LOUIS BELET
Swiss Cutting tools

ALUMINIUM

Ask for the full catalogue!

EXPERT TOOLS
ALUMINIUM

LOUIS BÉLET S.A.
Les Gasses 11
CH - 2943 Vendlincourt
www.louisbelet.ch

SWISS MADE

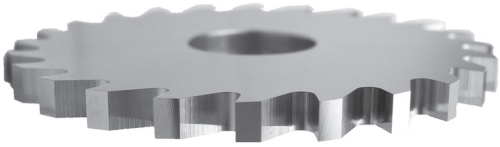
- Titanium
- Stainless steel
- Composite
- Brass
- Aluminium

LOUIS BELET
Swiss Cutting tools

EXPERT cutting tools recommended for machining aluminium

Tool material : **SOLID CARBIDE**
Recommended Coating: **SOLO**

PCD cutting tools are also highly performant in aluminium.

Operation	Ref.	Picture	Page
Drilling	**343-6/8/12**		5/7/10
Milling	**3200**		12
Saw blades	**223**		13
Threading	**5300**		18
Engraving	**119-2**		19
Special Custom tooling	**helical**		Upon request

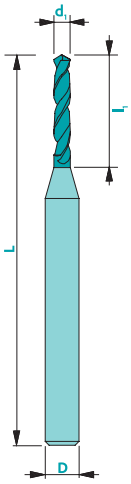
This table presents only one optimal tool for each operation. You will find other tools suitable for aluminium machining in our full catalogue.

Index - Aluminium

N° Wsn	DIN	AFNOR	Gr.
2.1504	NiAlBz		b
3.0205	Al99		a
3.0205	Al99.0	1200 (A4)	a
3.0255	Al99.5	1050 (A5)	a
3.0257	EAl99.0		a
3.0275	Al99.7		a
3.0285	Al99.8		a
3.0305	Al99.9		a
3.0505	AlMn0.5Mg0.5		a
3.0506	AlMn0.6		a
3.0515	AlMn1		a
3.0517	AlMnCu		a
3.0524	AlMn1Mg0.5	3003 (A – M1)	a
3.0526	AlMn1Mg1	3004 (A – M1G)	a
3.0615	AlMgSiPb		a
3.1255	AlCuSiMn	2014 (A – U4SG)	b
3.1305	AlCu2.5Mg0.5	2117 (A – U2G)	b
3.1325	AlCuMg1		a
3.1355	AlCuMg2	2017A (A – U4G)	b
3.1355	AlCuMg2	2024 (A – U4G1)	b
3.1645	AlCuMgPb		a
3.1655	AlCuBiPb	2011 (A – U5PbBi)	b
3.2131	AlSi5Cu1	A – S7GY	b
3.2134	G – AlSi5Cu1Mg		b
3.2151	AlSi6Cu4	A – S5U3	b
3.2245	SAlSi5	A – S5	a
3.2307	Al99.85MgSi		a
3.2315	AlMgSi1	A – SGM0.7 (anticor. 110)	a
3.2371	AlSi7Mg		b
3.2381	AlSi10Mg	A – S10G	c
3.2525	SAlSi12	A – S12	c
3.2581	G – AlSi12		c
3.2581	AlSi12	A – S12Y4	c
3.2583	G – AlSi12(Cu)		c
3.3206	AlMgSi0.5	A – GS	b
3.3210	AlMgSi0.7		b
3.3292	GD – AlMg9		a
3.3307	Al99.85Mg0.5		a
3.3308	Al99.5Mg0.5		a
3.3315	AlMg1		a
3.3316	AlMg1.5		a
3.3317	Al99.85Mg1		a
3.3326	AlMg1.8		a
3.3345	AlMg4.5		a
3.3523	AlMg2.5		a
3.3525	AlMg2Mn0.3	5052 (A – G3)	a
3.3535	AlMg3	A – G3C	a
3.3543	G – AlMg3(Cu)		a
3.3547	AlMg4.5Mn	A – G4.5MC	a
3.3555	AlMg5		a
3.3561	G – AlMg5		a
3.4365	AlZn6MgCu1.5	7075 (A – Z5GU)	b

Drill - helix 34° - l_1=6 mm

Material group (see page 3)	a	b	c
Recommended coating	SOLO	SOLO	SOLO
V_c uncoated [m/min]	175	150	100
V_c coated [m/min]	195	170	120
F [mm]	Ø/40	Ø/40	Ø/40
Pecking	Øx1.7	Øx1.8	Øx1.9



Tolerances d_1: -0.002/-0.004
D: h5

Available uncoated or coated

Art. n°	d_1	l_1	D	L
343-6d0.60	0.60	6.0	2.0	38
343-6d0.61	0.61	6.0	2.0	38
343-6d0.62	0.62	6.0	2.0	38
343-6d0.63	0.63	6.0	2.0	38
343-6d0.64	0.64	6.0	2.0	38
343-6d0.65	0.65	6.0	2.0	38
343-6d0.66	0.66	6.0	2.0	38
343-6d0.67	0.67	6.0	2.0	38
343-6d0.68	0.68	6.0	2.0	38
343-6d0.69	0.69	6.0	2.0	38
343-6d0.70	0.70	6.0	2.0	38
343-6d0.71	0.71	6.0	2.0	38
343-6d0.72	0.72	6.0	2.0	38
343-6d0.73	0.73	6.0	2.0	38
343-6d0.74	0.74	6.0	2.0	38
343-6d0.75	0.75	6.0	2.0	38
343-6d0.76	0.76	6.0	2.0	38
343-6d0.77	0.77	6.0	2.0	38
343-6d0.78	0.78	6.0	2.0	38
343-6d0.79	0.79	6.0	2.0	38
343-6d0.80	0.80	6.0	2.0	38
343-6d0.81	0.81	6.0	2.0	38
343-6d0.82	0.82	6.0	2.0	38
343-6d0.83	0.83	6.0	2.0	38
343-6d0.84	0.84	6.0	2.0	38
343-6d0.85	0.85	6.0	2.0	38
343-6d0.86	0.86	6.0	2.0	38
343-6d0.87	0.87	6.0	2.0	38
343-6d0.88	0.88	6.0	2.0	38

Art. n°	d_1	l_1	D	L
343-6d0.89	0.89	6.0	2.0	38
343-6d0.90	0.90	6.0	2.0	38
343-6d0.91	0.91	6.0	2.0	38
343-6d0.92	0.92	6.0	2.0	38
343-6d0.93	0.93	6.0	2.0	38
343-6d0.94	0.94	6.0	2.0	38
343-6d0.95	0.95	6.0	2.0	38
343-6d0.96	0.96	6.0	2.0	38
343-6d0.97	0.97	6.0	2.0	38
343-6d0.98	0.98	6.0	2.0	38
343-6d0.99	0.99	6.0	2.0	38
343-6d1.00	1.00	6.0	2.0	38
343-6d1.01	1.01	6.0	2.0	38
343-6d1.02	1.02	6.0	2.0	38
343-6d1.03	1.03	6.0	2.0	38
343-6d1.04	1.04	6.0	2.0	38
343-6d1.05	1.05	6.0	2.0	38
343-6d1.06	1.06	6.0	2.0	38
343-6d1.07	1.07	6.0	2.0	38
343-6d1.08	1.08	6.0	2.0	38
343-6d1.09	1.09	6.0	2.0	38
343-6d1.09	1.09	6.0	2.0	38
343-6d1.10	1.10	6.0	2.0	38
343-6d1.11	1.11	6.0	2.0	38
343-6d1.12	1.12	6.0	2.0	38
343-6d1.13	1.13	6.0	2.0	38
343-6d1.14	1.14	6.0	2.0	38
343-6d1.15	1.15	6.0	2.0	38
343-6d1.16	1.16	6.0	2.0	38

