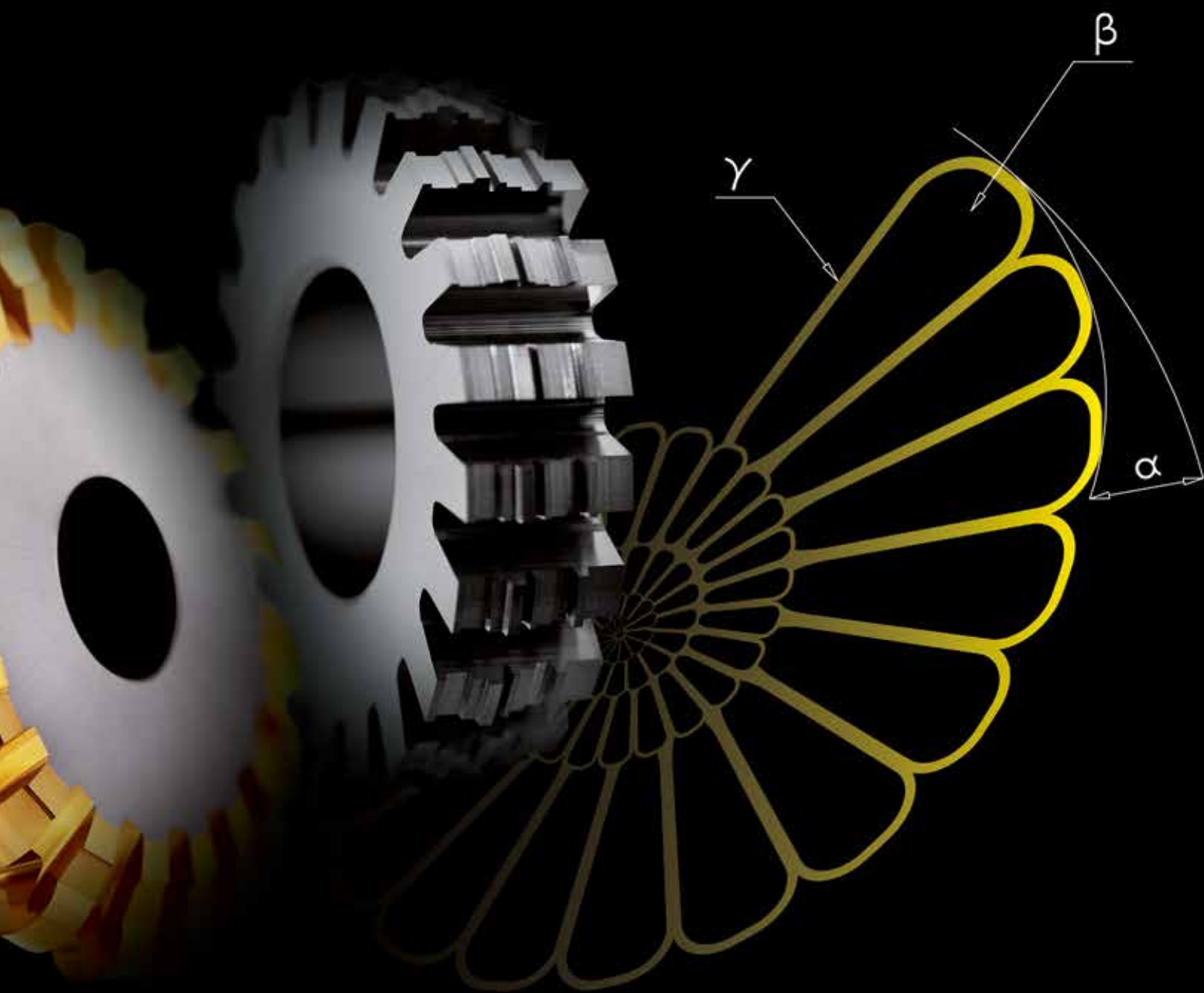




GLOOR



Available from stock





GLOOR

han tools



Gloor Precision Tools Ltd.

