



DRY CUTTING PROFILE MACHINING

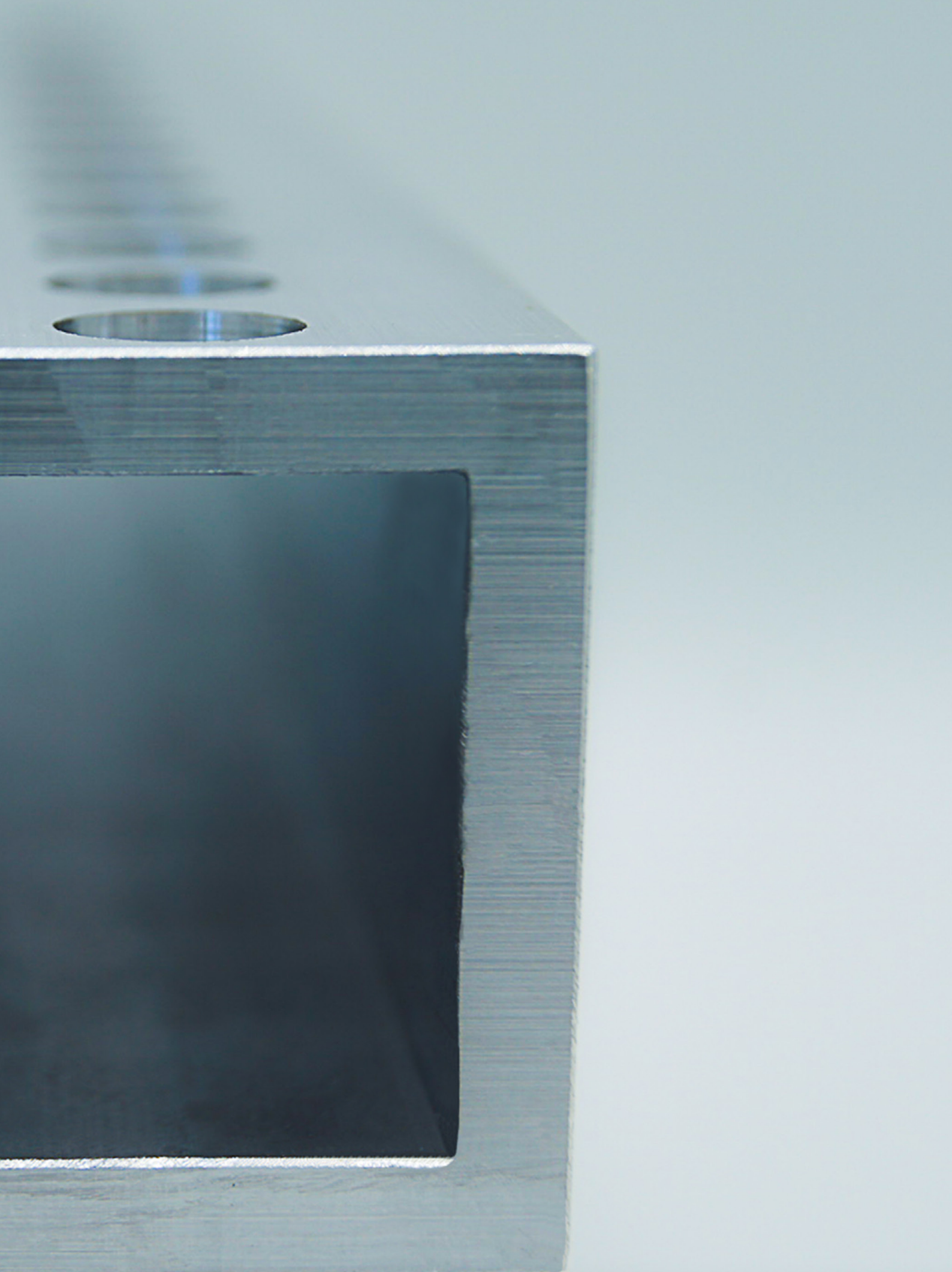


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// Advantages

No use of coolant

**Better surface quality
(burr-free machining)**

**Tool life up to 5
times higher**

**Washing of the profiles
is not needed anymore**



**Dry chips
(better for recycle)**

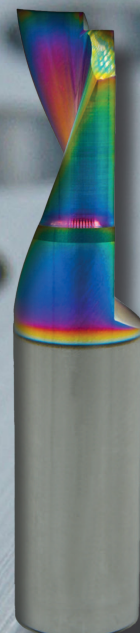
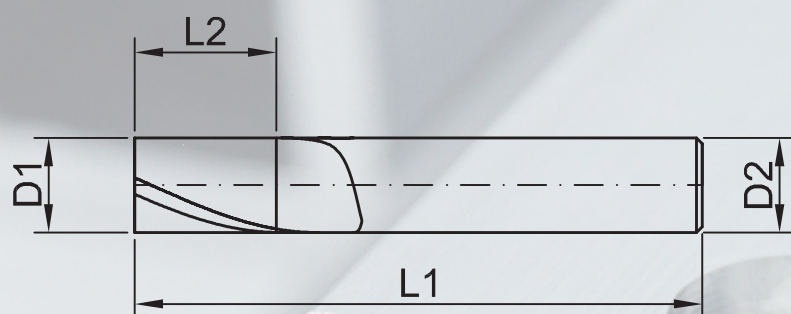
**Environmental benefits
(no use of coolant)**

**Health benefits
(better air quality)**

**D-Cut works best with
anodized profiles**