118° Z2

λ 34°

CARB

Formulas

$F = F_z \cdot Z$

$V_F = F_z \cdot Z \cdot n$

$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$

$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$

$f_z = \frac{V_f}{Z \cdot n}$

Caption

F [mm]:Feed per rotation

FZ [mm]: Feed per tooth

Z : Number of teeth

Vf [mm/min]: Feed speed

n : Spindle speed

343-6

Continuation

Drill - helix 34° - l_1=6 mm

Available uncoated or coated

118°

Z2

λ 34°

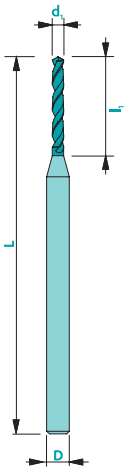
CARB

Art. n°	d_1	l_1	D	L
343-6d1.17	1.17	6.0	2.0	38
343-6d1.18	1.18	6.0	2.0	38
343-6d1.19	1.19	6.0	2.0	38
343-6d1.20	1.20	6.0	2.0	38
343-6d1.21	1.21	6.0	2.0	38
343-6d1.22	1.22	6.0	2.0	38
343-6d1.23	1.23	6.0	2.0	38
343-6d1.24	1.24	6.0	2.0	38
343-6d1.25	1.25	6.0	2.0	38
343-6d1.26	1.26	6.0	2.0	38
343-6d1.27	1.27	6.0	2.0	38
343-6d1.28	1.28	6.0	2.0	38
343-6d1.29	1.29	6.0	2.0	38
343-6d1.30	1.30	6.0	2.0	38
343-6d1.31	1.31	6.0	2.0	38
343-6d1.32	1.32	6.0	2.0	38
343-6d1.33	1.33	6.0	2.0	38
343-6d1.34	1.34	6.0	2.0	38
343-6d1.35	1.35	6.0	2.0	38
343-6d1.36	1.36	6.0	2.0	38
343-6d1.37	1.37	6.0	2.0	38
343-6d1.38	1.38	6.0	2.0	38
343-6d1.39	1.39	6.0	2.0	38
343-6d1.40	1.40	6.0	2.0	38
343-6d1.41	1.41	6.0	2.0	38
343-6d1.42	1.42	6.0	2.0	38
343-6d1.43	1.43	6.0	2.0	38
343-6d1.44	1.44	6.0	2.0	38
343-6d1.45	1.45	6.0	2.0	38
343-6d1.46	1.46	6.0	2.0	38
343-6d1.47	1.47	6.0	2.0	38
343-6d1.48	1.48	6.0	2.0	38
343-6d1.49	1.49	6.0	2.0	38
343-6d1.50	1.50	6.0	2.0	38
343-6d1.51	1.51	6.0	2.0	38
343-6d1.52	1.52	6.0	2.0	38
343-6d1.53	1.53	6.0	2.0	38
343-6d1.54	1.54	6.0	2.0	38
343-6d1.55	1.55	6.0	2.0	38
343-6d1.56	1.56	6.0	2.0	38
343-6d1.57	1.57	6.0	2.0	38
343-6d1.58	1.58	6.0	2.0	38
343-6d1.59	1.59	6.0	2.0	38
343-6d1.60	1.60	6.0	2.0	38
343-6d1.61	1.61	6.0	2.0	38

Art. n°	d_1	l_1	D	L
343-6d1.62	1.62	6.0	2.0	38
343-6d1.63	1.63	6.0	2.0	38
343-6d1.64	1.64	6.0	2.0	38
343-6d1.65	1.65	6.0	2.0	38
343-6d1.66	1.66	6.0	2.0	38
343-6d1.67	1.67	6.0	2.0	38
343-6d1.68	1.68	6.0	2.0	38
343-6d1.69	1.69	6.0	2.0	38
343-6d1.70	1.70	6.0	2.0	38
343-6d1.71	1.71	6.0	2.0	38
343-6d1.72	1.72	6.0	2.0	38
343-6d1.73	1.73	6.0	2.0	38
343-6d1.74	1.74	6.0	2.0	38
343-6d1.75	1.75	6.0	2.0	38
343-6d1.76	1.76	6.0	2.0	38
343-6d1.77	1.77	6.0	2.0	38
343-6d1.78	1.78	6.0	2.0	38
343-6d1.79	1.79	6.0	2.0	38
343-6d1.80	1.80	6.0	2.0	38
343-6d1.81	1.81	6.0	2.0	38
343-6d1.82	1.82	6.0	2.0	38
343-6d1.83	1.83	6.0	2.0	38
343-6d1.84	1.84	6.0	2.0	38
343-6d1.85	1.85	6.0	2.0	38
343-6d1.86	1.86	6.0	2.0	38
343-6d1.87	1.87	6.0	2.0	38
343-6d1.88	1.88	6.0	2.0	38
343-6d1.89	1.89	6.0	2.0	38
343-6d1.90	1.90	6.0	2.0	38
343-6d1.91	1.91	6.0	2.0	38
343-6d1.92	1.92	6.0	2.0	38
343-6d1.93	1.93	6.0	2.0	38
343-6d1.94	1.94	6.0	2.0	38
343-6d1.95	1.95	6.0	2.0	38
343-6d1.96	1.96	6.0	2.0	38
343-6d1.97	1.97	6.0	2.0	38
343-6d1.98	1.98	6.0	2.0	38
343-6d1.99	1.99	6.0	2.0	38
343-6d2.00	2.00	6.0	2.0	38

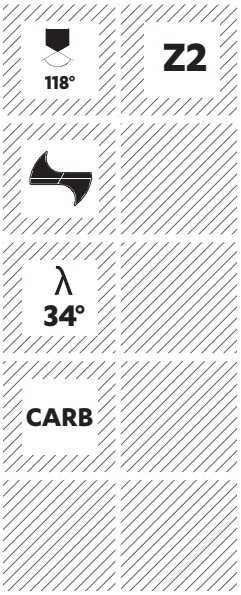
Drill - helix 34° - l_1=8 mm

Material group (see page 3)	a	b	c
Recommended coating	SOLO	SOLO	SOLO
V_c uncoated [m/min]	175	150	100
V_c coated [m/min]	195	170	120
F [mm]	Ø/40	Ø/40	Ø/40
Pecking	Øx1.7	Øx1.8	Øx1.9



Tolerances d_1: -0.002/-0.004
D: h5

Available uncoated or coated



Art. n°	d_1	l_1	D	L
343-8d0.80	0.80	8.0	2.0	38
343-8d0.81	0.81	8.0	2.0	38
343-8d0.82	0.82	8.0	2.0	38
343-8d0.83	0.83	8.0	2.0	38
343-8d0.84	0.84	8.0	2.0	38
343-8d0.85	0.85	8.0	2.0	38
343-8d0.86	0.86	8.0	2.0	38
343-8d0.87	0.87	8.0	2.0	38
343-8d0.88	0.88	8.0	2.0	38
343-8d0.89	0.89	8.0	2.0	38
343-8d0.90	0.90	8.0	2.0	38
343-8d0.91	0.91	8.0	2.0	38
343-8d0.92	0.92	8.0	2.0	38
343-8d0.93	0.93	8.0	2.0	38
343-8d0.94	0.94	8.0	2.0	38
343-8d0.95	0.95	8.0	2.0	38
343-8d0.96	0.96	8.0	2.0	38
343-8d0.97	0.97	8.0	2.0	38
343-8d0.98	0.98	8.0	2.0	38
343-8d0.99	0.99	8.0	2.0	38
343-8d1.00	1.00	8.0	2.0	38
343-8d1.01	1.01	8.0	2.0	38
343-8d1.02	1.02	8.0	2.0	38
343-8d1.03	1.03	8.0	2.0	38
343-8d1.04	1.04	8.0	2.0	38
343-8d1.05	1.05	8.0	2.0	38
343-8d1.06	1.06	8.0	2.0	38
343-8d1.07	1.07	8.0	2.0	38
343-8d1.08	1.08	8.0	2.0	38
343-8d1.09	1.09	8.0	2.0	38

Art. n°	d_1	l_1	D	L
343-8d1.10	1.10	8.0	2.0	38
343-8d1.11	1.11	8.0	2.0	38
343-8d1.12	1.12	8.0	2.0	38
343-8d1.13	1.13	8.0	2.0	38
343-8d1.14	1.14	8.0	2.0	38
343-8d1.15	1.15	8.0	2.0	38
343-8d1.16	1.16	8.0	2.0	38
343-8d1.17	1.17	8.0	2.0	38
343-8d1.18	1.18	8.0	2.0	38
343-8d1.19	1.19	8.0	2.0	38
343-8d1.20	1.20	8.0	2.0	38
343-8d1.21	1.21	8.0	2.0	38
343-8d1.22	1.22	8.0	2.0	38
343-8d1.23	1.23	8.0	2.0	38
343-8d1.24	1.24	8.0	2.0	38
343-8d1.25	1.25	8.0	2.0	38
343-8d1.26	1.26	8.0	2.0	38
343-8d1.27	1.27	8.0	2.0	38
343-8d1.28	1.28	8.0	2.0	38
343-8d1.29	1.29	8.0	2.0	38
343-8d1.30	1.30	8.0	2.0	38
343-8d1.31	1.31	8.0	2.0	38
343-8d1.32	1.32	8.0	2.0	38
343-8d1.33	1.33	8.0	2.0	38
343-8d1.34	1.34	8.0	2.0	38
343-8d1.35	1.35	8.0	2.0	38
343-8d1.36	1.36	8.0	2.0	38
343-8d1.37	1.37	8.0	2.0	38
343-8d1.38	1.38	8.0	2.0	38
343-8d1.39	1.39	8.0	2.0	38

Formulas

$F = F_z \cdot Z$

$V_F = F_z \cdot Z \cdot n$

$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$

$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$

$f_z = \frac{V_f}{Z \cdot n}$

Caption

F [mm]:Feed per rotation

FZ [mm]: Feed per tooth

Z : Number of teeth

Vf [mm/min]: Feed speed

n : Spindle speed

Drill - helix 34° - l_1=8 mm

Continuation

Available uncoated or coated

118°

Z2

λ 34°

CARB

Art. n°	d_1	l_1	D	L
343-8d1.40	1.40	8.0	2.0	38
343-8d1.41	1.41	8.0	2.0	38
343-8d1.42	1.42	8.0	2.0	38
343-8d1.43	1.43	8.0	2.0	38
343-8d1.44	1.44	8.0	2.0	38
343-8d1.45	1.45	8.0	2.0	38
343-8d1.46	1.46	8.0	2.0	38
343-8d1.47	1.47	8.0	2.0	38
343-8d1.48	1.48	8.0	2.0	38
343-8d1.49	1.49	8.0	2.0	38
343-8d1.50	1.50	8.0	2.0	38
343-8d1.51	1.51	8.0	2.0	38
343-8d1.52	1.52	8.0	2.0	38
343-8d1.53	1.53	8.0	2.0	38
343-8d1.54	1.54	8.0	2.0	38
343-8d1.55	1.55	8.0	2.0	38
343-8d1.56	1.56	8.0	2.0	38
343-8d1.57	1.57	8.0	2.0	38
343-8d1.58	1.58	8.0	2.0	38
343-8d1.59	1.59	8.0	2.0	38
343-8d1.60	1.60	8.0	2.0	38
343-8d1.61	1.61	8.0	2.0	38
343-8d1.62	1.62	8.0	2.0	38
343-8d1.63	1.63	8.0	2.0	38
343-8d1.64	1.64	8.0	2.0	38
343-8d1.65	1.65	8.0	2.0	38
343-8d1.66	1.66	8.0	2.0	38
343-8d1.67	1.67	8.0	2.0	38
343-8d1.68	1.68	8.0	2.0	38
343-8d1.69	1.69	8.0	2.0	38
343-8d1.70	1.70	8.0	2.0	38
343-8d1.71	1.71	8.0	2.0	38
343-8d1.72	1.72	8.0	2.0	38
343-8d1.73	1.73	8.0	2.0	38
343-8d1.74	1.74	8.0	2.0	38
343-8d1.75	1.75	8.0	2.0	38
343-8d1.76	1.76	8.0	2.0	38
343-8d1.77	1.77	8.0	2.0	38
343-8d1.78	1.78	8.0	2.0	38
343-8d1.79	1.79	8.0	2.0	38
343-8d1.80	1.80	8.0	2.0	38
343-8d1.81	1.81	8.0	2.0	38
343-8d1.82	1.82	8.0	2.0	38
343-8d1.83	1.83	8.0	2.0	38
343-8d1.84	1.84	8.0	2.0	38

