill M42

DP

RH



Technical features:

- Heavy metal tungsten alloy body (up to 40 mm)
- Case hardened body (over 40 mm)
- High density PCD cutting edges: 4/8
- Helix angle: 0° - 10°
- Cutting tolerance: +/- 0,02
- Balance: G2,5 < 1 gr/mm
- Diameters range: from 25,0 to 50,0 mm
- Shank form: HSK20C



Through coolant on request

Applications:

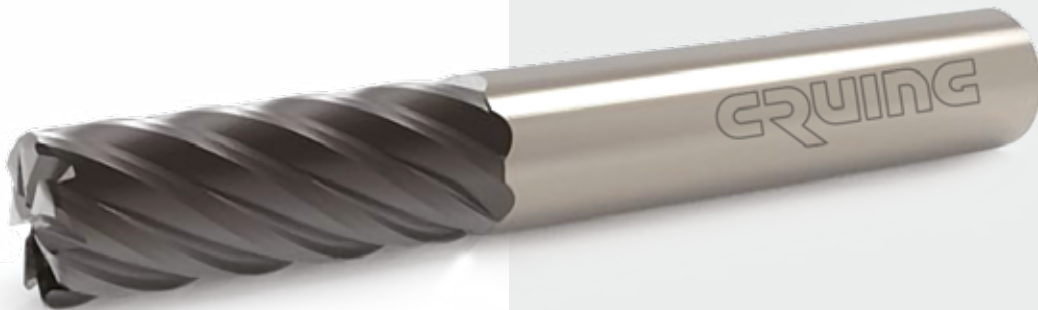
- For CNC automated cutting of CFRP, aluminium and light alloy materials
- Particularly indicated for high speed facing operations
- "Easy-Flow" design for more efficient dust and chip evacuation
- Profiled "GlideCut" edges to reduce cutting pressure
- Available with through coolant, if operating with Basic and Reach tool holders
- For use with Aerotech System for air cooled dry cutting
- End-cut-to-centre design available up to 40 mm diameters
- Customised multi-role cutters available on request

D	d	L2	L4	Z	code
25	HSK20C	10	15	4	AM42010
32	HSK20C	10	15	4	AM42015
40	HSK20C	10	15	5	AM42020
50	HSK20C	10	15	5	AM42025

Solid Carbide Milling

Cruing Aeromill series offers **solid carbide cutters designed for milling composites materials.**

Cruing Aeromill series offers solid carbide cutters designed for milling composites materials: aluminium, die cast aluminium, aircraft Alu, non ferrous metals, **plastics, Titanium, Inconel, aluminium <12%, magnesium, copper.**




- No chatter and vibration
- Increased edge retention
- No delamination
- Super-fine surface finish
- Low Ra values
- Solid-carbide or heavy metal tungsten alloy body
- With external and internal coolant supply

Aeromill series covers the complete range of cutting tools commonly used within the Aerospace and composites industries. **Edge milling, troicodal, multiflute solutions**, all qualified by leading manufacturers cutting composites parts.

Tool Programme Solid Carbide Milling




End-Mill Series

Technical design	End-Mill Series							
	AeroMill M10	AeroMill M15	AeroMill M20	AeroMill M25	AeroMill M30	AeroMill M35	AeroMill M40	AeroMill M45
Diameters (mm)	6,0 - 20,0	6,0 - 20,0	6,0 - 20,0	6,0 - 20,0	3,0 - 12,0	3,0 - 12,0	3,0 - 12,0	3,0 - 12,0
Number of cutting edges	3	3	3	3	Multi flute	Multi flute	Multi flute	Multi flute
Helix angle	43°-45°-47°	43°-45°-47°	43°-45°-47°	43°-45°-47°	25°	25°	25°	25°
Cutting material	HW	HW	HW	HW	HW	HW	HW	HW
Shank	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA
Application	Aluminium, die-cast aluminium, aircraft aluminium, non ferrous metals, plastics	Aluminium, die-cast aluminium, aircraft aluminium, non ferrous metals, plastics	Aluminium, die-cast aluminium, aircraft aluminium, non ferrous metals, plastics	Aluminium, die-cast aluminium, aircraft aluminium, non ferrous metals, plastics	Composite materials, non-ferrous metals, Plexiglas and Polycarbonate materials	Composite materials, non-ferrous metals, Plexiglas and Polycarbonate materials	Composite materials, non-ferrous metals, Plexiglas and Polycarbonate materials	Composite materials, non-ferrous metals, Plexiglas and Polycarbonate materials
Coated	●	●	●	●				
Radius corner		●		●				
Chamfer corner			●					
Through coolant 			●	●				
End cut to centre	●	●	●	●			●	●
Front cut	●	●	●	●		●	●	●
Drilling point			●					135°
Page	43	44	45	46	47	48	49	50

Tool Programme Solid Carbide Milling

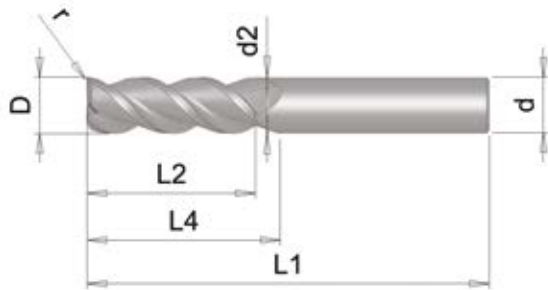


End-Mill Series

Technical design		AeroMill M50	AeroMill M55	AeroMill M60	AeroMill M65	AeroMill M70	AeroMill M75	AeroMill M80	AeroMill M85
	Diameters (mm)		4,0 - 12,0	6,0 - 20,0	12,0 - 20,0	3,0 - 20,0	12,0 - 20,0	3,0 - 12,0	3,0 - 12,0
Number of cutting edges		6	4	7	4	5	2	2	4/5/6
Helix angle		10°	38° - 39°	38°	38°	35° - 36°	30°	35°	0°
Cutting material		HW	HW	HW	HW	HW	HW	HW	HW
Shank		DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA	DIN 6535 from HA
Application		Pre-finishing & large volume removal with chipbreaker for composite (CRFP) materials	Finishing for Inconel 625, 718, titanium Alloys Ti-6AL-4V	Finishing for Inconel 625, 718, titanium Alloys Ti-6AL-4V	Finishing for Inconel 625, 718, titanium Alloys Ti-6AL-4V	Finishing for Inconel 625, 718, titanium Alloys Ti-6AL-4V	Aluminium with <12° Si, magnesium, copper	Aluminium with <12° Si, magnesium, copper	Deburr steel-alloys, tempered steel, stainless steel, non-ferrous metals, cast iron, titanium
Coated		●	●	●	●	●	●	●	
Radius corner			●	●		●	●		
Chamfer corner		●	●		●		●	●	
Through coolant									
End cut to centre		●	●	●	●			●	●
Front cut		●	●	●	●	●	●	●	●
Drilling point									
Page		51	52	54	55	56	57	58	59

End-Mill Series

AeroMill M10 (Z3 SC Endmill)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 6.0 to 20.0 mm on request
- Shank form: HB (DIN 6535) h5