We develop and produce high-quality tools. We sell these tools worldwide to companies in various industries with machining processes. Our primary goal is to manufacture tools that are always better than the previous executions, enabling us to significantly reduce process and unit costs for our customers.

Our customers benefit from comprehensive and competent advice and support based on many years of profound practical experience, this is our particular strength.



**«Precise tools with
modern technology
and competent advice»**





INDEX

6-12 Whirling end mill

13-14 Thread end mill

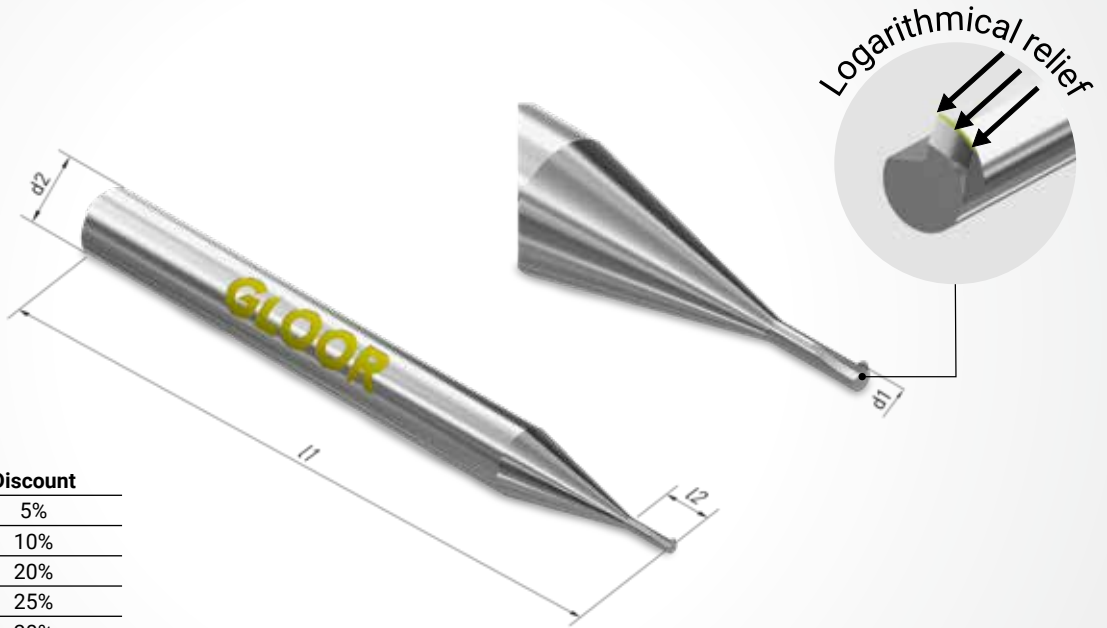
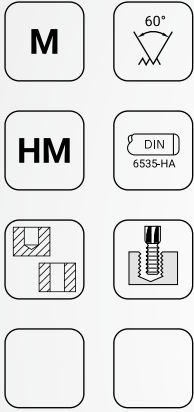
15-21 Slitting saws