Art. n°	d_1	l_1	D	L
343-8d1.85	1.85	8.0	2.0	38
343-8d1.86	1.86	8.0	2.0	38
343-8d1.87	1.87	8.0	2.0	38
343-8d1.88	1.88	8.0	2.0	38
343-8d1.89	1.89	8.0	2.0	38
343-8d1.90	1.90	8.0	2.0	38
343-8d1.91	1.91	8.0	2.0	38
343-8d1.92	1.92	8.0	2.0	38
343-8d1.93	1.93	8.0	2.0	38
343-8d1.94	1.94	8.0	2.0	38
343-8d1.95	1.95	8.0	2.0	38
343-8d1.96	1.96	8.0	2.0	38
343-8d1.97	1.97	8.0	2.0	38
343-8d1.98	1.98	8.0	2.0	38
343-8d1.99	1.99	8.0	2.0	38
343-8d2.00	2.00	8.0	2.0	38
343-8d2.01	2.01	8.0	3.0	38
343-8d2.02	2.02	8.0	3.0	38
343-8d2.03	2.03	8.0	3.0	38
343-8d2.04	2.04	8.0	3.0	38
343-8d2.05	2.05	8.0	3.0	38
343-8d2.06	2.06	8.0	3.0	38
343-8d2.07	2.07	8.0	3.0	38
343-8d2.08	2.08	8.0	3.0	38
343-8d2.09	2.09	8.0	3.0	38
343-8d2.10	2.10	8.0	3.0	38
343-8d2.11	2.11	8.0	3.0	38
343-8d2.12	2.12	8.0	3.0	38
343-8d2.13	2.13	8.0	3.0	38
343-8d2.14	2.14	8.0	3.0	38
343-8d2.15	2.15	8.0	3.0	38
343-8d2.16	2.16	8.0	3.0	38
343-8d2.17	2.17	8.0	3.0	38
343-8d2.18	2.18	8.0	3.0	38
343-8d2.19	2.19	8.0	3.0	38
343-8d2.20	2.20	8.0	3.0	38
343-8d2.21	2.21	8.0	3.0	38
343-8d2.22	2.22	8.0	3.0	38
343-8d2.23	2.23	8.0	3.0	38
343-8d2.24	2.24	8.0	3.0	38
343-8d2.25	2.25	8.0	3.0	38
343-8d2.26	2.26	8.0	3.0	38
343-8d2.27	2.27	8.0	3.0	38
343-8d2.28	2.28	8.0	3.0	38
343-8d2.29	2.29	8.0	3.0	38

Drill - helix 34° - l_1=8 mm

Art. n°	d_1	l_1	D	L
343-8d2.30	2.30	8.0	3.0	38
343-8d2.31	2.31	8.0	3.0	38
343-8d2.32	2.32	8.0	3.0	38
343-8d2.33	2.33	8.0	3.0	38
343-8d2.34	2.34	8.0	3.0	38
343-8d2.35	2.35	8.0	3.0	38
343-8d2.36	2.36	8.0	3.0	38
343-8d2.37	2.37	8.0	3.0	38
343-8d2.38	2.38	8.0	3.0	38
343-8d2.39	2.39	8.0	3.0	38
343-8d2.40	2.40	8.0	3.0	38
343-8d2.41	2.41	8.0	3.0	38
343-8d2.42	2.42	8.0	3.0	38
343-8d2.43	2.43	8.0	3.0	38
343-8d2.44	2.44	8.0	3.0	38
343-8d2.45	2.45	8.0	3.0	38
343-8d2.46	2.46	8.0	3.0	38
343-8d2.47	2.47	8.0	3.0	38
343-8d2.48	2.48	8.0	3.0	38
343-8d2.49	2.49	8.0	3.0	38
343-8d2.50	2.50	8.0	3.0	38
343-8d2.51	2.51	8.0	3.0	38
343-8d2.52	2.52	8.0	3.0	38
343-8d2.53	2.53	8.0	3.0	38
343-8d2.54	2.54	8.0	3.0	38
343-8d2.55	2.55	8.0	3.0	38
343-8d2.56	2.56	8.0	3.0	38
343-8d2.57	2.57	8.0	3.0	38
343-8d2.58	2.58	8.0	3.0	38
343-8d2.59	2.59	8.0	3.0	38
343-8d2.60	2.60	8.0	3.0	38
343-8d2.61	2.61	8.0	3.0	38
343-8d2.62	2.62	8.0	3.0	38
343-8d2.63	2.63	8.0	3.0	38
343-8d2.64	2.64	8.0	3.0	38
343-8d2.65	2.65	8.0	3.0	38
343-8d2.66	2.66	8.0	3.0	38
343-8d2.67	2.67	8.0	3.0	38
343-8d2.68	2.68	8.0	3.0	38
343-8d2.69	2.69	8.0	3.0	38
343-8d2.70	2.70	8.0	3.0	38
343-8d2.71	2.71	8.0	3.0	38
343-8d2.72	2.72	8.0	3.0	38
343-8d2.73	2.73	8.0	3.0	38
343-8d2.74	2.74	8.0	3.0	38
343-8d2.75	2.75	8.0	3.0	38
343-8d2.76	2.76	8.0	3.0	38
343-8d2.77	2.77	8.0	3.0	38
343-8d2.78	2.78	8.0	3.0	38
343-8d2.79	2.79	8.0	3.0	38
343-8d2.80	2.80	8.0	3.0	38
343-8d2.81	2.81	8.0	3.0	38
343-8d2.82	2.82	8.0	3.0	38
343-8d2.83	2.83	8.0	3.0	38
343-8d2.84	2.84	8.0	3.0	38
343-8d2.85	2.85	8.0	3.0	38
343-8d2.86	2.86	8.0	3.0	38
343-8d2.87	2.87	8.0	3.0	38
343-8d2.88	2.88	8.0	3.0	38
343-8d2.89	2.89	8.0	3.0	38
343-8d2.90	2.90	8.0	3.0	38
343-8d2.91	2.91	8.0	3.0	38
343-8d2.92	2.92	8.0	3.0	38
343-8d2.93	2.93	8.0	3.0	38
343-8d2.94	2.94	8.0	3.0	38
343-8d2.95	2.95	8.0	3.0	38
343-8d2.96	2.96	8.0	3.0	38
343-8d2.97	2.97	8.0	3.0	38
343-8d2.98	2.98	8.0	3.0	38
343-8d2.99	2.99	8.0	3.0	38
343-8d3.00	3.00	8.0	3.0	38
343-8d3.10	3.10	8.0	4.0	38
343-8d3.20	3.20	8.0	4.0	38
343-8d3.30	3.30	8.0	4.0	38
343-8d3.40	3.40	8.0	4.0	38
343-8d3.50	3.50	8.0	4.0	38
343-8d3.60	3.60	8.0	4.0	38
343-8d3.70	3.70	8.0	4.0	38
343-8d3.80	3.80	8.0	4.0	38
343-8d3.90	3.90	8.0	4.0	38
343-8d4.00	4.00	8.0	4.0	38
343-8d4.10	4.10	8.0	4.5	38
343-8d4.20	4.20	8.0	4.5	38
343-8d4.30	4.30	8.0	4.5	38
343-8d4.40	4.40	8.0	4.5	38
343-8d4.50	4.50	8.0	4.5	38
343-8d5.00	5.00	8.0	5.0	38
343-8d5.50	5.50	8.0	5.5	38
343-8d6.00	6.00	8.0	6.0	38

Available
uncoated or coated

118°

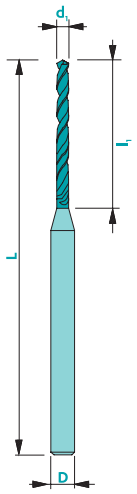
Z2

λ
34°

CARB

343-12

Drill - helix 34° - l_1=12 mm



Material group (see page 3)	a	b	c
Recommended coating	SOLO	SOLO	SOLO
V_c uncoated [m/min]	175	150	100
V_c coated [m/min]	195	170	120
F [mm]	Ø/40	Ø/40	Ø/40
Pecking	Øx1.7	Øx1.8	Øx1.9