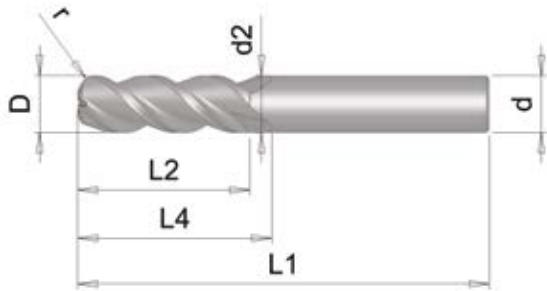
Applications:

- For aluminium and die-cast aluminium
- For plastic
- For aircraft aluminium
- For non ferrous metals

D	d	L4	L1	L2	Z	d2	s	code
6,00	6,00	21	57	13	3	5,50	0,2	AM10010
8,00	8,00	26	63	19	3	7,40	0,2	AM10015
10,00	10,00	30	72	22	3	9,20	0,25	AM10020
12,00	12,00	37	83	26	3	11,00	0,3	AM10025
16,00	16,00	42	92	32	3	15,00	0,4	AM10030
20,00	20,00	50	104	38	3	19,00	0,45	AM10035

End-Mill Series

AeroMill M15 (Z3 Toroidal Endmill)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 6.0 to 20.0 mm on request
- Shank form: HB (DIN 6535) h5

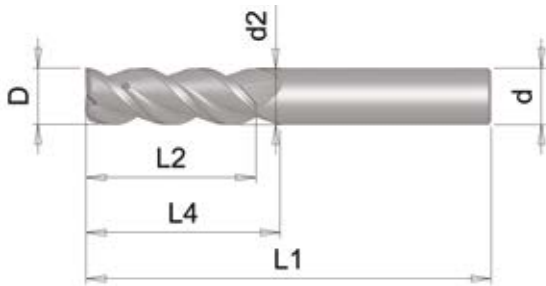
Applications:

- For aluminium and die-cast aluminium
- For plastic
- For aircraft aluminium
- For non ferrous metals

D	d	L4	L1	L2	Z	d2	r	code
6,00	6,00	21	57	13	3	5,50	0,5	AM15010
6,00	6,00	21	57	13	3	5,50	1	AM15015
6,00	6,00	21	57	13	3	5,50	1,5	AM15020
8,00	8,00	26	63	19	3	7,40	1,5	AM15025
8,00	8,00	26	63	19	3	7,40	2	AM15030
8,00	8,00	26	63	19	3	7,40	2,5	AM15035
8,00	8,00	26	63	19	3	7,40	3	AM15040
10,00	10,00	30	70	22	3	9,20	2	AM15045
10,00	10,00	30	70	22	3	9,20	2,5	AM15050
10,00	10,00	30	72	22	3	9,20	3	AM15055
10,00	10,00	30	72	22	3	9,20	4	AM15060
12,00	12,00	37	83	26	3	11,00	2	AM15065
12,00	12,00	37	83	26	3	11,00	2,5	AM15070
12,00	12,00	37	83	26	3	11,00	3	AM15075
12,00	12,00	37	83	26	3	11,00	4	AM15080
16,00	16,00	42	92	32	3	15,00	2	AM15085
16,00	16,00	42	92	32	3	15,00	2,5	AM15090
16,00	16,00	42	92	32	3	15,00	3	AM15095
16,00	16,00	42	92	32	3	15,00	4	AM15100
16,00	16,00	42	92	32	3	15,00	5	AM15105
20,00	20,00	50	104	38	3	19,00	2,5	AM15110
20,00	20,00	50	104	38	3	19,00	3	AM15115
20,00	20,00	50	104	38	3	19,00	4	AM15120
20,00	20,00	50	104	38	3	19,00	5	AM15125

End-Mill Series

AeroMill M20 (Z3 Toroidal Endmill with coolant slots)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 6.0 to 20.0 mm on request
- Shank form: HB (DIN 6535) h5
- With cooling slots

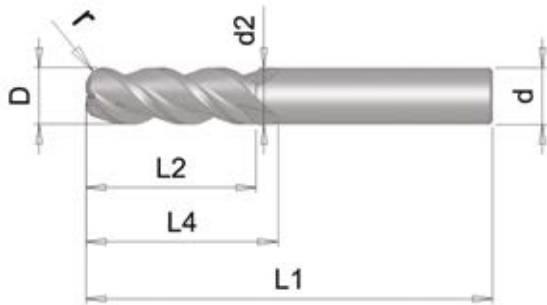
Applications:

- for aluminium and die-cast aluminium
- For plastic
- For aircraft aluminium
- For non ferrous metals

D	d	L4	L1	L2	z	d2	s	code
6,00	6,00	21	57	13	3	5,50	0,2	AM20010
8,00	8,00	26	63	19	3	7,40	0,2	AM20015
10,00	8,00	30	72	22	3	9,20	0,25	AM20020
12,00	12,00	37	83	26	3	11,00	0,3	AM20025
16,00	16,00	42	92	32	3	15,00	0,4	AM20030
20,00	20,00	50	104	38	3	19,00	0,45	AM20035

End-Mill Series

AeroMill M25 (Z3 Toroidal Endmill with coolant slots)



Technical features:

- Solid carbide micro grain
- Diameters: from 6.0 to 20.0 mm on request
- Diameter tolerance: h10
- Shank form: HB (DIN 6535) h5
- With cooling slots

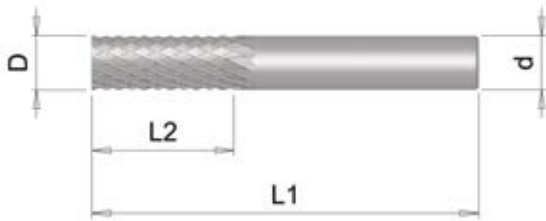
Applications:

- For aluminium and die-cast aluminium
- For plastic
- For aircraft aluminium
- For non ferrous metals

D	d	L4	L1	L2	Z	d2	r	code
6,00	6,00	21	57	13	3	5,50	0,50	AM25010
6,00	6,00	21	57	13	3	5,50	1	AM25015
8,00	8,00	26	63	19	3	7,40	2	AM25020
8,00	8,00	26	63	19	3	7,40	3	AM25025
10,00	10,00	30	70	22	3	9,20	2	AM25030
10,00	10,00	30	72	22	3	9,20	3	AM25035
10,00	10,00	30	72	22	3	9,20	4	AM25040
12,00	12,00	37	83	26	3	11,00	2	AM25045
12,00	12,00	37	83	26	3	11,00	3	AM25050
12,00	12,00	37	83	26	3	11,00	4	AM25055
16,00	16,00	42	92	32	3	15,00	3	AM25060
16,00	16,00	42	92	32	3	15,00	4	AM25065
16,00	16,00	42	92	32	3	15,00	5	AM25070
20,00	20,00	50	104	38	3	19,00	3	AM25075
20,00	20,00	50	104	38	3	19,00	5	AM25080

End-Mill Series

AeroMill M30 (SC Multiflute composite router-burr)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 3.0 to 12.0 mm on request
- Shank form: HA (DIN 6535)

Applications:

- For machining composite (CRFP) materials
- For non ferrous
- Plexiglas and Polycarbonate materials

D	d	L2	L1	code
3,00	3,00	10	40	AM30010
4,00	4,00	15	40	AM30015
5,00	5,00	16	50	AM30020
6,00	6,00	18	50	AM30025
8,00	8,00	25	63	AM30030
10,00	10,00	30	72	AM30035
12,00	12,00	32	83	AM30040