// Milling Tools

Solide carbide milling tool for dry cutting

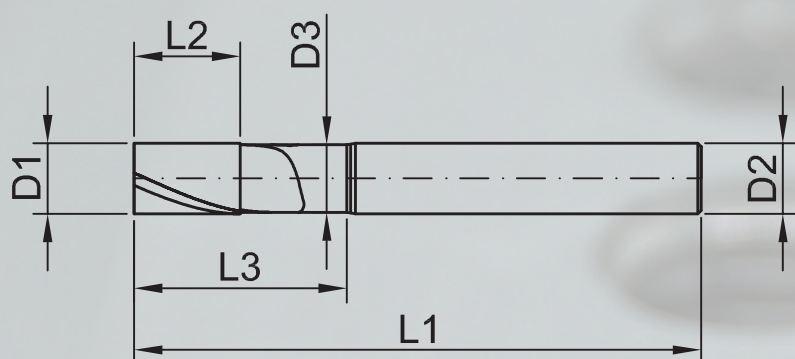


vc (m/min)
Cutting Speed
150-300

fz (mm)
Feed per tooth
0.07-0.25

Article Nr.	D1	D2	L1	L2	Z
109020	2	6	50	4	1
109030	3	6	50	4	1
109040	4	6	50	6	1
109050	5	6	50	7.5	1
109060	6	6	50	9	1
109070	7	8	50	10.5	1
109080	8	8	50	12	1
109090	9	10	60	13.5	1
109100	10	10	60	15	1
109110	11	12	73	16.5	1
109120	12	12	73	18	1
109130	13	14	75	19.5	1
109140	14	16	75	21	1
109150	15	16	82	22.5	1
109160	16	16	82	24	1
109170	17	18	84	25.5	1
109180	18	18	84	27	1