Tolerances d_1: -0.002/-0.004
D: h5

Available
uncoated or coated

118°

Z2

λ
34°

CARB

Formulas

$F = F_z \cdot Z$

$V_F = F_z \cdot Z \cdot n$

$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$

$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$

$f_z = \frac{V_f}{Z \cdot n}$

Caption

F [mm]:Feed per rotation

FZ [mm]: Feed per tooth

Z : Number of teeth

Vf [mm/min]: Feed speed

n : Spindle speed

Art. n°	d_1	l_1	D	L
343-12d0.80	0.80	12.0	2.0	38
343-12d0.81	0.81	12.0	2.0	38
343-12d0.82	0.82	12.0	2.0	38
343-12d0.83	0.83	12.0	2.0	38
343-12d0.84	0.84	12.0	2.0	38
343-12d0.85	0.85	12.0	2.0	38
343-12d0.86	0.86	12.0	2.0	38
343-12d0.87	0.87	12.0	2.0	38
343-12d0.88	0.88	12.0	2.0	38
343-12d0.89	0.89	12.0	2.0	38
343-12d0.90	0.90	12.0	2.0	38
343-12d0.91	0.91	12.0	2.0	38
343-12d0.92	0.92	12.0	2.0	38
343-12d0.93	0.93	12.0	2.0	38
343-12d0.94	0.94	12.0	2.0	38
343-12d0.95	0.95	12.0	2.0	38
343-12d0.96	0.96	12.0	2.0	38
343-12d0.97	0.97	12.0	2.0	38
343-12d0.98	0.98	12.0	2.0	38
343-12d0.99	0.99	12.0	2.0	38
343-12d1.00	1.00	12.0	2.0	38
343-12d1.01	1.01	12.0	2.0	38
343-12d1.02	1.02	12.0	2.0	38
343-12d1.03	1.03	12.0	2.0	38
343-12d1.04	1.04	12.0	2.0	38
343-12d1.05	1.05	12.0	2.0	38
343-12d1.06	1.06	12.0	2.0	38
343-12d1.07	1.07	12.0	2.0	38
343-12d1.08	1.08	12.0	2.0	38
343-12d1.09	1.09	12.0	2.0	38
343-12d1.10	1.10	12.0	2.0	38
343-12d1.11	1.11	12.0	2.0	38

Art. n°	d_1	l_1	D	L
343-12d1.12	1.12	12.0	2.0	38
343-12d1.13	1.13	12.0	2.0	38
343-12d1.14	1.14	12.0	2.0	38
343-12d1.15	1.15	12.0	2.0	38
343-12d1.16	1.16	12.0	2.0	38
343-12d1.17	1.17	12.0	2.0	38
343-12d1.18	1.18	12.0	2.0	38
343-12d1.19	1.19	12.0	2.0	38
343-12d1.20	1.20	12.0	2.0	38
343-12d1.21	1.21	12.0	2.0	38
343-12d1.22	1.22	12.0	2.0	38
343-12d1.23	1.23	12.0	2.0	38
343-12d1.24	1.24	12.0	2.0	38
343-12d1.25	1.25	12.0	2.0	38
343-12d1.26	1.26	12.0	2.0	38
343-12d1.27	1.27	12.0	2.0	38
343-12d1.28	1.28	12.0	2.0	38
343-12d1.29	1.29	12.0	2.0	38
343-12d1.30	1.30	12.0	2.0	38
343-12d1.31	1.31	12.0	2.0	38
343-12d1.32	1.32	12.0	2.0	38
343-12d1.33	1.33	12.0	2.0	38
343-12d1.34	1.34	12.0	2.0	38
343-12d1.35	1.35	12.0	2.0	38
343-12d1.36	1.36	12.0	2.0	38
343-12d1.37	1.37	12.0	2.0	38
343-12d1.38	1.38	12.0	2.0	38
343-12d1.39	1.39	12.0	2.0	38
343-12d1.40	1.40	12.0	2.0	38
343-12d1.41	1.41	12.0	2.0	38
343-12d1.42	1.42	12.0	2.0	38
343-12d1.43	1.43	12.0	2.0	38

Drill - helix 34° - l_1=12 mm

Art. n°	d_1	l_1	D	L
343-12d1.44	1.44	12.0	2.0	38
343-12d1.45	1.45	12.0	2.0	38
343-12d1.46	1.46	12.0	2.0	38
343-12d1.47	1.47	12.0	2.0	38
343-12d1.48	1.48	12.0	2.0	38
343-12d1.49	1.49	12.0	2.0	38
343-12d1.50	1.50	12.0	2.0	38
343-12d1.51	1.51	12.0	2.0	38
343-12d1.52	1.52	12.0	2.0	38
343-12d1.53	1.53	12.0	2.0	38
343-12d1.54	1.54	12.0	2.0	38
343-12d1.55	1.55	12.0	2.0	38
343-12d1.56	1.56	12.0	2.0	38
343-12d1.57	1.57	12.0	2.0	38
343-12d1.58	1.58	12.0	2.0	38
343-12d1.59	1.59	12.0	2.0	38
343-12d1.60	1.60	12.0	2.0	38
343-12d1.61	1.61	12.0	2.0	38
343-12d1.62	1.62	12.0	2.0	38
343-12d1.63	1.63	12.0	2.0	38
343-12d1.64	1.64	12.0	2.0	38
343-12d1.65	1.65	12.0	2.0	38
343-12d1.66	1.66	12.0	2.0	38
343-12d1.67	1.67	12.0	2.0	38
343-12d1.68	1.68	12.0	2.0	38
343-12d1.69	1.69	12.0	2.0	38
343-12d1.70	1.70	12.0	2.0	38
343-12d1.71	1.71	12.0	2.0	38
343-12d1.72	1.72	12.0	2.0	38
343-12d1.73	1.73	12.0	2.0	38
343-12d1.74	1.74	12.0	2.0	38
343-12d1.75	1.75	12.0	2.0	38
343-12d1.76	1.76	12.0	2.0	38
343-12d1.77	1.77	12.0	2.0	38
343-12d1.78	1.78	12.0	2.0	38
343-12d1.79	1.79	12.0	2.0	38
343-12d1.80	1.80	12.0	2.0	38
343-12d1.81	1.81	12.0	2.0	38
343-12d1.82	1.82	12.0	2.0	38
343-12d1.83	1.83	12.0	2.0	38
343-12d1.84	1.84	12.0	2.0	38
343-12d1.85	1.85	12.0	2.0	38
343-12d1.86	1.86	12.0	2.0	38
343-12d1.87	1.87	12.0	2.0	38
343-12d1.88	1.88	12.0	2.0	38
343-12d1.89	1.89	12.0	2.0	38
343-12d1.90	1.90	12.0	2.0	38
343-12d1.91	1.91	12.0	2.0	38
343-12d1.92	1.92	12.0	2.0	38
343-12d1.93	1.93	12.0	2.0	38

Art. n°	d_1	l_1	D	L
343-12d1.94	1.94	12.0	2.0	38
343-12d1.95	1.95	12.0	2.0	38
343-12d1.96	1.96	12.0	2.0	38
343-12d1.97	1.97	12.0	2.0	38
343-12d1.98	1.98	12.0	2.0	38
343-12d1.99	1.99	12.0	2.0	38
343-12d2.00	2.00	12.0	2.0	38
343-12d2.05	2.05	12.0	3.0	38
343-12d2.10	2.10	12.0	3.0	38
343-12d2.15	2.15	12.0	3.0	38
343-12d2.17	2.17	12.0	3.0	38
343-12d2.18	2.18	12.0	3.0	38
343-12d2.20	2.20	12.0	3.0	38
343-12d2.25	2.25	12.0	3.0	38
343-12d2.27	2.27	12.0	3.0	38
343-12d2.28	2.28	12.0	3.0	38
343-12d2.30	2.30	12.0	3.0	38
343-12d2.35	2.35	12.0	3.0	38
343-12d2.37	2.37	12.0	3.0	38
343-12d2.38	2.38	12.0	3.0	38
343-12d2.40	2.40	12.0	3.0	38
343-12d2.45	2.45	12.0	3.0	38
343-12d2.50	2.50	12.0	3.0	38
343-12d2.55	2.55	12.0	3.0	38
343-12d2.60	2.60	12.0	3.0	38
343-12d2.65	2.65	12.0	3.0	38
343-12d2.70	2.70	12.0	3.0	38
343-12d2.80	2.80	12.0	3.0	38
343-12d2.90	2.90	12.0	3.0	38
343-12d2.95	2.95	12.0	3.0	38
343-12d3.00	3.00	12.0	3.0	38
343-12d3.10	3.10	12.0	4.0	38
343-12d3.20	3.20	12.0	4.0	38
343-12d3.30	3.30	12.0	4.0	38
343-12d3.40	3.40	12.0	4.0	38
343-12d3.50	3.50	12.0	4.0	38
343-12d3.60	3.60	12.0	4.0	38
343-12d3.70	3.70	12.0	4.0	38
343-12d3.80	3.80	12.0	4.0	38
343-12d3.90	3.90	12.0	4.0	38
343-12d4.00	4.00	12.0	4.0	38
343-12d4.10	4.10	12.0	4.5	38
343-12d4.20	4.20	12.0	4.5	38
343-12d4.30	4.30	12.0	4.5	38
343-12d4.40	4.40	12.0	4.5	38
343-12d4.50	4.50	12.0	4.5	38
343-12d5.00	5.00	12.0	5.0	38
343-12d5.50	5.50	12.0	5.5	38
343-12d6.00	6.00	12.0	6.0	38