End-Mill Series

AeroMill M35 (SC Multiflute composite router-burr)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 3.0 to 12.0 mm on request
- Shank form: HA (DIN 6535)

Applications:

- Countouring cutters with front cut, multicut (composite materials)
- For machining composite (CRFP) materials
- For non ferrous
- For plexiglas and Polycarbonate materials

D	d	L2	L1	code (RH)
3,00	3,00	10	40	AM35010
4,00	4,00	15	40	AM35015
5,00	5,00	16	50	AM35020
6,00	6,00	18	50	AM35025
8,00	8,00	25	63	AM35030
10,00	10,00	30	72	AM35035
12,00	12,00	32	83	AM35040

End-Mill Series

AeroMill M40 (SC Multiflute composite router-burr)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 3.0 to 12.0 mm on request
- Shank form: HA (DIN 6535)

Applications:

- Countouring cutters with front cut (composite materials)
- Countouring cutters for machining composite (CRFP) materials
- For non ferrous
- For plexiglas and Polycarbonate materials

D	d	L2	L1	code
3,00	3,00	10	40	AM40010
4,00	4,00	15	40	AM40015
5,00	5,00	16	50	AM40020
6,00	6,00	18	50	AM40025
8,00	8,00	25	63	AM40030
10,00	10,00	30	72	AM40035
12,00	12,00	32	83	AM40040

End-Mill Series

AeroMill M45 (SC Multiflute composite router-burr)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 3.0 to 12.0 mm on request
- Shank form: HA (DIN 6535)

Applications:

- Countouring cutters for machining composite (CRFP) materials
- For non ferrous
- For plexiglas and Polycarbonate materials

D	d	L2	L1	code
3,00	3,00	10	40	AM45010
4,00	4,00	15	40	AM45015
5,00	5,00	16	50	AM45020
6,00	6,00	18	50	AM45025
8,00	8,00	25	63	AM45030
10,00	10,00	30	72	AM45035
12,00	12,00	32	83	AM45040

End-Mill Series

AeroMill M50 (Z6 SC Roughing Routers)



Technical features:

- Solid carbide micro grain
- Diameter tolerance: h10
- Diameters: from 4.0 to 12.0 mm on request
- Shank form: HA (DIN 6535)

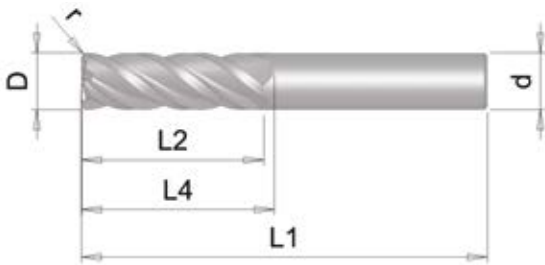
Applications:

- Countouring cutters, helix 10°, Z=6
- For machining composite (CRFP) materials

D	d	L2	L1	Z	code
4,00	4,00	15	40	6	AM50010
5,00	5,00	16	50	6	AM50015
6,00	6,00	18	50	6	AM50020
8,00	8,00	20	63	6	AM50025
10,00	10,00	25	72	6	AM50030
12,00	12,00	30	83	6	AM50035

End-Mill Series

AeroMill M55 (Z4 SC Toroidal Endmill)



Technical features:

- Solid carbide micrograin
- Irregular helix-pitch
- High material removal rates
- Cutting without vibrations thanks one center cut
- Diameter tolerance: h10
- Diameters: from 6.0 to 20.0 mm on request
- Shank form: HA (DIN 6535)

Applications:

- For inconel 625 and 718
- For titanium alloys Ti-6Al-4V

D	d	L2	L1	Z	r	code
6,00	6,00	13	57	4	0,25	AM55010
6,00	6,00	13	57	4	0,5	AM55015
6,00	6,00	13	57	4	1,5	AM55020
6,00	6,00	13	57	4	2,5	AM55025
8,00	8,00	19	63	4	0,5	AM55030
8,00	8,00	19	63	4	0,8	AM55035
8,00	8,00	19	63	4	1,5	AM55040
8,00	8,00	19	63	4	2,5	AM55045
10,00	10,00	22	72	4	0,5	AM55050
10,00	10,00	22	72	4	0,8	AM55055
10,00	10,00	22	72	4	1,5	AM55060
10,00	10,00	22	72	4	2,00	AM55065
10,00	10,00	22	72	4	2,5	AM55070
10,00	10,00	22	72	4	3,00	AM55075
10,00	10,00	22	72	4	4,00	AM55080

D	d	L2	L1	Z	r	code
12,00	12,00	26	83	4	0,5	AM55085
12,00	12,00	26	83	4	0,8	AM55090
12,00	12,00	26	83	4	1,5	AM55095
12,00	12,00	26	83	4	2,00	AM55100
12,00	12,00	26	83	4	2,5	AM55105
12,00	12,00	26	83	4	3,00	AM55110
12,00	12,00	26	83	4	3,5	AM55115
12,00	12,00	26	83	4	4,00	AM55120
16,00	16,00	32	92	4	0,5	AM55125
16,00	16,00	32	92	4	0,8	AM55130
16,00	16,00	32	92	4	2,00	AM55135
16,00	16,00	32	92	4	2,5	AM55140
16,00	16,00	32	92	4	3,00	AM55145
16,00	16,00	32	92	4	3,5	AM55150
16,00	16,00	32	92	4	4,00	AM55155
16,00	16,00	32	92	4	5,00	AM55160
20,00	20,00	38	104	4	0,5	AM55165
20,00	20,00	38	104	4	0,8	AM55170
20,00	20,00	38	104	4	2,00	AM55175
20,00	20,00	38	104	4	2,5	AM55180
20,00	20,00	38	104	4	3,00	AM55185
20,00	20,00	38	104	4	3,5	AM55190
20,00	20,00	38	104	4	4,00	AM55195
20,00	20,00	38	104	4	5,00	AM55200

End-Mill Series

AeroMill M60 (Z7 SC Toroidal Endmill)



Technical features:

- Solid carbide micrograin
- High materials rates, cutting without vibrations
- Diameter tolerance: h10
- Diameters: from 12.0 to 20.0 mm on request
- Shank form: HA (DIN 6535)

Applications:

- For inconel 625 and 718
- For titanium alloys Ti-6Al-4V

D	d	L2	L1	Z	r	code
12,00	12,00	32	83	7	0,50	AM60010
12,00	12,00	32	83	7	1,00	AM60015
12,00	12,00	32	83	7	2,00	AM60020
12,00	12,00	32	83	7	2,50	AM60025
12,00	12,00	32	83	7	3,00	AM60030
12,00	12,00	32	83	7	4,00	AM60035
16,00	16,00	50	92	7	0,50	AM60040
16,00	16,00	50	92	7	1,00	AM60045
16,00	16,00	50	92	7	2,00	AM60050
16,00	16,00	50	92	7	2,50	AM60055
16,00	16,00	50	92	7	3,00	AM60060
16,00	16,00	50	92	7	3,50	AM60065
16,00	16,00	50	92	7	4,00	AM60070
16,00	16,00	50	92	7	5,00	AM60075
20,00	20,00	52	104	7	1,00	AM60080
20,00	20,00	52	104	7	2,00	AM60085
20,00	20,00	52	104	7	2,50	AM60090
20,00	20,00	52	104	7	3,00	AM60095
20,00	20,00	52	104	7	4,00	AM60100
20,00	20,00	52	104	7	5,00	AM60105