22-23 End mill for Torx

24-25 Thread milling cutter for lathe

26-27 Legend



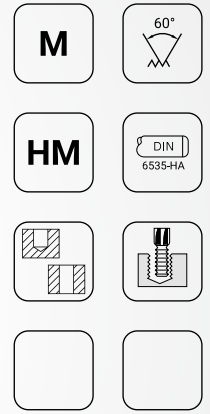
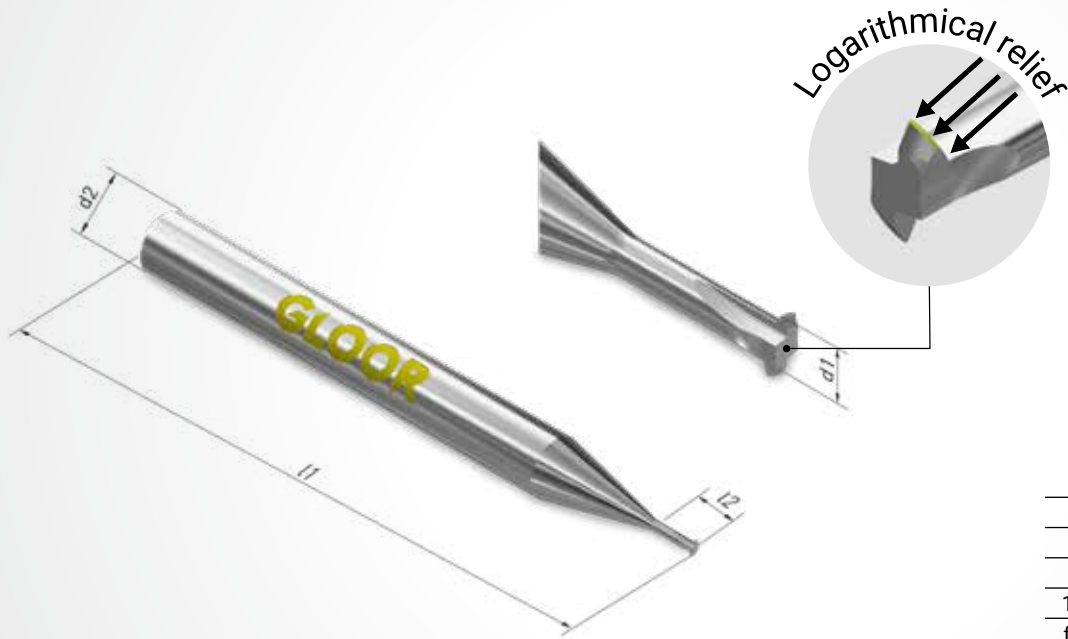


Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	10%
50 - 99 pcs =	20%
100 - 199 pcs =	25%
from 200 pcs =	30%

Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti
----	------	-----------------------------------	-----------------------------------	----

Solid carbide whirling end mill

Art. No.	M	P	l1	l2	d1	d2		
65051.00.00001	0.6	0.150	32	1.5	0.42	3	1	0.45
65051.00.00002	0.7	0.175	32	1.8	0.47	3	1	0.53
65051.00.00003	0.8	0.200	32	1.8	0.57	3	1	0.60
65051.00.00004	0.9	0.225	32	2.1	0.62	3	1	0.68
65051.00.00005	1.0	0.250	32	2.3	0.72	3	1	0.75
65051.00.00006	1.2	0.250	32	2.8	0.92	3	1	0.95
65051.00.00007	1.4	0.300	32	3.0	1.03	3	1	1.10
65051.00.00008	1.4	0.300	32	4.0	1.03	3	1	1.10
65051.00.00009	1.6	0.350	32	4.0	1.18	3	1	1.25
65051.00.00010	1.6	0.350	32	5.0	1.18	3	1	1.25
65051.00.00011	1.8	0.350	32	3.5	1.38	3	1	1.45
65051.00.00012	1.8	0.350	32	5.0	1.38	3	1	1.45
65051.00.00013	2.0	0.400	32	4.0	1.53	3	1	1.60
65051.00.00014	2.0	0.400	32	6.0	1.53	3	1	1.60