Available
uncoated or coated

118°

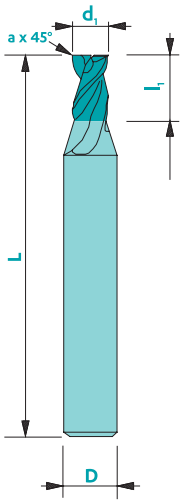
Z2

λ
34°

CARB

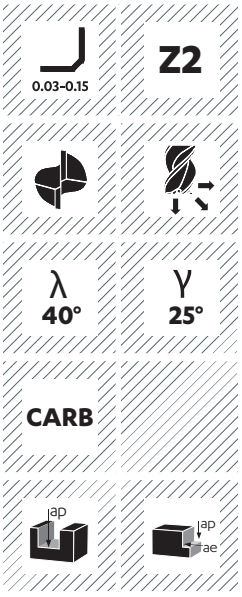
3200 EXPERT end mill aluminium

Available
uncoated or coated



Material group (see page 3)	a	b	c
Recommended coating	SOLO	SOLO	SOLO
V_c uncoated [m/min]	320	280	220
V_c coated [m/min]	380	335	265
F_z Ø 0.25 [mm]	0.002	0.002	0.002
F_z Ø 0.50 [mm]	0.003	0.003	0.003
F_z Ø 1.00 [mm]	0.006	0.006	0.006
F_z Ø 2.00 [mm]	0.01	0.01	0.01
F_z Ø 4.00 [mm]	0.02	0.02	0.02
F_z Ø 6.00 [mm]	0.025	0.025	0.025
F_z Ø 8.00 [mm]	0.03	0.03	0.03
F_z Ø 10.00 [mm]	0.04	0.04	0.04
F_z Ø 12.00 [mm]	0.045	0.045	0.045
F_z Ø 16.00 [mm]	0.055	0.055	0.055
F_z Ø 20.00 [mm]	0.07	0.07	0.07

Tolerances $d_1 \leq 1$ mm ▶ +0/-0.01 D: h5
$d_1 > 1$ mm ▶ +0/-0.02 d_1=D ▶ d_1: e8



ap=0.5xd$_1$ ae=0.15xd$_1$
ap=1.5xd$_1$

Art. n°	d_1	l_1	D	L	a
3200d0.50	0.5	1.0	6	57	0.03
3200d1.00	1.0	2.0	6	57	0.03
3200d1.50	1.5	3.0	6	57	0.04
3200d2.00	2.0	4.0	6	57	0.04
3200d2.50	2.5	5.0	6	57	0.04
3200d3.00	3.0	6.0	6	57	0.04
3200d3.50	3.5	7.0	6	57	0.05
3200d4.00	4.0	8.0	6	57	0.05
3200d5.00	5.0	10.0	6	57	0.05
3200d6.00	6.0	12.0	6	57	0.07
3200d8.00	8.0	16.0	8	63	0.07
3200d10.00	10.0	20.0	10	72	0.10
3200d12.00	12.0	24.0	12	83	0.15

Formulas

$F = F_z \cdot Z$

$V_F = F_z \cdot Z \cdot n$

$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$

$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$

$f_z = \frac{V_f}{Z \cdot n}$

Caption

F [mm]:Feed per rotation

FZ [mm]: Feed per tooth

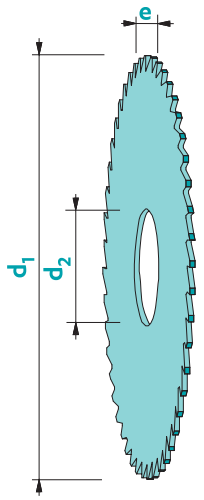
Z : Number of teeth

Vf [mm/min]: Feed speed

n : Spindle speed

Slitting saw DIN 1838 coarse pitch

Material group (see page 3)	a	b	c
Recommended coating	SOLO	SOLO	SOLO
V_c uncoated [m/min]	330	310	300
V_c coated [m/min]	360	330	320
F_Z [mm]	Ø/10000	Ø/10000	Ø/10000

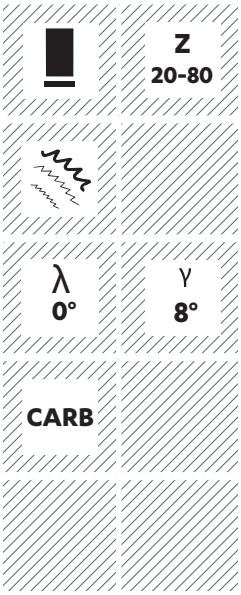


Tolerance e: +/-0.01
d_2: H7

Available uncoated or coated

Art. n°	d_1	e	d_2	Z
223d15e0.20a5Z20	15	0.20	5	20
223d15e0.25a5Z20	15	0.25	5	20
223d15e0.30a5Z20	15	0.30	5	20
223d15e0.35a5Z20	15	0.35	5	20
223d15e0.40a5Z20	15	0.40	5	20
223d15e0.45a5Z20	15	0.45	5	20
223d15e0.50a5Z20	15	0.50	5	20
223d15e0.60a5Z20	15	0.60	5	20
223d15e0.70a5Z20	15	0.70	5	20
223d15e0.80a5Z20	15	0.80	5	20
223d15e0.90a5Z20	15	0.90	5	20
223d15e1.00a5Z20	15	1.00	5	20
223d15e1.10a5Z20	15	1.10	5	20
223d15e1.20a5Z20	15	1.20	5	20
223d15e1.30a5Z20	15	1.30	5	20
223d15e1.40a5Z20	15	1.40	5	20
223d15e1.50a5Z20	15	1.50	5	20
223d15e1.60a5Z20	15	1.60	5	20
223d15e1.70a5Z20	15	1.70	5	20
223d15e1.80a5Z20	15	1.80	5	20
223d15e1.90a5Z20	15	1.90	5	20
223d15e2.00a5Z20	15	2.00	5	20
223d15e2.10a5Z20	15	2.10	5	20
223d15e2.20a5Z20	15	2.20	5	20
223d15e2.30a5Z20	15	2.30	5	20
223d15e2.40a5Z20	15	2.40	5	20
223d15e2.50a5Z20	15	2.50	5	20
223d15e2.60a5Z20	15	2.60	5	20
223d15e2.70a5Z20	15	2.70	5	20
223d15e2.80a5Z20	15	2.80	5	20
223d15e2.90a5Z20	15	2.90	5	20

Art. n°	d_1	e	d_2	Z
223d15e3.00a5Z20	15	3.00	5	20
223d15e3.10a5Z20	15	3.10	5	20
223d15e3.20a5Z20	15	3.20	5	20
223d15e3.30a5Z20	15	3.30	5	20
223d15e3.40a5Z20	15	3.40	5	20
223d15e3.50a5Z20	15	3.50	5	20
223d15e3.60a5Z20	15	3.60	5	20
223d15e3.70a5Z20	15	3.70	5	20
223d15e3.80a5Z20	15	3.80	5	20
223d15e3.90a5Z20	15	3.90	5	20
223d15e4.00a5Z20	15	4.00	5	20
223d15e4.50a5Z20	15	4.50	5	20
223d15e5.00a5Z20	15	5.00	5	20
223d15e5.50a5Z20	15	5.50	5	20
223d15e6.00a5Z20	15	6.00	5	20
223d20e0.20a5Z20	20	0.20	5	20
223d20e0.25a5Z20	20	0.25	5	20
223d20e0.30a5Z20	20	0.30	5	20
223d20e0.35a5Z20	20	0.35	5	20
223d20e0.40a5Z20	20	0.40	5	20
223d20e0.45a5Z20	20	0.45	5	20
223d20e0.50a5Z20	20	0.50	5	20
223d20e0.60a5Z20	20	0.60	5	20
223d20e0.70a5Z20	20	0.70	5	20
223d20e0.80a5Z20	20	0.80	5	20
223d20e0.90a5Z20	20	0.90	5	20
223d20e1.00a5Z20	20	1.00	5	20
223d20e1.10a5Z20	20	1.10	5	20
223d20e1.20a5Z20	20	1.20	5	20
223d20e1.30a5Z20	20	1.30	5	20
223d20e1.40a5Z20	20	1.40	5	20



Formulas

$F = F_z \cdot Z$

$V_F = F_z \cdot Z \cdot n$

$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$

$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$

$f_z = \frac{V_f}{Z \cdot n}$

Caption

F [mm]:Feed per rotation
FZ [mm]: Feed per tooth
Z : Number of teeth
Vf [mm/min]: Feed speed
n : Spindle speed