End-Mill Series

AeroMill M65 (Z4 SC Endmill)



Technical features:

- Solid carbide micrograin
- Irregular helix-pitch
- High materials removal rates
- Cutting without vibrations thanks one center cut
- Diameter tolerance: h10
- Diameters: from 3.0 to 20.0 mm on request
- Shank form: HA (DIN 6535)

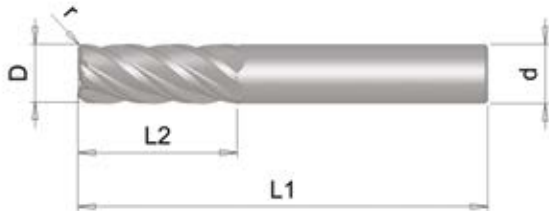
Applications:

- For inconel 625 and 718
- For titanium alloys Ti-6Al-4V

D	d	L2	L1	Z	code
3	6	8	57	4	AM65010
4	6	11	57	4	AM65015
5	6	13	57	4	AM65020
6	6	13	57	4	AM65025
8	8	19	63	4	AM65030
10	10	22	72	4	AM65035
12	12	26	83	4	AM65040
16	16	32	92	4	AM65045
20	20	38	104	4	AM65050

End-Mill Series

AeroMill M70 (Z5 SC Toroidal Endmill)



Technical features:

- Solid carbide micrograin
- Irregular helix-pitch
- High materials removal rates
- Cutting without vibrations
- Diameter tolerance: h10
- Diameters: from 12.0 to 20.0 mm on request
- Shank form: HA (DIN 6535)

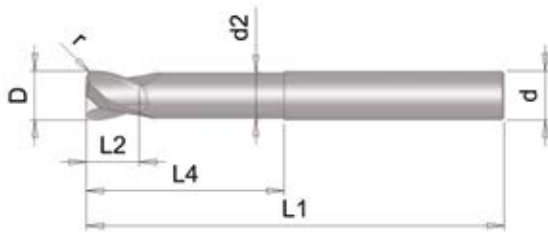
Applications:

- For inconel 625 and 718
- For titanium alloys Ti-6Al-4V

D	d	L2	L1	Z	r	code
12,00	12,00	32	83	5	0,5	AM70010
12,00	12,00	32	83	5	1	AM70015
12,00	12,00	32	83	5	1,5	AM70020
12,00	12,00	32	83	5	2	AM70025
12,00	12,00	32	83	5	2,5	AM70030
12,00	12,00	32	83	5	3	AM70035
12,00	12,00	32	83	5	4	AM70040
16,00	16,00	50	92	5	0,5	AM70045
16,00	16,00	50	92	5	1	AM70050
16,00	16,00	50	92	5	1,5	AM70055
16,00	16,00	50	92	5	2	AM70060
16,00	16,00	50	92	5	2,5	AM70065
16,00	16,00	50	92	5	3	AM70070
16,00	16,00	50	92	5	3,5	AM70075
16,00	16,00	50	92	5	4,00	AM70080
16,00	16,00	50	92	5	5,00	AM70085
20,00	20,00	52	104	5	1	AM70090
20,00	20,00	52	104	5	2	AM70095
20,00	20,00	52	104	5	2,5	AM70100
20,00	20,00	52	104	5	3	AM70105
20,00	20,00	52	104	5	4	AM70110
20,00	20,00	52	104	5	5	AM70115

End-Mill Series

AeroMill M75 (Z2 SC Toroidal Endmill alu < 12%)



Technical features:

- Solid carbide micrograin
- Diameter tolerance: e8
- Diameters: from 3.0 to 12.0 mm on request

Applications:

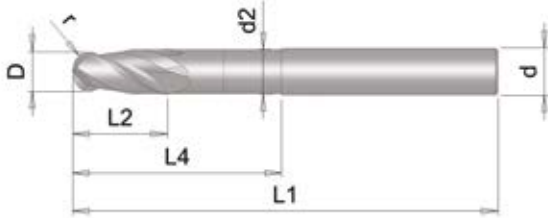
- To high speed cutting in aluminium with <12% Si, magnesium, copper

D	d	L2	L1	L4	Z	d2	r	code
3,00	4,00	5	60	20	2	2,70	0,3	AM75010
4,00	4,00	5	60	20	2	3,70	0,4	AM75015
5,00	5,00	6	60	20	2	4,60	0,5	AM75020
6,00	6,00	7	65	25	2	5,50	0,3	AM75025
6,00	6,00	7	65	25	2	5,50	1	AM75030
8,00	8,00	9	70	30	2	7,40	0,3	AM75035
8,00	8,00	9	70	30	2	7,40	1	AM75040
10,00	10,00	11	85	40	2	9,20	0,3	AM75045
10,00	10,00	11	85	40	2	9,20	1,5	AM75050
12,00	12,00	12	93	45	2	11,00	1,5	AM75055

End-Mill Series

AeroMill M80

(Z2 SC Ball Nose alu < 12%)



Technical features:

- Solid carbide micrograin
- Diameter tolerance: e8
- Diameters: from 3.0 to 12.0 mm on request

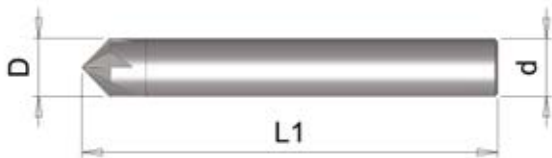
Applications:

- To High speed cutting in aluminium with <12% Si, magnesium, copper

D	d	L2	L1	L4	d2	r	code
3,00	6,00	6	70	25	2,80	1,5	AM80010
4,00	6,00	8	70	25	3,70	2	AM80015
5,00	6,00	10	70	25	4,60	2,5	AM80020
6,00	6,00	12	80	35	5,50	3	AM80025
8,00	8,00	16	80	35	7,40	4	AM80030
10,00	10,00	20	90	45	9,20	5	AM80035
12,00	12,00	24	100	50	11,00	6	AM80040

End-Mill Series

AeroMill M85 (Z4 SC Countersink 100°)



Technical features:

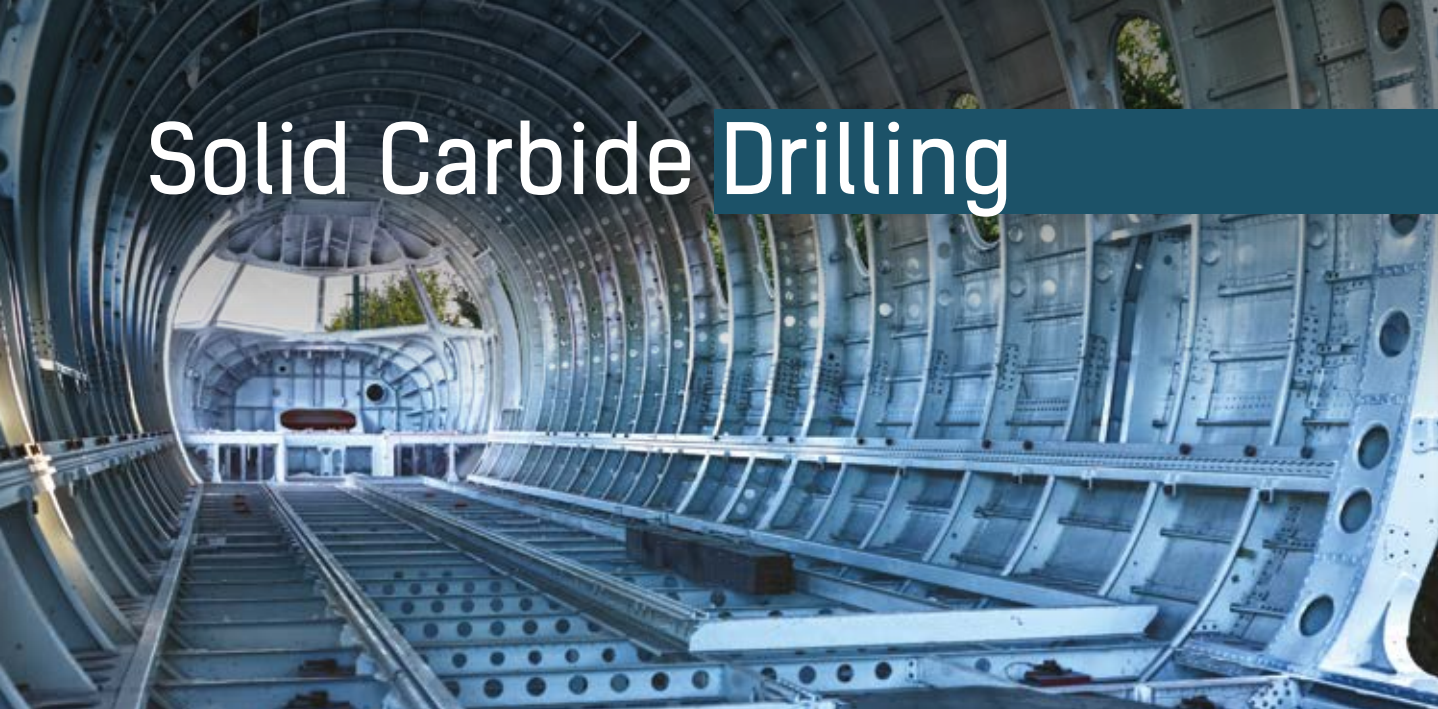
- Solid carbide grades: 10% Co Micro grain
- Diameters: from 4.0 to 12.0 mm on request
- Available: 60° - 90°

Applications:

- For steel-alloys
- For tempered and stainless steel
- For non ferrous metals
- For cast iron
- For titanium

D	d	L1	Z	code
4,00	4,00	54,00	4	AM85010
6,00	6,00	60,00	4	AM85015
8,00	8,00	63,00	5	AM85020
10,00	10,00	72,00	6	AM85025
12,00	12,00	83,00	6	AM85030

Solid Carbide Drilling



Cruing Aerodrill series offers **unique designed for solid carbide Twist drills and one-shot drill.**


Many leading producers of composite parts for the Aerospace industry have already qualified Cruing drills and are **benefitting** from the performances of one of the most cost-effective drills available today.



- Special drill point
- Cutting edge optimized for CFRP, Aluminium, aircraft aluminium, non ferrous metals, plastics and steel
- Excellent hole quality
- No delamination
- With external and internal coolant supply

Tool Programme Solid Carbide Drilling



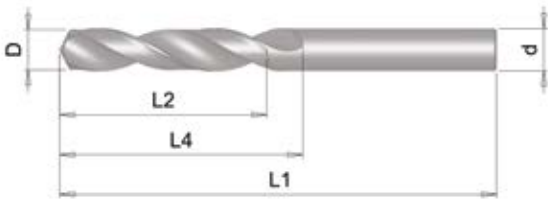
		SC Drilling Series			
		AeroDrill D10	AeroDrill D15	AeroDrill D20	AeroDrill D25
Technical design	Diameters (mm)	3,0 - 5,0	2,0 - 12,0	1,0 - 12,0	2,5 - 14,0
	Number of cutting edges	2	3	4	2
	Helix angle	30°	0°	0°	30°
	Cutting material	HW	HW	HW	HW
	Shank	DIN 6535 form HAK	DIN 6535 form HA	DIN 6535 form HA	DIN 6535 form HA
Application		Aluminium and aircraft aluminium, non-ferrous metals	Carbon fibre, plastic materials	Carbon fibre, plastic materials	Steel, cast steel, heatresisting steel, non-ferrous metals
Drilling depth		5D			3D
Coating		ZrN			ALTiSiN
Through coolant		 ●			
Drilling point		140°			140°
Page		62	64	65	66

SC-Drilling Series

AeroDrill D10 (Z2 SC twist drill)

DP

RH



Technical features:

- Solid carbide grades: 10% Co Micro grain
- Flute geometry: special point flute execution
- Diameter tolerance: m7
- Diameters: from 3.0 to 12.0 mm on request
- Shank form: HA (DIN 6535)
- With colling slots
- 5D (8D on request)

Applications:

- For aluminium
- For aircraft aluminium

D	d	L2	L1	L4	Z	code
3,00	6,00	23	66	28	2	AD10010
3,10	6,00	23	66	28	2	AD10015
3,30	6,00	23	66	28	2	AD10020
3,50	6,00	23	66	28	2	AD10025
3,70	6,00	23	66	28	2	AD10030
3,80	6,00	29	74	36	2	AD10035
4,00	6,00	29	74	36	2	AD10040
4,20	6,00	29	74	36	2	AD10045
4,50	6,00	35	74	36	2	AD10050
4,80	6,00	35	82	44	2	AD10055
5,00	6,00	35	82	44	2	AD10060
5,10	6,00	35	82	44	2	AD10065
5,20	6,00	35	82	44	2	AD10070
5,50	6,00	35	82	44	2	AD10075
5,80	6,00	35	82	44	2	AD10080
6,00	6,00	35	82	44	2	AD10085
6,30	8,00	43	91	53	2	AD10090
6,50	8,00	43	91	53	2	AD10095
6,80	8,00	43	91	53	2	AD10100
7,00	8,00	43	91	53	2	AD10105
7,50	8,00	43	91	53	2	AD10110
7,80	8,00	43	91	53	2	AD10115

D	d	L2	L1	L4	Z	code
8,00	8,00	43	91	53	2	AD10120
8,50	10,00	49	103	61	2	AD10125
8,80	10,00	49	103	61	2	AD10130
9,00	10,00	49	103	61	2	AD10135
9,20	10,00	49	103	61	2	AD10140
9,50	10,00	49	103	61	2	AD10145
9,80	10,00	49	103	61	2	AD10150
10,00	10,00	49	103	61	2	AD10155
10,20	12,00	56	118	71	2	AD10160
10,50	12,00	56	118	71	2	AD10165
10,80	12,00	56	118	71	2	AD10170
11,00	12,00	56	118	71	2	AD10175
11,50	12,00	56	118	71	2	AD10180
11,80	12,00	56	118	71	2	AD10185
12,00	12,00	56	118	71	2	AD10190

SC-Drilling Series

AeroDrill D15 (Z2 SC Twist drill)

DP

RH



Technical features:

- Solid carbide grades: K10 Micro grain
- Diameter tolerance: H7 mm
- Diameters: from 2.0 to 12.0 mm on request
- Coating: OmicronAlTiN

Applications:

- For drilling/reaming carbon fibre
- For plastic materials

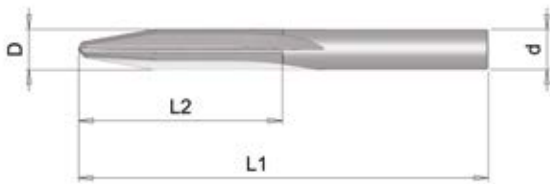
D	d	L1	L2	Z	code
2,00	2,00	100	50	3	AD15010
2,48	2,48	100	50	3	AD15015
3,00	3,00	100	50	3	AD15020
3,17	3,17	100	50	3	AD15025
4,00	4,00	100	50	3	AD15030
4,21	4,21	100	50	3	AD15035
4,82	4,82	100	50	3	AD15040
5,05	5,05	100	50	3	AD15045
5,53	5,83	100	50	3	AD15050
6,00	6,00	100	50	3	AD15055
6,33	6,33	100	50	3	AD15060
6,60	6,60	100	50	3	AD15065
7,00	7,00	100	50	3	AD15070
7,92	7,92	100	50	3	AD15075
8,00	8,00	100	50	3	AD15080
8,63	8,63	100	50	3	AD15085
9,00	9,00	100	50	3	AD15090
10,00	10,00	100	50	3	AD15095
12,00	12,00	100	50	3	AD15100

SC-Drilling Series

AeroDrill D20 (Z4 SC One shot drill)

DP

RH



Technical features:

- Solid carbide micrograin
- Diameter tolerance: H7 mm
- Diameters: from 2.0 to 12.0 mm on request

Applications:

- For drilling/reaming carbon fibre
- For plastic materials

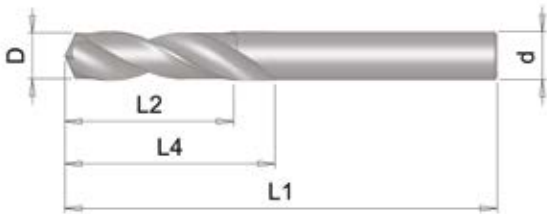
D	d	L1	L2	Z	code
2,00	2,00	100	50	4	AD20010
2,48	2,48	100	50	4	AD20020
3,00	3,00	100	50	4	AD20030
3,17	3,17	100	50	4	AD20040
4,00	4,00	100	50	4	AD20050
4,21	4,21	100	50	4	AD20060
4,82	4,82	100	50	4	AD20070
5,05	5,05	100	50	4	AD20080
5,53	5,83	100	50	4	AD20090
6,00	6,00	100	50	4	AD20100
6,33	6,33	100	50	4	AD20110
6,60	6,60	100	50	4	AD20120
7,00	7,00	100	50	4	AD20130
7,92	7,92	100	50	4	AD20140
8,00	8,00	100	50	4	AD20150
8,63	8,63	100	50	4	AD20160
9,00	9,00	100	50	4	AD20170
10,00	10,00	100	50	4	AD20180
12,00	12,00	100	50	4	AD20190

SC-Drilling Series

AeroDrill D25 (Z2 SC Twist drill)

DP

RH



Technical features:

- Solid carbide Micro grain
- Diameter tolerance: m7
- Diameters: from 2.5 to 14.0 mm on request
- Shank form: HA (DIN 6535)
- Coating: AltSiN
- 3D (5D on request)

Applications:

- For steel
- For cast steel
- heatresisting steel
- non-ferrous metals

D	d	L2	L1	L4	Z	code
2,50	6,00	14	62	20	2	AD25010
2,80	6,00	14	62	20	2	AD25015
3,00	6,00	14	62	20	2	AD25020
3,10	6,00	14	62	20	2	AD25025
3,20	6,00	14	62	20	2	AD25030
3,30	6,00	14	62	20	2	AD25035
3,40	6,00	14	62	20	2	AD25040
3,50	6,00	14	62	20	2	AD25045
3,60	6,00	17	62	20	2	AD25050
3,70	6,00	17	62	20	2	AD25055
3,80	6,00	17	66	24	2	AD25060
3,90	6,00	17	66	24	2	AD25065
4,00	6,00	17	66	24	2	AD25070
4,10	6,00	17	66	24	2	AD25075
4,20	6,00	17	66	24	2	AD25080
4,30	6,00	17	66	24	2	AD25085
4,40	6,00	17	66	24	2	AD25090
4,50	6,00	17	66	24	2	AD25095
4,60	6,00	20	66	24	2	AD25100
4,70	6,00	20	66	24	2	AD25105
4,80	6,00	20	66	28	2	AD25110
4,90	6,00	20	66	28	2	AD25115
5,00	6,00	20	66	28	2	AD25120
5,10	6,00	20	66	28	2	AD25125

D	d	L2	L1	L4	Z	code
5,20	6,00	20	66	28	2	AD25130
5,30	6,00	20	66	28	2	AD25135
5,40	6,00	20	66	28	2	AD25140
5,50	6,00	20	66	28	2	AD25145
5,60	6,00	20	66	28	2	AD25150
5,70	6,00	20	66	28	2	AD25155
5,80	6,00	20	66	28	2	AD25160
5,90	6,00	20	66	28	2	AD25165
6,00	6,00	20	66	28	2	AD25170
6,30	8,00	24	79	34	2	AD25175
6,50	8,00	24	79	34	2	AD25180
6,80	8,00	24	79	34	2	AD25185
7,00	8,00	24	79	34	2	AD25190
7,50	8,00	29	79	41	2	AD25195
7,80	8,00	29	79	41	2	AD25200
8,00	8,00	29	79	41	2	AD25205
8,50	10,00	35	89	47	2	AD25210
8,80	10,00	35	89	47	2	AD25215
9,00	10,00	35	89	47	2	AD25220
9,20	10,00	35	89	47	2	AD25225
9,50	10,00	35	89	47	2	AD25230
9,80	10,00	35	89	47	2	AD25235
10,00	10,00	35	89	47	2	AD25240
10,20	12,00	40	102	55	2	AD25245
10,50	12,00	40	102	55	2	AD25250
10,80	12,00	40	102	55	2	AD25255
11,00	12,00	40	102	55	2	AD25260
11,50	12,00	40	102	55	2	AD25265
11,80	12,00	40	102	55	2	AD25270
12,00	12,00	40	102	55	2	AD25275
12,50	14,00	43	107	60	2	AD25280
12,80	14,00	43	107	60	2	AD25285
13,00	14,00	43	107	60	2	AD25290
13,50	14,00	43	107	60	2	AD25295
14,00	14,00	43	107	60	2	AD25300

Solid Carbide Reaming



Cruing Aeroreamer series offers **solid carbide cutters** for high hole quality with low Ra values.