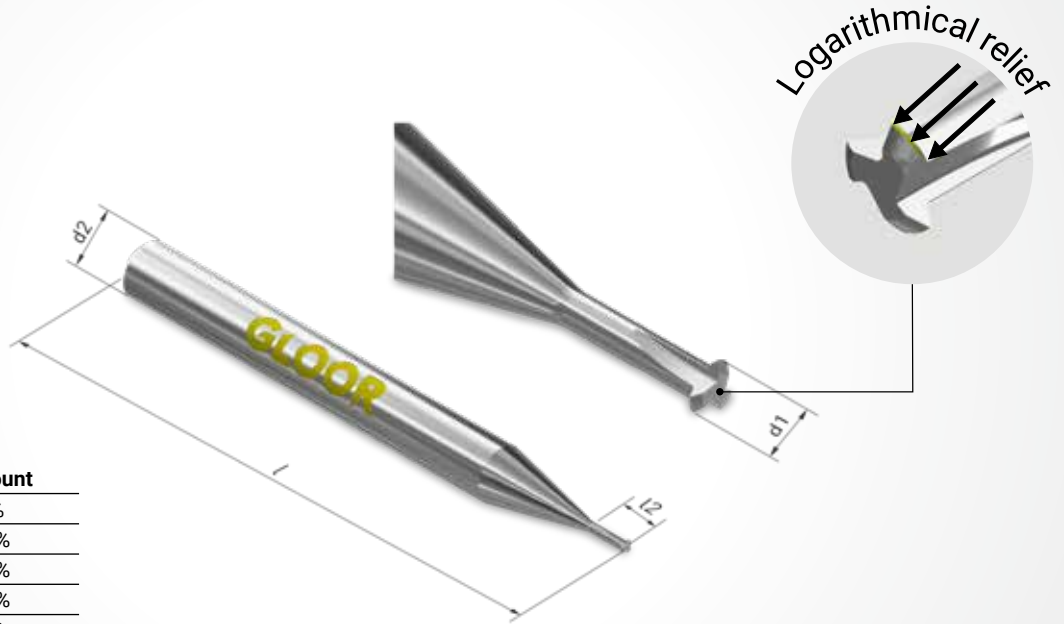
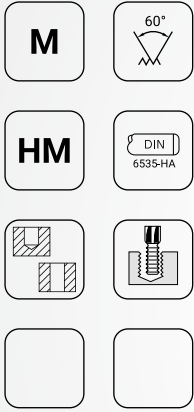


Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	10%
50 - 99 pcs =	20%
100 - 199 pcs =	25%
from 200 pcs =	30%

Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti
----	------	-----------------------------------	-----------------------------------	----

Solid carbide whirling end mill

Art. No.	M	P	l1	l2	d1	d2		
65051.00.00015	0.6	0.150	32	1.5	0.42	3	2	0.45
65051.00.00016	0.7	0.175	32	1.8	0.47	3	2	0.53
65051.00.00017	0.8	0.200	32	1.8	0.57	3	2	0.60
65051.00.00018	0.9	0.225	32	2.1	0.62	3	2	0.68
65051.00.00019	1.0	0.250	32	2.3	0.72	3	2	0.75
65051.00.00020	1.2	0.250	32	2.8	0.92	3	2	0.95
65051.00.00021	1.4	0.300	32	4.0	1.03	3	2	1.10
65051.00.00022	1.6	0.350	32	5.0	1.18	3	2	1.25
65051.00.00023	1.8	0.350	32	5.0	1.38	3	2	1.45
65051.00.00024	2.0	0.400	32	5.0	1.53	3	2	1.60
65051.00.00025	2.0	0.400	32	7.0	1.53	3	2	1.60
65051.00.00026	2.5	0.450	32	5.0	1.97	3	2	2.05
65051.00.00027	2.5	0.450	32	8.0	1.97	3	2	2.05
65051.00.00028	3.0	0.500	32	6.0	2.42	3	2	2.50
65051.00.00029	3.0	0.500	32	9.0	2.42	3	2	2.50