Solid carbide undercuted milling tool for dry cutting



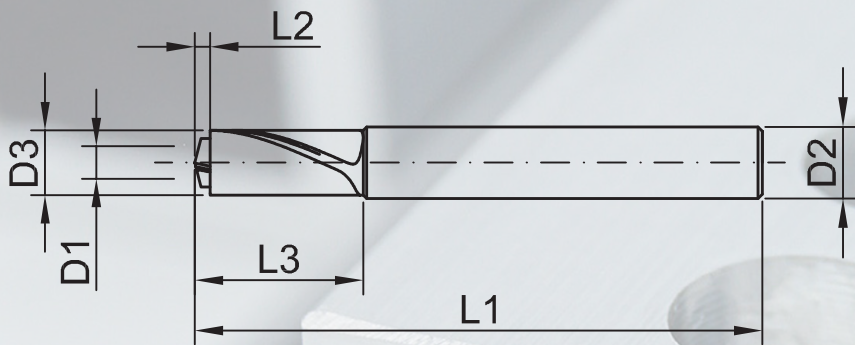
vc (m/min)
Cutting Speed
150-300

fz (mm)
Feed per tooth
0.07-0.25

ArticleNr.	D1	D2	D3	L1	L2	L3	Z
109020UC	2	6	2	50	4	10	1
109030UC	3	6	3	50	4	10	1
109040UC	4	6	4	50	6	12	1
109050UC	5	6	5	50	7.5	15	1
109060UC	6	6	6	50	9	17	1
109070UC	7	8	7	50	10.5	18	1
109080UC	8	8	7.5	50	12	18	1
109090UC	9	10	8.5	60	13.5	20	1
109100UC	10	10	9.5	60	15	20	1
109110UC	11	12	10.5	73	16.5	25	1
109120UC	12	12	11.5	73	18	25	1
109130UC	13	14	12.5	75	19.5	28	1
109140UC	14	16	13.5	75	21	30	1
109150UC	15	16	14.5	82	22.5	35	1
109160UC	16	16	15.5	82	24	35	1
109170UC	17	18	16.5	84	25.5	37	1
109180UC	18	18	17.5	84	27	37	1

// Drilling Tools

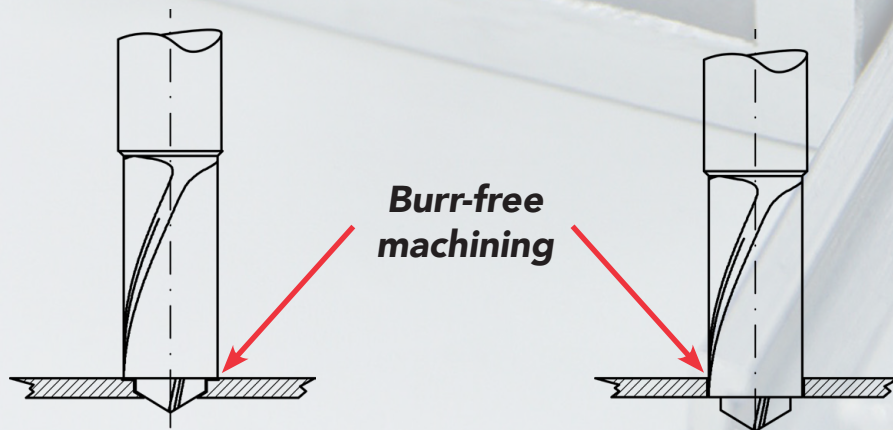
Solid carbide stepdrill for burr free dry cutting



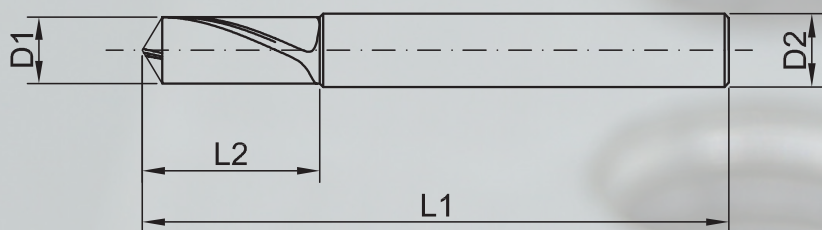
vc (m/min)
Cutting Speed
300-400

fz (mm)
Feed per tooth
0.07-0.3

Article Nr.	D1	D2	D3	L1	L2	L3
209020	1	6	2	50	2	10
209030	2	6	3	50	2	10
209040	3	6	4	60	2	12
209050	4	6	5	70	2	15
209060	5	6	6	70	2	17
209070	6	8	7	90	2	18
209080	7	8	8	100	2	18



Solid carbide core drill for dry cutting



vc (m/min)
Cutting Speed
300-400

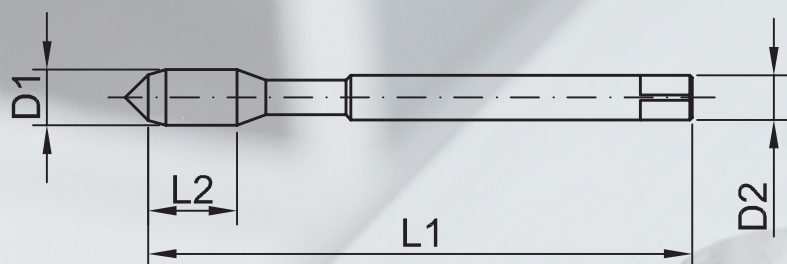
fz (mm)
Feed per tooth
0.07-0.3

Article Nr.	D1	D2	L1	L2	Gewinde
219025	2.5	6	50	10	M3
219033	3.3	6	50	10	M4
219042	4.2	6	60	12	M5
219050	5.0	6	70	15	M6
219068	6.8	8	70	17	M8
219085	8.5	10	90	18	M10
219102	10.2	12	100	18	M12