Aeroreamer covers the complete range of cutting tools commonly used within the **Aerospace and composite industries.**



- No vibration
- Super-fine finish
- Low Ra values
- With external and internal coolant supply

Tool Programme Solid Carbide Reaming

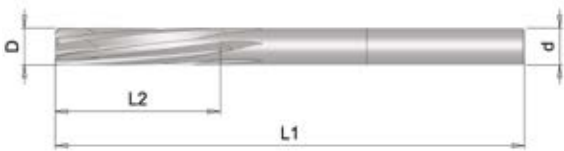


		SC Drilling Series			
		AeroReamer R10	AeroReamer R15	AeroReamer R20	AeroReamer R25
Technical design	Diameters (mm)	1,0 - 13	0,95 - 12,5	5,0 - 12,0	5,0 - 12,0
	Number of cutting edges	4-6	4-6	6	6
	Helix angle	7°	7°	7°	7°
	Cutting material	HW	HW	HW	HW
	Shank	DIN 6535	DIN 6535	DIN 6535	DIN 6535
Application		CNC finishing	CNC finishing	CNC finishing	CNC finishing
Chamfer corner		45°	45°	45°	45°
Coating				●	●
Through coolant				●	●
Page		70	72	75	76

SC-Drilling Series

AeroReamer R10 (Z4/Z6 SC twist reamer)

DP RH



Technical features:

- Solid carbide Micro grain
- Right hand cutting-left hand helix
- Irregular division
- Helix: 7°
- Diameter tolerance: H7
- Diameters: from 1.0 to 13.0 mm
- Coating: on request
- DIN 212

Applications:

- For steel
- For non-ferrous materials
- For cast iron

D	d	L2	L1	Z	code
1,00	1,00	5,00	40,00	4	AR10010
1,10	1,10	7,00	40,00	4	AR10015
1,20	1,20	7,00	40,00	4	AR10020
1,30	1,30	7,00	40,00	4	AR10025
1,40	1,40	8,00	40,00	4	AR10030
1,50	1,50	8,00	40,00	4	AR10035
1,60	1,60	9,00	43,00	4	AR10040
1,70	1,70	10,00	46,00	4	AR10045
1,80	1,80	10,00	46,00	4	AR10050
1,90	1,90	10,00	46,00	4	AR10055
2,00	2,00	11,00	49,00	4	AR10060
2,10	2,10	11,00	49,00	4	AR10065
2,20	2,20	12,00	53,00	4	AR10070
2,30	2,30	12,00	53,00	4	AR10075
2,40	2,40	14,00	54,00	4	AR10080
2,50	2,50	14,00	57,00	4	AR10085
2,60	2,60	14,00	57,00	4	AR10090
2,70	2,70	15,00	61,00	4	AR10095
2,80	2,80	15,00	61,00	4	AR10100
2,90	2,90	15,00	61,00	4	AR10105
3,00	3,00	15,00	61,00	4	AR10110
3,10	3,10	16,00	65,00	4	AR10115
3,20	3,20	16,00	65,00	4	AR10120
3,30	3,30	16,00	65,00	4	AR10125

D	d	L2	L1	Z	code
3,40	3,40	18,00	70,00	4	AR10130
3,50	3,50	18,00	70,00	4	AR10135
3,60	3,60	18,00	70,00	4	AR10140
3,70	3,70	19,00	70,00	4	AR10145
3,80	3,80	19,00	75,00	4	AR10150
3,90	3,90	19,00	75,00	4	AR10155
4,00	4,00	19,00	75,00	4	AR10160
4,10	4,10	9,00	75,00	4	AR10165
4,20	4,20	19,00	75,00	4	AR10170
4,30	4,30	21,00	80,00	4	AR10175
4,40	4,40	21,00	80,00	4	AR10180
4,50	4,50	21,00	80,00	4	AR10185
4,60	4,60	21,00	80,00	4	AR10190
4,70	4,70	21,00	80,00	4	AR10195
4,80	4,80	23,00	86,00	6	AR10200
4,90	4,90	23,00	86,00	6	AR10205
5,00	5,00	23,00	86,00	6	AR10210
5,10	5,10	23,00	86,00	6	AR10215
5,20	5,20	23,00	86,00	6	AR10220
5,30	5,30	23,00	86,00	6	AR10225
5,40	5,40	26,00	93,00	6	AR10230
5,50	5,50	26,00	93,00	6	AR10235
5,60	5,60	26,00	93,00	6	AR10240
5,70	5,70	26,00	93,00	6	AR10245
5,80	5,80	26,00	93,00	6	AR10250
5,90	5,90	26,00	93,00	6	AR10255
6,00	6,00	26,00	93,00	6	AR10260
6,50	6,50	28,00	101,00	6	AR10265
7,00	7,00	31,00	109,00	6	AR10270
7,50	7,50	31,00	109,00	6	AR10275
8,00	8,00	33,00	117,00	6	AR10280
8,50	8,50	33,00	117,00	6	AR10285
9,00	9,00	36,00	125,00	6	AR10290
9,50	9,50	36,00	125,00	6	AR10295
10,00	10,00	38,00	133,00	6	AR10300
10,50	10,50	38,00	133,00	6	AR10305
11,00	11,00	41,00	142,00	6	AR10310
11,50	11,50	41,00	142,00	6	AR10315
12,00	12,00	44,00	151,00	6	AR10320
12,50	12,50	44,00	151,00	6	AR10325
13,00	13,00	44,00	151,00	6	AR10330

SC-Drilling Series

AeroReamer R15 (Z4/Z6 SC twist reamer 1/100)

DP RH



Technical features:

- Solid carbide Micro grain
- Right hand cutting-left hand helix
- Irregular division
- Helix: 7°
- Diameter tolerance: H7
- Diameters: from 0,95 to 12,05 mm
- Coating: on request
- DIN 212

Applications:

- For steel
- For non-ferrous materials
- For cast iron

D	d	L2	L1	Z	code
0,95	1,00	5,00	40,00	4	AR15010
0,96	1,50	5,00	40,00	4	AR15015
0,97	1,50	5,00	40,00	4	AR15020
0,98	1,50	5,00	40,00	4	AR15025
0,99	1,50	5,00	40,00	4	AR15030
1,01	1,50	5,00	40,00	4	AR15035
1,02	1,50	5,00	40,00	4	AR15040
1,03	1,50	5,00	40,00	4	AR15045
1,04	1,50	5,00	40,00	4	AR15050
1,05	1,50	5,00	40,00	4	AR15055
1,97	2,00	11,00	49,00	4	AR15060
1,98	2,00	11,00	49,00	4	AR15065
1,99	2,00	11,00	49,00	4	AR15070
2,01	2,00	11,00	49,00	4	AR15075
2,02	2,00	11,00	49,00	4	AR15080
2,03	2,00	11,00	49,00	4	AR15085
2,04	2,00	11,00	49,00	4	AR15090
2,05	2,00	11,00	49,00	4	AR15095
2,97	3,00	15,00	61,00	6	AR15100
2,98	3,00	15,00	61,00	6	AR15105
2,99	3,00	15,00	61,00	6	AR15110
3,01	3,00	15,00	61,00	6	AR15115
3,02	3,00	15,00	61,00	6	AR15120
3,03	3,00	15,00	61,00	6	AR15125
3,04	3,00	15,00	61,00	6	AR15130