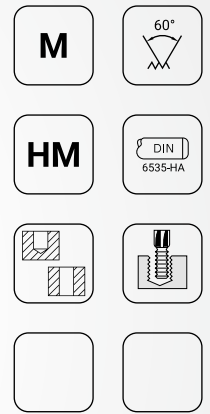
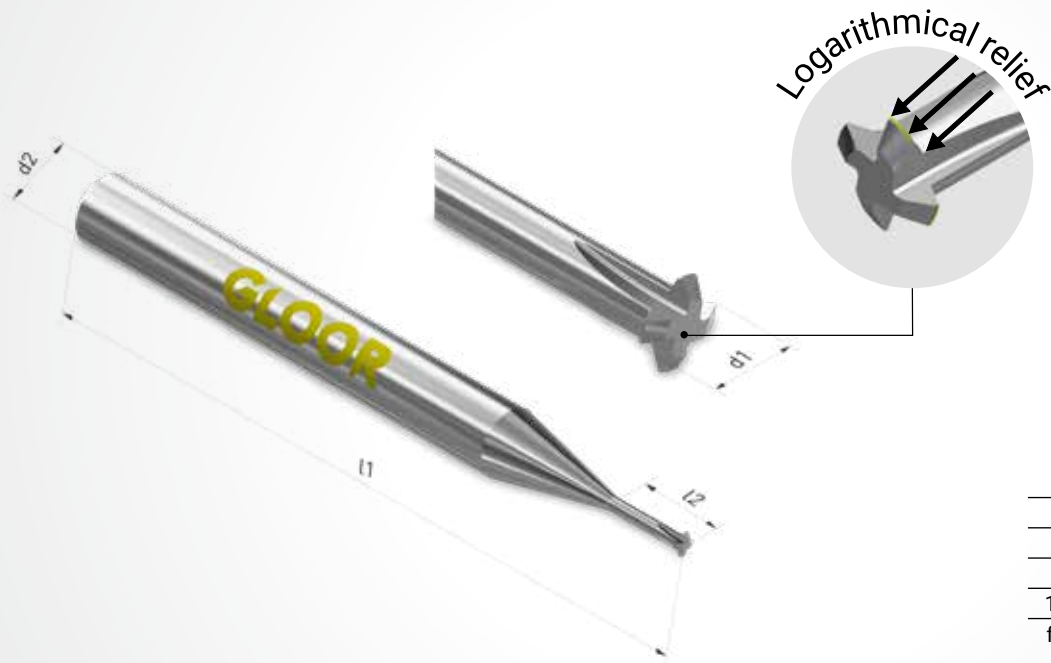


Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	10%
50 - 99 pcs =	20%
100 - 199 pcs =	25%
from 200 pcs =	30%

Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti
----	------	-----------------------------------	-----------------------------------	----

Solid carbide whirling end mill

Art. No.	M	P	l1	l2	d1	d2		
65051.00.00030	0.6	0.150	32	1.5	0.42	3	3	0.45
65051.00.00031	0.7	0.175	32	1.8	0.47	3	3	0.53
65051.00.00032	0.8	0.200	32	1.8	0.57	3	3	0.60
65051.00.00033	0.9	0.225	32	2.1	0.62	3	3	0.68
65051.00.00034	1.0	0.250	32	2.3	0.72	3	3	0.75
65051.00.00035	1.2	0.250	32	2.8	0.92	3	3	0.95
65051.00.00036	1.4	0.300	32	4.0	1.03	3	3	1.10
65051.00.00037	1.6	0.350	32	5.0	1.18	3	3	1.25
65051.00.00038	1.8	0.350	32	5.0	1.38	3	3	1.45
65051.00.00039	2.0	0.400	32	6.0	1.53	3	3	1.60
65051.00.00040	2.5	0.450	32	7.0	1.97	3	3	2.05
65051.00.00041	3.0	0.500	32	8.0	2.42	3	3	2.50
65051.00.00042	3.5	0.600	32	9.0	2.82	3	3	2.90
65051.00.00043	4.0	0.700	32	10.0	2.90	3	3	3.30