// Threading Tools

PM-HSS machine threading tool for dry cutting

Straight grooved - for clearance hole



Technology:

Chamfer Length: $B / 3,5-5 \times P$

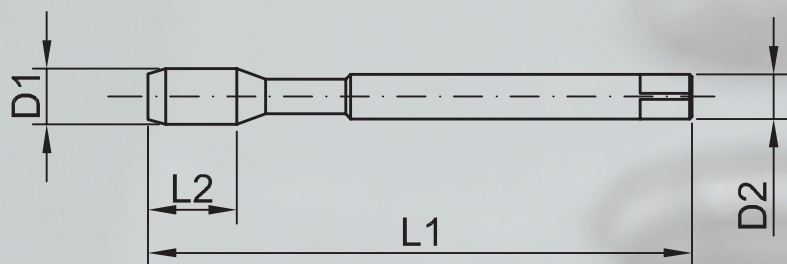
Tolerance: ISO2 (6H)

vc (m/min)
Cutting Speed
25-35

Article Nr.	D1	D2	Core ϕ	L1	L2	\square	P _{mm}
309030	M3	3.5	2.5	56	11	2.7	0.5
309040	M4	4.5	3.3	63	13	3.4	0.7
309050	M5	6	4.2	70	15	4.9	0.8
309060	M6	6	5.0	80	17	4.9	1
309080	M8	8	6.8	90	20	6.2	1.25
309100	M10	10	8.5	100	22	8	1.5
309120	M12	9	10.2	110	24	7	1.75

PM-HSS machine threading tool for dry cutting

Spiral grooved - for blind holes



Technology:

Chamfer Length: $C / 2-3 \times P$

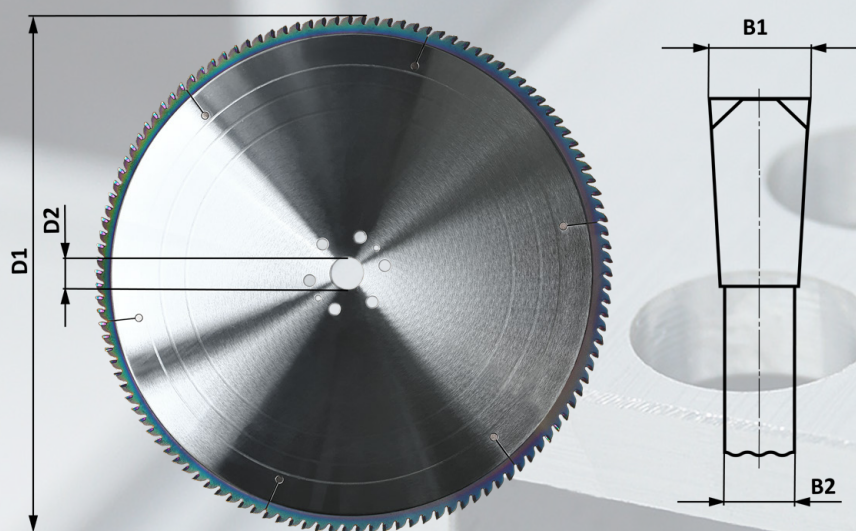
Tolerance: ISO2 (6H)

vc (m/min)
Cutting Speed
25-35

Article Nr.	D1	D2	Core ø	L1	L2	□	P _{mm}
319030	M3	3.5	2.5	56	6	2.7	0.5
319040	M4	4.5	3.3	63	7	3.4	0.7
319050	M5	6	4.2	70	8	4.9	0.8
319060	M6	6	5.0	80	10	4.9	1
319080	M8	8	6.8	90	13	6.2	1.25
319100	M10	10	8.5	100	15	8	1.5
319120	M12	9	10.2	110	18	7	1.75