Slitting saw DIN 1838 coarse pitch

Available
uncoated or coated

Z
20-80

λ
0°

γ
8°

CARB

Art. n°	d_1	e	d_2	Z
223d20e1.50a5Z20	20	1.50	5	20
223d20e1.60a5Z20	20	1.60	5	20
223d20e1.70a5Z20	20	1.70	5	20
223d20e1.80a5Z20	20	1.80	5	20
223d20e1.90a5Z20	20	1.90	5	20
223d20e2.00a5Z20	20	2.00	5	20
223d20e2.10a5Z20	20	2.10	5	20
223d20e2.20a5Z20	20	2.20	5	20
223d20e2.30a5Z20	20	2.30	5	20
223d20e2.40a5Z20	20	2.40	5	20
223d20e2.50a5Z20	20	2.50	5	20
223d20e2.60a5Z20	20	2.60	5	20
223d20e2.70a5Z20	20	2.70	5	20
223d20e2.80a5Z20	20	2.80	5	20
223d20e2.90a5Z20	20	2.90	5	20
223d20e3.00a5Z20	20	3.00	5	20
223d20e3.10a5Z20	20	3.10	5	20
223d20e3.20a5Z20	20	3.20	5	20
223d20e3.30a5Z20	20	3.30	5	20
223d20e3.40a5Z20	20	3.40	5	20
223d20e3.50a5Z20	20	3.50	5	20
223d20e3.60a5Z20	20	3.60	5	20
223d20e3.70a5Z20	20	3.70	5	20
223d20e3.80a5Z20	20	3.80	5	20
223d20e3.90a5Z20	20	3.90	5	20
223d20e4.00a5Z20	20	4.00	5	20
223d20e4.50a5Z20	20	4.50	5	20
223d20e5.00a5Z20	20	5.00	5	20
223d20e5.50a5Z20	20	5.50	5	20
223d20e6.00a5Z20	20	6.00	5	20
223d25e0.20a8Z20	25	0.20	8	20
223d25e0.25a8Z20	25	0.25	8	20
223d25e0.30a8Z20	25	0.30	8	20
223d25e0.35a8Z20	25	0.35	8	20
223d25e0.40a8Z20	25	0.40	8	20
223d25e0.45a8Z20	25	0.45	8	20
223d25e0.50a8Z20	25	0.50	8	20
223d25e0.60a8Z20	25	0.60	8	20
223d25e0.70a8Z20	25	0.70	8	20
223d25e0.80a8Z20	25	0.80	8	20
223d25e0.90a8Z20	25	0.90	8	20
223d25e1.00a8Z20	25	1.00	8	20
223d25e1.10a8Z20	25	1.10	8	20
223d25e1.20a8Z20	25	1.20	8	20
223d25e1.30a8Z20	25	1.30	8	20
223d25e1.40a8Z20	25	1.40	8	20
223d25e1.50a8Z20	25	1.50	8	20

Art. n°	d_1	e	d_2	Z
223d25e1.60a8Z20	25	1.60	8	20
223d25e1.70a8Z20	25	1.70	8	20
223d25e1.80a8Z20	25	1.80	8	20
223d25e1.90a8Z20	25	1.90	8	20
223d25e2.00a8Z20	25	2.00	8	20
223d25e2.10a8Z20	25	2.10	8	20
223d25e2.20a8Z20	25	2.20	8	20
223d25e2.30a8Z20	25	2.30	8	20
223d25e2.40a8Z20	25	2.40	8	20
223d25e2.50a8Z20	25	2.50	8	20
223d25e2.60a8Z20	25	2.60	8	20
223d25e2.70a8Z20	25	2.70	8	20
223d25e2.80a8Z20	25	2.80	8	20
223d25e2.90a8Z20	25	2.90	8	20
223d25e3.00a8Z20	25	3.00	8	20
223d25e3.10a8Z20	25	3.10	8	20
223d25e3.20a8Z20	25	3.20	8	20
223d25e3.30a8Z20	25	3.30	8	20
223d25e3.40a8Z20	25	3.40	8	20
223d25e3.50a8Z20	25	3.50	8	20
223d25e3.60a8Z20	25	3.60	8	20
223d25e3.70a8Z20	25	3.70	8	20
223d25e3.80a8Z20	25	3.80	8	20
223d25e3.90a8Z20	25	3.90	8	20
223d25e4.00a8Z20	25	4.00	8	20
223d25e4.50a8Z20	25	4.50	8	20
223d25e5.00a8Z20	25	5.00	8	20
223d25e5.50a8Z20	25	5.50	8	20
223d25e6.00a8Z20	25	6.00	8	20
223d30e0.20a8Z30	30	0.20	8	30
223d30e0.25a8Z30	30	0.25	8	30
223d30e0.30a8Z30	30	0.30	8	30
223d30e0.35a8Z30	30	0.35	8	30
223d30e0.40a8Z30	30	0.40	8	30
223d30e0.45a8Z30	30	0.45	8	30
223d30e0.50a8Z30	30	0.50	8	30
223d30e0.60a8Z30	30	0.60	8	30
223d30e0.70a8Z30	30	0.70	8	30
223d30e0.80a8Z24	30	0.80	8	24
223d30e0.90a8Z24	30	0.90	8	24
223d30e1.00a8Z24	30	1.00	8	24
223d30e1.10a8Z24	30	1.10	8	24
223d30e1.20a8Z24	30	1.20	8	24
223d30e1.30a8Z24	30	1.30	8	24
223d30e1.40a8Z24	30	1.40	8	24
223d30e1.50a8Z24	30	1.50	8	24
223d30e1.60a8Z24	30	1.60	8	24

Slitting saw DIN 1838 coarse pitch

Art. n°	d_1	e	d_2	Z
223d30e1.70a8Z24	30	1.70	8	24
223d30e1.80a8Z24	30	1.80	8	24
223d30e1.90a8Z24	30	1.90	8	24
223d30e2.00a8Z24	30	2.00	8	24
223d30e2.10a8Z24	30	2.10	8	24
223d30e2.20a8Z24	30	2.20	8	24
223d30e2.30a8Z24	30	2.30	8	24
223d30e2.40a8Z24	30	2.40	8	24
223d30e2.50a8Z24	30	2.50	8	24
223d30e2.60a8Z24	30	2.60	8	24
223d30e2.70a8Z24	30	2.70	8	24
223d30e2.80a8Z24	30	2.80	8	24
223d30e2.90a8Z24	30	2.90	8	24
223d30e3.00a8Z24	30	3.00	8	24
223d30e3.10a8Z24	30	3.10	8	24
223d30e3.20a8Z24	30	3.20	8	24
223d30e3.30a8Z24	30	3.30	8	24
223d30e3.40a8Z24	30	3.40	8	24
223d30e3.50a8Z24	30	3.50	8	24
223d30e3.60a8Z24	30	3.60	8	24
223d30e3.70a8Z24	30	3.70	8	24
223d30e3.80a8Z24	30	3.80	8	24
223d30e3.90a8Z24	30	3.90	8	24
223d30e4.00a8Z24	30	4.00	8	24
223d30e4.50a8Z24	30	4.50	8	24
223d30e5.00a8Z24	30	5.00	8	24
223d30e5.50a8Z24	30	5.50	8	24
223d30e6.00a8Z24	30	6.00	8	24
223d40e0.20a10Z40	40	0.20	10	40
223d40e0.25a10Z40	40	0.25	10	40
223d40e0.30a10Z40	40	0.30	10	40
223d40e0.35a10Z40	40	0.35	10	40
223d40e0.40a10Z40	40	0.40	10	40
223d40e0.45a10Z40	40	0.45	10	40
223d40e0.50a10Z40	40	0.50	10	40
223d40e0.60a10Z40	40	0.60	10	40
223d40e0.70a10Z40	40	0.70	10	40
223d40e0.80a10Z32	40	0.80	10	32
223d40e0.90a10Z32	40	0.90	10	32
223d40e1.00a10Z32	40	1.00	10	32
223d40e1.10a10Z32	40	1.10	10	32
223d40e1.20a10Z32	40	1.20	10	32
223d40e1.30a10Z32	40	1.30	10	32
223d40e1.40a10Z32	40	1.40	10	32
223d40e1.50a10Z32	40	1.50	10	32
223d40e1.60a10Z32	40	1.60	10	32
223d40e1.70a10Z24	40	1.70	10	24

Art. n°	d_1	e	d_2	Z
223d40e1.80a10Z24	40	1.80	10	24
223d40e1.90a10Z24	40	1.90	10	24
223d40e2.00a10Z24	40	2.00	10	24
223d40e2.10a10Z24	40	2.10	10	24
223d40e2.20a10Z24	40	2.20	10	24
223d40e2.30a10Z24	40	2.30	10	24
223d40e2.40a10Z24	40	2.40	10	24
223d40e2.50a10Z24	40	2.50	10	24
223d40e2.60a10Z24	40	2.60	10	24
223d40e2.70a10Z24	40	2.70	10	24
223d40e2.80a10Z24	40	2.80	10	24
223d40e2.90a10Z24	40	2.90	10	24
223d40e3.00a10Z24	40	3.00	10	24
223d40e3.10a10Z20	40	3.10	10	20
223d40e3.20a10Z20	40	3.20	10	20
223d40e3.30a10Z20	40	3.30	10	20
223d40e3.40a10Z20	40	3.40	10	20
223d40e3.50a10Z20	40	3.50	10	20
223d40e3.60a10Z20	40	3.60	10	20
223d40e3.70a10Z20	40	3.70	10	20
223d40e3.80a10Z20	40	3.80	10	20
223d40e3.90a10Z20	40	3.90	10	20
223d40e4.00a10Z20	40	4.00	10	20
223d40e4.50a10Z20	40	4.50	10	20
223d40e5.00a10Z20	40	5.00	10	20
223d40e5.50a10Z20	40	5.50	10	20
223d40e6.00a10Z20	40	6.00	10	20
223d50e0.40a13Z48	50	0.40	13	48
223d50e0.45a13Z48	50	0.45	13	48
223d50e0.50a13Z48	50	0.50	13	48
223d50e0.60a13Z40	50	0.60	13	40
223d50e0.70a13Z40	50	0.70	13	40
223d50e0.80a13Z40	50	0.80	13	40
223d50e0.90a13Z40	50	0.90	13	40
223d50e1.00a13Z40	50	1.00	13	40
223d50e1.10a13Z40	50	1.10	13	40
223d50e1.20a13Z40	50	1.20	13	40
223d50e1.30a13Z32	50	1.30	13	32
223d50e1.40a13Z32	50	1.40	13	32
223d50e1.50a13Z32	50	1.50	13	32
223d50e1.60a13Z32	50	1.60	13	32
223d50e1.70a13Z32	50	1.70	13	32
223d50e1.80a13Z32	50	1.80	13	32
223d50e1.90a13Z32	50	1.90	13	32
223d50e2.00a13Z32	50	2.00	13	32
223d50e2.10a13Z32	50	2.10	13	32
223d50e2.20a13Z32	50	2.20	13	32