D	d	L2	L1	Z	code
3,05	3,00	15,00	61,00	6	ARI5135
3,97	4,00	19,00	75,00	6	ARI5140
3,98	4,00	19,00	75,00	6	ARI5145
3,99	4,00	19,00	75,00	6	ARI5150
4,01	4,00	19,00	75,00	6	ARI5155
4,02	4,00	19,00	75,00	6	ARI5160
4,03	4,00	19,00	75,00	6	ARI5165
4,04	4,00	19,00	75,00	6	ARI5170
4,05	4,00	19,00	75,00	6	ARI5175
4,97	5,00	23,00	86,00	6	ARI5180
4,98	5,00	23,00	86,00	6	ARI5185
4,99	5,00	23,00	86,00	6	ARI5190
5,01	5,00	23,00	86,00	6	ARI5195
5,02	5,00	23,00	86,00	6	ARI5200
5,03	5,00	23,00	86,00	6	ARI5205
5,04	5,00	23,00	86,00	6	ARI5210
5,05	5,00	23,00	86,00	6	ARI5215
5,97	6,00	26,00	93,00	6	ARI5220
5,98	6,00	26,00	93,00	6	ARI5225
5,99	6,00	26,00	93,00	6	ARI5230
6,01	6,00	26,00	93,00	6	ARI5235
6,02	6,00	26,00	93,00	6	ARI5240
6,03	6,00	26,00	93,00	6	ARI5245
6,04	6,00	26,00	93,00	6	ARI5250
6,05	6,00	26,00	93,00	6	ARI5255
6,97	8,00	31,00	109,00	6	ARI5260
6,98	8,00	31,00	109,00	6	ARI5265
6,99	8,00	31,00	109,00	6	ARI5270
7,01	8,00	31,00	109,00	6	ARI5275
7,02	8,00	31,00	109,00	6	ARI5280
7,03	8,00	31,00	109,00	6	ARI5285
7,04	8,00	31,00	109,00	6	ARI5290
7,05	8,00	31,00	109,00	6	ARI5295
7,97	8,00	33,00	117,00	6	ARI5300
7,98	8,00	33,00	117,00	6	ARI5305
7,99	8,00	33,00	117,00	6	ARI5310
8,01	8,00	33,00	117,00	6	ARI5315
8,02	8,00	33,00	117,00	6	ARI5320
8,03	8,00	33,00	117,00	6	ARI5325
8,04	8,00	33,00	117,00	6	ARI5330
8,05	8,00	33,00	117,00	6	ARI5335
8,97	10,00	36,00	125,00	6	ARI5340
8,98	10,00	36,00	125,00	6	ARI5345
8,99	10,00	36,00	125,00	6	ARI5350
9,01	10,00	36,00	125,00	6	ARI5355
9,02	10,00	36,00	125,00	6	ARI5360
9,03	10,00	36,00	125,00	6	ARI5365
9,04	10,00	36,00	125,00	6	ARI5370
9,05	10,00	36,00	125,00	6	ARI5375
9,97	10,00	38,00	133,00	6	ARI5380
9,98	10,00	38,00	133,00	6	ARI5385
9,99	10,00	38,00	133,00	6	ARI5390

D	d	L2	L1	Z	code
10,01	10,00	38,00	133,00	6	AR15395
10,02	10,00	38,00	133,00	6	AR15400
10,03	10,00	38,00	133,00	6	AR15405
10,04	10,00	38,00	133,00	6	AR15410
10,05	10,00	38,00	133,00	6	AR15415
10,97	12,00	41,00	142,00	6	AR15420
10,98	12,00	41,00	142,00	6	AR15425
10,99	12,00	41,00	142,00	6	AR15430
11,01	12,00	41,00	142,00	6	AR15435
11,02	12,00	41,00	142,00	6	AR15440
11,03	12,00	41,00	142,00	6	AR15445
11,04	12,00	41,00	142,00	6	AR15450
11,05	12,00	41,00	142,00	6	AR15455
11,97	12,00	44,00	151,00	6	AR15460
11,98	12,00	44,00	151,00	6	AR15465
11,99	12,00	44,00	151,00	6	AR15470
12,01	12,00	44,00	151,00	6	AR15475
12,02	12,00	44,00	151,00	6	AR15480
12,03	12,00	44,00	151,00	6	AR15485
12,04	12,00	44,00	151,00	6	AR15490
12,05	12,00	44,00	151,00	6	AR15495

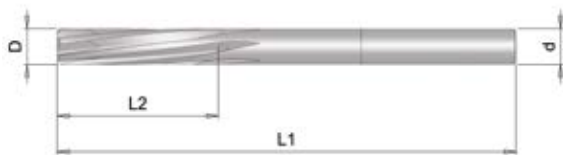
SC-Drilling Series

AeroReamer R20

(Z6 SC twist reamer with internal cooling)

DP

RH



Technical features:

- Solid carbide Micro grain
- Right hand cutting-left hand helix
- Irregular division
- Helix: 7°
- Diameter tolerance: H7
- Diameters: from 5,00 to 12,00 mm
- Coating: TiCN-G
- DIN 212

Applications:

- For high alloy steel
- For inox, titan
- For iron
- For hardened steels
- For inconel

D	d	L2	L1	Z	code
5,00	6,00	23,00	86,00	6	AR20010
5,50	6,00	26,00	93,00	6	AR20050
6,00	6,00	26,00	93,00	6	AR20020
6,50	8,00	28,00	101,00	6	AR20025
7,00	8,00	31,00	109,00	6	AR20030
7,50	8,00	31,00	109,00	6	AR20035
8,00	8,00	33,00	117,00	6	AR20040
8,50	10,00	33,00	117,00	6	AR20045
9,00	10,00	36,00	125,00	6	AR20050
9,50	10,00	36,00	125,00	6	AR20055
10,00	10,00	38,00	133,00	6	AR20060
10,50	12,00	41,00	142,00	6	AR20065
11,00	12,00	41,00	142,00	6	AR20070
11,50	12,00	41,00	142,00	6	AR20075
12,00	12,00	44,00	151,00	6	AR20080

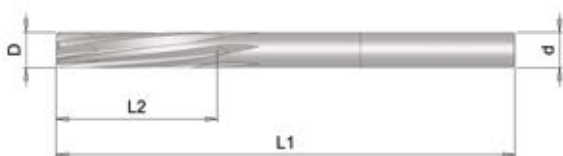
SC-Drilling Series

AeroReamer R25

(Z6 SC twist reamer with internal cooling through flutes)

DP

RH



Technical features:

- Solid carbide Micro grain
- Right hand cutting-left hand helix
- Irregular division
- Helix: 7°
- Diameter tolerance: H7
- Diameters: from 5,00 to 12,00 mm
- Coating: TiCN-G
- DIN 212

Applications:

- For high alloy steel
- For inox, titan
- For iron
- For hardened steels
- For inconel

D	d	L2	L1	Z	code
5,00	6,00	23,00	86,00	6	AR25010
5,50	6,00	26,00	93,00	6	AR25050
6,00	6,00	26,00	93,00	6	AR25020
6,50	8,00	28,00	101,00	6	AR25025
7,00	8,00	31,00	109,00	6	AR25030
7,50	8,00	31,00	109,00	6	AR25035
8,00	8,00	33,00	117,00	6	AR25040
8,50	10,00	33,00	117,00	6	AR25045
9,00	10,00	36,00	125,00	6	AR25050
9,50	10,00	36,00	125,00	6	AR25055
10,00	10,00	38,00	133,00	6	AR25060
10,50	12,00	41,00	142,00	6	AR25065
11,00	12,00	41,00	142,00	6	AR25070
11,50	12,00	41,00	142,00	6	AR25075
12,00	12,00	44,00	151,00	6	AR25080



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