// Saw blade

Saw blade for dry cutting



Article Nr.	D1	B1	B2	D2	Z
419250028	250	2.8	2.0	30	80
419300030	300	3.0	2.2	30	96
419350036	350	3.6	3.0	30	96
419400038	400	3.8	3.0	30	96
419450040	450	4.0	3.4	30	102
419500040	500	4.0	3.4	30	120

Material example (DIN EN 10027)

AlMn (AlMn1Cu) (3003), AlMg (AlMg2) (5251)
AlCuMg (AlZnMg3Cu) (7022)

Cutting speed v_c (m/min)

2000 - 4800
2000 - 4000

Feed per tooth f_z (mm/z)

0.005 - 0.03
0.005 - 0.03

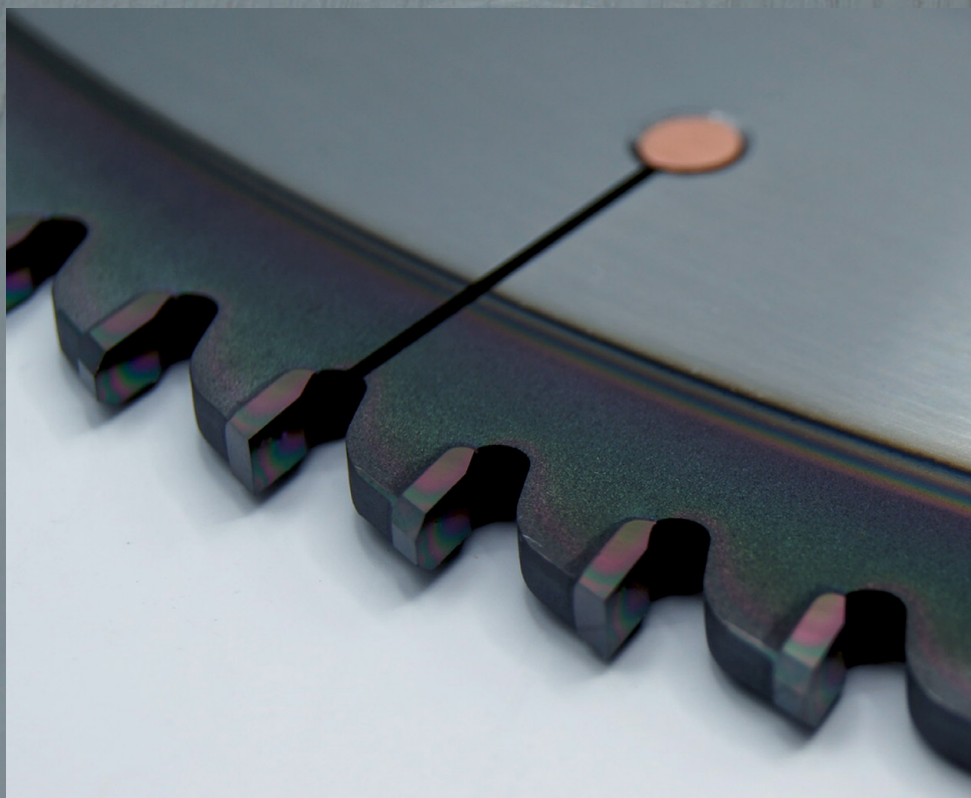
Application: Cross cuts and final processing of aluminium profiles

Design: Desert-Cut saw blades are designed for dry machining. In addition, the riveted construction ensures extremely quiet and vibration-free cutting results. Moreover, the saw blade impresses with burr-free cutting results and excellent cutting quality, which is caused by the particularly grinded cutting edge. As a result, enormous savings concerning post-processing activities and a shortened cycle time can be achieved. Furthermore, the Desert-Cut saw blades are offering a longer lifetime in comparison to conventional saw blades.

Material: Aluminium alloys (anodised), profiles up to 10 mm thickness

Machine types: Mechanic cross-cut saws, flush-mounted cross-cut saws, machining centre with sawing aggregate, revolving transfer machine, continuous casting plants

Tooth: Triple-chip flat tooth (FT), HW





Powered by

ARNO®

Kofler®

Metall Kofler GmbH

Industriezone B14

A-6166 Fulpmes

www.desert-cut.com

mkofler@mkofler.at

Tel.: +43 5225 62712