Available uncoated or coated

Z
20-80

λ
0°

γ
8°

CARB

Slitting saw DIN 1838 coarse pitch

Available
uncoated or coated

Z
20-80

λ
0°

γ
8°

CARB

Art. n°	d_1	e	d_2	Z
223d50e2.30a13Z32	50	2.30	13	32
223d50e2.40a13Z32	50	2.40	13	32
223d50e2.50a13Z32	50	2.50	13	32
223d50e2.60a13Z24	50	2.60	13	24
223d50e2.70a13Z24	50	2.70	13	24
223d50e2.80a13Z24	50	2.80	13	24
223d50e2.90a13Z24	50	2.90	13	24
223d50e3.00a13Z24	50	3.00	13	24
223d50e3.10a13Z24	50	3.10	13	24
223d50e3.20a13Z24	50	3.20	13	24
223d50e3.30a13Z24	50	3.30	13	24
223d50e3.40a13Z24	50	3.40	13	24
223d50e3.50a13Z24	50	3.50	13	24
223d50e3.60a13Z24	50	3.60	13	24
223d50e3.70a13Z24	50	3.70	13	24
223d50e3.80a13Z24	50	3.80	13	24
223d50e3.90a13Z24	50	3.90	13	24
223d50e4.00a13Z24	50	4.00	13	24
223d50e4.50a13Z24	50	4.50	13	24
223d50e5.00a13Z24	50	5.00	13	24
223d50e5.50a13Z20	50	5.50	13	20
223d50e6.00a13Z20	50	6.00	13	20
223d63e0.40a16Z64	63	0.40	16	64
223d63e0.45a16Z64	63	0.45	16	64
223d63e0.50a16Z64	63	0.50	16	64
223d63e0.60a16Z48	63	0.60	16	48
223d63e0.70a16Z48	63	0.70	16	48
223d63e0.80a16Z48	63	0.80	16	48
223d63e0.90a16Z48	63	0.90	16	48
223d63e1.00a16Z40	63	1.00	16	40
223d63e1.10a16Z40	63	1.10	16	40
223d63e1.20a16Z40	63	1.20	16	40
223d63e1.30a16Z40	63	1.30	16	40
223d63e1.40a16Z40	63	1.40	16	40
223d63e1.50a16Z40	63	1.50	16	40
223d63e1.60a16Z40	63	1.60	16	40
223d63e1.70a16Z40	63	1.70	16	40
223d63e1.80a16Z40	63	1.80	16	40
223d63e1.90a16Z40	63	1.90	16	40
223d63e2.00a16Z40	63	2.00	16	40
223d63e2.10a16Z32	63	2.10	16	32
223d63e2.20a16Z32	63	2.20	16	32
223d63e2.30a16Z32	63	2.30	16	32
223d63e2.40a16Z32	63	2.40	16	32
223d63e2.50a16Z32	63	2.50	16	32
223d63e2.60a16Z32	63	2.60	16	32
223d63e2.70a16Z32	63	2.70	16	32

Art. n°	d_1	e	d_2	Z
223d63e2.80a16Z32	63	2.80	16	32
223d63e2.90a16Z32	63	2.90	16	32
223d63e3.00a16Z32	63	3.00	16	32
223d63e3.10a16Z32	63	3.10	16	32
223d63e3.20a16Z32	63	3.20	16	32
223d63e3.30a16Z32	63	3.30	16	32
223d63e3.40a16Z32	63	3.40	16	32
223d63e3.50a16Z32	63	3.50	16	32
223d63e3.60a16Z32	63	3.60	16	32
223d63e3.70a16Z32	63	3.70	16	32
223d63e3.80a16Z32	63	3.80	16	32
223d63e3.90a16Z32	63	3.90	16	32
223d63e4.00a16Z32	63	4.00	16	32
223d63e4.50a16Z24	63	4.50	16	24
223d63e5.00a16Z24	63	5.00	16	24
223d63e5.50a16Z24	63	5.50	16	24
223d63e6.00a16Z24	63	6.00	16	24
223d80e0.60a22Z64	80	0.60	22	64
223d80e0.70a22Z64	80	0.70	22	64
223d80e0.80a22Z64	80	0.80	22	64
223d80e0.90a22Z48	80	0.90	22	48
223d80e1.00a22Z48	80	1.00	22	48
223d80e1.10a22Z48	80	1.10	22	48
223d80e1.20a22Z48	80	1.20	22	48
223d80e1.30a22Z48	80	1.30	22	48
223d80e1.40a22Z48	80	1.40	22	48
223d80e1.50a22Z48	80	1.50	22	48
223d80e1.60a22Z48	80	1.60	22	48
223d80e1.70a22Z40	80	1.70	22	40
223d80e1.80a22Z40	80	1.80	22	40
223d80e1.90a22Z40	80	1.90	22	40
223d80e2.00a22Z40	80	2.00	22	40
223d80e2.10a22Z40	80	2.10	22	40
223d80e2.20a22Z40	80	2.20	22	40
223d80e2.30a22Z40	80	2.30	22	40
223d80e2.40a22Z40	80	2.40	22	40
223d80e2.50a22Z40	80	2.50	22	40
223d80e2.60a22Z40	80	2.60	22	40
223d80e2.70a22Z40	80	2.70	22	40
223d80e2.80a22Z40	80	2.80	22	40
223d80e2.90a22Z40	80	2.90	22	40
223d80e3.00a22Z40	80	3.00	22	40
223d80e3.10a22Z32	80	3.10	22	32
223d80e3.20a22Z32	80	3.20	22	32
223d80e3.30a22Z32	80	3.30	22	32
223d80e3.40a22Z32	80	3.40	22	32
223d80e3.50a22Z32	80	3.50	22	32

Slitting saw DIN 1838 coarse pitch

Art. n°	d_1	e	d_2	Z
223d80e3.60a22Z32	80	3.60	22	32
223d80e3.70a22Z32	80	3.70	22	32
223d80e3.80a22Z32	80	3.80	22	32
223d80e3.90a22Z32	80	3.90	22	32
223d80e4.00a22Z32	80	4.00	22	32
223d80e4.50a22Z32	80	4.50	22	32
223d80e5.00a22Z32	80	5.00	22	32
223d80e5.50a22Z32	80	5.50	22	32
223d80e6.00a22Z32	80	6.00	22	32
223d100e0.60a22Z80	100	0.60	22	80
223d100e0.70a22Z64	100	0.70	22	64
223d100e0.80a22Z64	100	0.80	22	64
223d100e0.90a22Z64	100	0.90	22	64
223d100e1.00a22Z64	100	1.00	22	64
223d100e1.10a22Z64	100	1.10	22	64
223d100e1.20a22Z64	100	1.20	22	64
223d100e1.30a22Z48	100	1.30	22	48
223d100e1.40a22Z48	100	1.40	22	48
223d100e1.50a22Z48	100	1.50	22	48
223d100e1.60a22Z48	100	1.60	22	48
223d100e1.70a22Z48	100	1.70	22	48
223d100e1.80a22Z48	100	1.80	22	48
223d100e1.90a22Z48	100	1.90	22	48
223d100e2.00a22Z48	100	2.00	22	48
223d100e2.10a22Z48	100	2.10	22	48
223d100e2.20a22Z48	100	2.20	22	48
223d100e2.30a22Z48	100	2.30	22	48
223d100e2.40a22Z48	100	2.40	22	48
223d100e2.50a22Z48	100	2.50	22	48
223d100e2.60a22Z40	100	2.60	22	40
223d100e2.70a22Z40	100	2.70	22	40
223d100e2.80a22Z40	100	2.80	22	40
223d100e2.90a22Z40	100	2.90	22	40
223d100e3.00a22Z40	100	3.00	22	40
223d100e3.10a22Z40	100	3.10	22	40
223d100e3.20a22Z40	100	3.20	22	40
223d100e3.30a22Z40	100	3.30	22	40
223d100e3.40a22Z40	100	3.40	22	40
223d100e3.50a22Z40	100	3.50	22	40
223d100e3.60a22Z40	100	3.60	22	40
223d100e3.70a22Z40	100	3.70	22	40
223d100e3.80a22Z40	100	3.80	22	40
223d100e3.90a22Z40	100	3.90	22	40
223d100e4.00a22Z40	100	4.00	22	40
223d100e4.50a22Z40	100	4.50	22	40
223d100e5.00a22Z40	100	5.00	22	40
223d100e5.50a22Z32	100	5.50	22	32