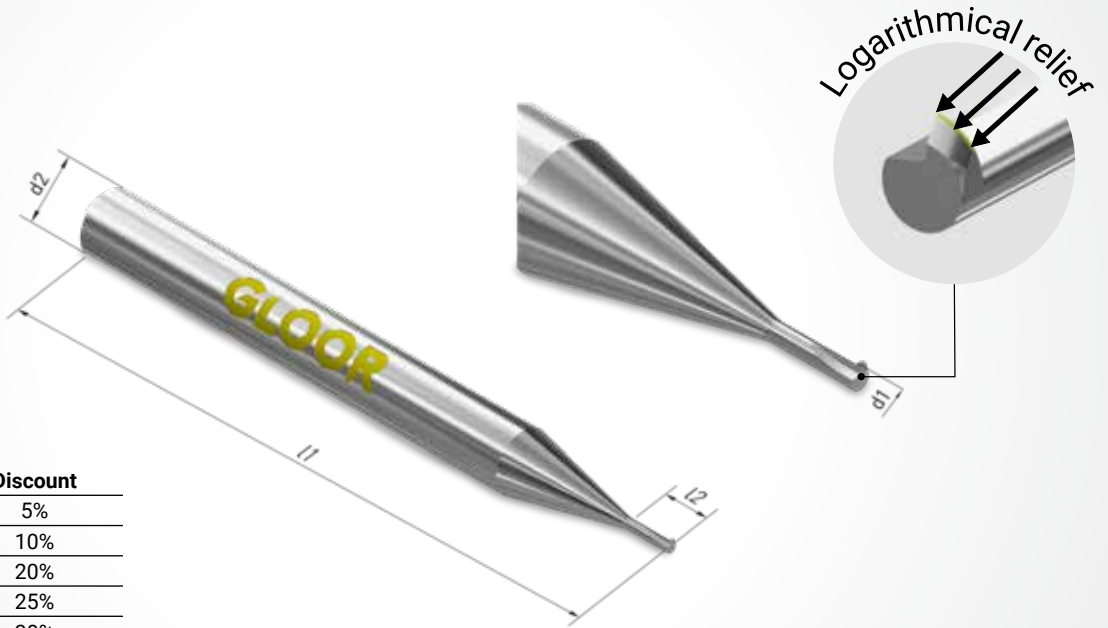
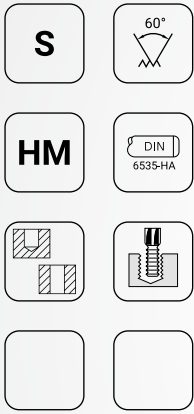


Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	10%
50 - 99 pcs =	20%
100 - 199 pcs =	25%
from 200 pcs =	30%

INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti
-------------	--	--	-----------

Solid carbide whirling end mill

Art. No.	M	P	l1	l2	d1	d2		
65051.00.00044	1.4	0.30	32	4	1.03	3	4	1.10
65051.00.00045	1.6	0.35	32	5	1.18	3	4	1.25
65051.00.00046	1.8	0.35	32	5	1.38	3	4	1.45
65051.00.00047	2.0	0.40	32	6	1.53	3	4	1.60
65051.00.00048	2.5	0.45	32	7	1.97	3	4	2.05
65051.00.00049	3.0	0.50	32	8	2.42	3	4	2.50
65051.00.00050	3.5	0.60	32	9	2.82	3	4	2.90
65051.00.00051	4.0	0.70	32	10	2.90	3	4	3.30