Art. n°	d_1	e	d_2	Z
223d100e6.00a22Z32	100	6.00	22	32
223d125e0.80a22Z80	125	0.80	22	80
223d125e0.90a22Z80	125	0.90	22	80
223d125e1.00a22Z80	125	1.00	22	80
223d125e1.10a22Z64	125	1.10	22	64
223d125e1.20a22Z64	125	1.20	22	64
223d125e1.30a22Z64	125	1.30	22	64
223d125e1.40a22Z64	125	1.40	22	64
223d125e1.50a22Z64	125	1.50	22	64
223d125e1.60a22Z64	125	1.60	22	64
223d125e1.70a22Z64	125	1.70	22	64
223d125e1.80a22Z64	125	1.80	22	64
223d125e1.90a22Z64	125	1.90	22	64
223d125e2.00a22Z64	125	2.00	22	64
223d125e2.10a22Z48	125	2.10	22	48
223d125e2.20a22Z48	125	2.20	22	48
223d125e2.30a22Z48	125	2.30	22	48
223d125e2.40a22Z48	125	2.40	22	48
223d125e2.50a22Z48	125	2.50	22	48
223d125e2.60a22Z48	125	2.60	22	48
223d125e2.70a22Z48	125	2.70	22	48
223d125e2.80a22Z48	125	2.80	22	48
223d125e2.90a22Z48	125	2.90	22	48
223d125e3.00a22Z48	125	3.00	22	48
223d125e3.10a22Z48	125	3.10	22	48
223d125e3.20a22Z48	125	3.20	22	48
223d125e3.30a22Z48	125	3.30	22	48
223d125e3.40a22Z48	125	3.40	22	48
223d125e3.50a22Z48	125	3.50	22	48
223d125e3.60a22Z48	125	3.60	22	48
223d125e3.70a22Z48	125	3.70	22	48
223d125e3.80a22Z48	125	3.80	22	48
223d125e3.90a22Z48	125	3.90	22	48
223d125e4.00a22Z48	125	4.00	22	48
223d125e4.50a22Z40	125	4.50	22	40
223d125e5.00a22Z40	125	5.00	22	40
223d125e5.50a22Z40	125	5.50	22	40
223d125e6.00a22Z40	125	6.00	22	40
223d160e1.00a32Z80	160	1.00	32	80
223d160e1.20a32Z80	160	1.20	32	80
223d160e1.50a32Z80	160	1.50	32	80
223d160e2.00a32Z80	160	2.00	32	80
223d160e2.50a32Z80	160	2.50	32	80
223d160e3.00a32Z64	160	3.00	32	64

Available uncoated or coated

Z 20-80

λ 0°

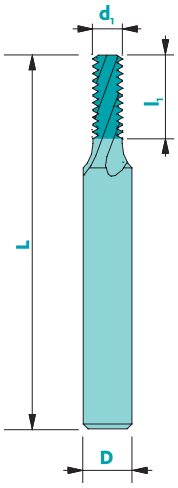
γ 8°

CARB

5300

Helical thread mill - ISO 60°

Internal and external threading



Material group (see page 3)	a	b	c
Recommended coating	SOLO	SOLO	SOLO
V_c uncoated [m/min]	320	280	220
V_c coated [m/min]	380	335	265

Available uncoated or coated

Tolerances

$d_1 \leq 1$mm ▶ +0/-0.01 D: h5
$d_1 > 1$mm ▶ +0/-0.02
$d_1 = D$ ▶ d_1: e8

Z2-5

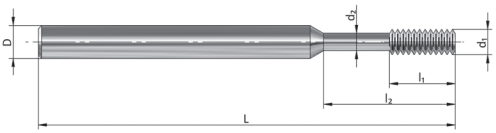
λ 20°

γ 8°

CARB

Art. n°	Ø nominal	Pitch	d_1	l_1	D	L	Z
5300M1.20	M1.20	0.25	0.85	2.4	3	38	2
5300M1.40	M1.40	0.30	1.00	2.8	3	38	3
5300M1.60/1.80	M1.60/1.80	0.35	1.10	3.6	3	38	3
5300M2.00	M2.00	0.40	1.40	4.0	3	38	3
5300M2.50	M2.50	0.45	1.80	5.0	3	38	3
5300M3.00	M3.00	0.50	2.30	6.0	3	38	3
5300M4.00	M4.00	0.70	3.00	8.0	6	57	3
5300M5.00	M5.00	0.80	3.80	10.0	6	57	4
5300M6.00	M6.00	1.00	4.50	12.0	6	57	4
5300M8.00	M8.00	1.25	5.00	16.0	6	57	4
5300M10.00	M10.00	1.50	6.00	20.0	6	57	5

Upon request :



Formulas

$F = F_z \cdot Z$

$V_F = F_z \cdot Z \cdot n$

$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$

$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$

$f_z = \frac{V_f}{Z \cdot n}$

Caption

F [mm]: Feed per rotation

FZ [mm]: Feed per tooth

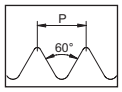
Z : Number of teeth

Vf [mm/min]: Feed speed

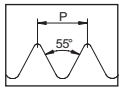
n : Spindle speed

☐ **Order** ☐ **Quotation request**

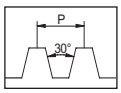
Norm :

☐ 

ISO 60°

☐ 

ISO 55°

☐ 

ISO trapézoïdal

☐ Other : _____

Dimensions :

d_1 : _____ l_1 : _____

d_2 : _____ l_2 : _____

D* : _____ L* : _____

Coating :

☐ Coated** : _____

☐ Uncoated

Machined material : _____

Order No : _____

Quantity : _____

Contact person : _____

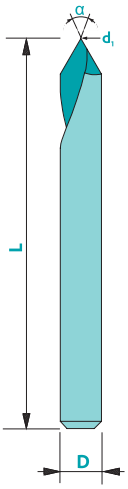
Company's stamp & date : _____

*Standard dimensions of the bars : Ø 3x L 38, Ø 4x L 38, Ø 6x L 38, Ø 6x L 51, Ø 8x L 61, Ø 10x L 72, Ø 12x L 83, Ø 16x L 92, Ø 20x L 104

** Without information, the most suitable Coating will be applied.

Helical engraving mill - flat tip

Material group (see page 3)	a	b	c
Recommended coating	SOLO	SOLO	SOLO
n [rpm]	30'000	30'000	30'000
Fz↓ [mm]	0.006	0.006	0.006
Fz→ [mm]	0.012	0.012	0.012



Available uncoated or coated

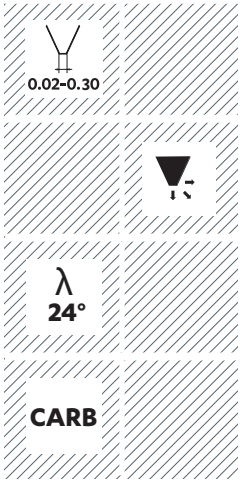
Tolerances d_1: +/- 0.01
D: h5

Article number : 119-2a##d#.##
Example: End mill ref. 119-2 with 25° angle and tip diameter 0.05 mm: 119-2a25d0.05

α*	d_1**	D	L
15-45°	0.02-0.09	3	33
15-45°	0.10-0.30	3	33
50-140°	0.02-0.09	3	33
50-140°	0.10-0.30	3	33

* Available angles: every 5° between 15° and 45°; every 10° between 50° and 140°
** Available diameters: every 0.01 mm between 0.02 and 0.09 mm; every 0.05 mm between 0.10 and 0.30 mm

Other dimensions (angle, tip diameter, shank) upon request



Formulas

$F = F_z \cdot Z$

$V_F = F_z \cdot Z \cdot n$

$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$

$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$

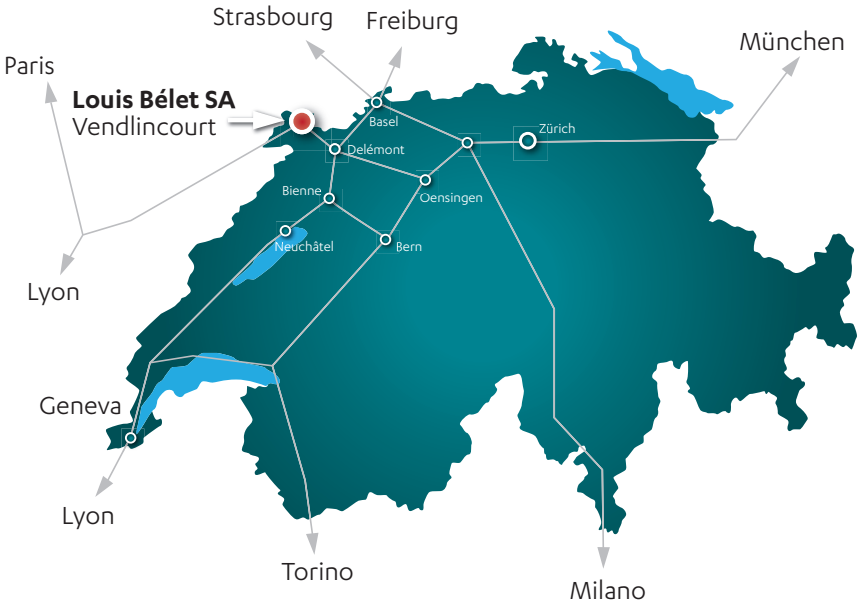
$f_z = \frac{V_f}{Z \cdot n}$

Caption

F [mm]:Feed per rotation
FZ [mm]: Feed per tooth
Z : Number of teeth
Vf [mm/min]: Feed speed
n : Spindle speed

Since 1948

Louis BELET SA is a family business of about 150 employees. The company is run by the two grandchildren of the founder, Mrs Roxane Piquerez and Mr Arnaud Maître.



LOUIS BELET SA
Les Gasses 11
CH - 2943 Vendlincourt
Tél. +41 (0) 32 474 04 10
Fax +41 (0) 32 474 45 42
www.louisbelet.ch
info@louisbelet.ch

The quest of excellence

Bélet's spirit relies on the quest of excellence. In all our activities, we constantly focus on finding the best solutions, for our customers and our employees.

Quality and environmental management are testified by our ISO 9001:2008 and ISO 14001:2004 certifications.

List of authorized distributors available on www.louisbelet.ch

12.2021