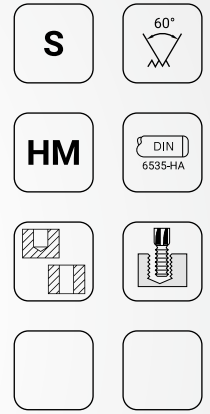
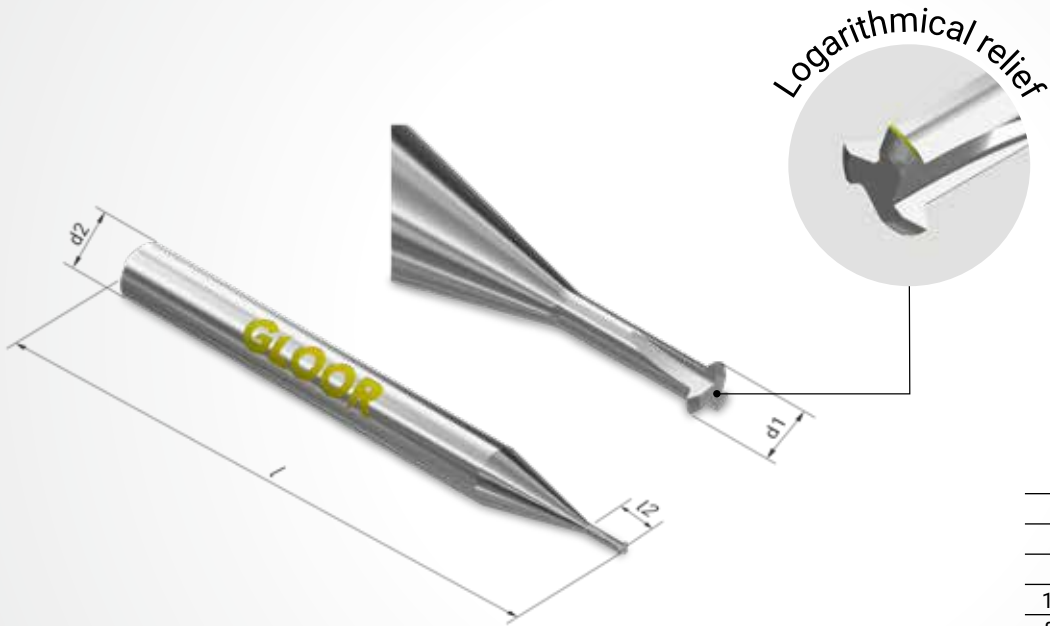


Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	10%
50 - 99 pcs =	20%
100 - 199 pcs =	25%
from 200 pcs =	30%

Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti
----	------	-----------------------------------	-----------------------------------	----

Solid carbide whirling end mill

Art. No.	S	P	l1	l2	d1	d2		Ø	Ø
65051.00.00052	0.6	0.150	32	1.5	0.45	3	1	0.48	0.50
65051.00.00053	0.7	0.175	32	1.8	0.53	3	1	0.56	0.58
65051.00.00054	0.8	0.200	32	2.0	0.61	3	1	0.64	0.66
65051.00.00055	0.9	0.225	32	2.2	0.69	3	1	0.72	0.74
65051.00.00056	1.0	0.250	32	2.4	0.77	3	1	0.80	0.82
65051.00.00057	1.2	0.250	32	3.0	0.97	3	1	1.00	1.02
65051.00.00058	1.4	0.300	32	3.3	1.12	3	1	1.15	1.17



Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	10%
50 - 99 pcs =	20%
100 - 199 pcs =	25%
from 200 pcs =	30%

Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti
----	------	-----------------------------------	-----------------------------------	----

Solid carbide whirling end mill

Art. No.	S	P	l1	l2	d1	d2		\emptyset	\emptyset
65051.00.00059	0.60	0.150	32	1.50	0.45	3	3	0.48	0.50
65051.00.00060	0.70	0.175	32	1.80	0.53	3	3	0.56	0.58
65051.00.00061	0.80	0.200	32	2.00	0.61	3	3	0.64	0.66
65051.00.00062	0.90	0.225	32	2.20	0.69	3	3	0.72	0.74
65051.00.00063	1.00	0.250	32	2.40	0.77	3	3	0.80	0.82
65051.00.00064	1.20	0.250	32	3.00	0.97	3	3	1.00	1.02
65051.00.00065	1.40	0.300	32	3.30	1.12	3	3	1.15	1.17

Solid carbide whirling end mill

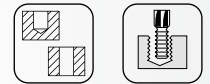
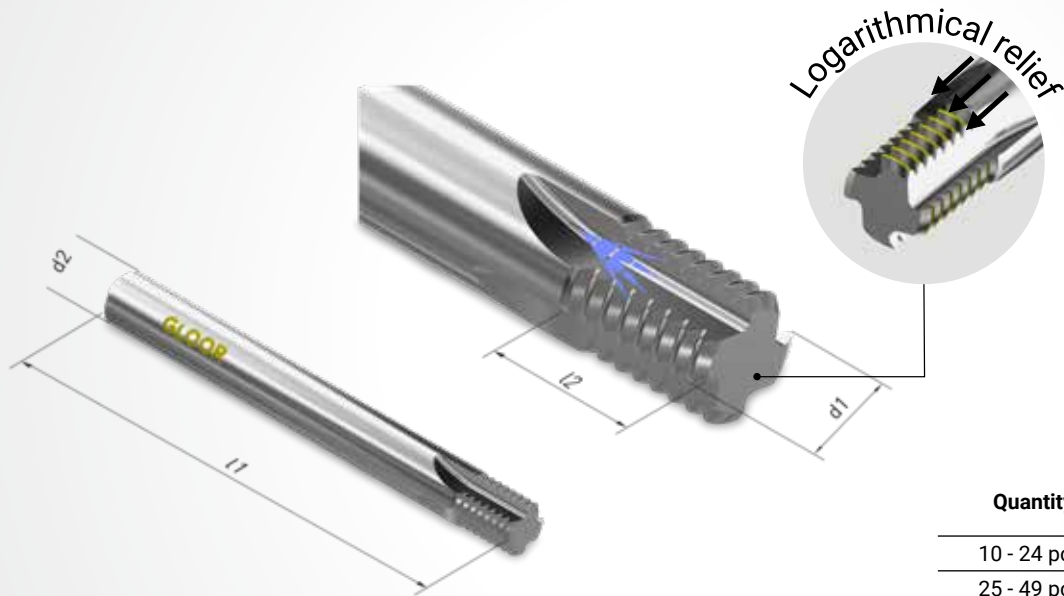
- Gloor internal thread whirlers are used for the internal milling of small threads in the dental, watchmaking and medical industries.
- Gloor whirl thread are logarithmically relief ground, this gives you a better support and of the cutting edge and this results in longer tool life.
- The profile shape is designed with our special software, that the thread to be machined is free of distortion and dimensionally accurate.
- Our internal thread whirlers are made of ultra-fine grain carbide.
- **Available on request:**
 - Internal thread whirler from M=0.40
 - Internal thread whirler topping
 - Internal thread whirler metric fine
 - Internal thread whirler multi-grooved
 - Coated internal thread whirler
 - Other dimensions and designs

Cutting conditions and processing instructions

Material	Cutting speed Vc m/min			Feed per tooth fz (mm)				
		M0.6 - 0.80	M0.90 - 1.10	M1.20 - 1.50	M1.60 - 1.80	M2 - 2.30	M2.50	M3
Steel<850N/mm2	70 - 90	0.005-0.009	0.008-0.013	0.011-0.016	0.013-0.018	0.014-0.020	0.018-0.022	0.022-0.035
Steel>850N/mm2	50 - 70	0.005-0.008	0.008-0.012	0.010-0.014	0.012-0.016	0.013-0.018	0.017-0.020	0.020-0.032
INOX	40 - 60	0.004 - 0.007	0.006-0.010	0.008-0.012	0.010-0.014	0.011-0.016	0.015-0.020	0.020-0.030
Titan	50 - 70	0.005-0.008	0.008-0.012	0.010-0.014	0.012-0.016	0.013-0.018	0.017-0.020	0.020-0.032
Cu	100 - 140	0.020-0.030	0.024-0.034	0.028-0.038	0.032-0.042	0.036-0.046	0.038-0.050	0.040-0.055

With workpiece rotating - Values for stainless steel and titanium

M	RPM (1/min)	Feed mm/U	Material	Cutting speed Vc m/min	Lubrication
M 0.6	16'000-44'000	0.008-0.016	Steel<850N/mm2	100	Emulsion/Cutting-oil
M 0.80	14'000-41'000	0.010-0.018	Steel>850H/mm2	80	Emulsion/Cutting-oil
M 1.0	12'000-36'000	0.012-0.020	Inox	60	Emulsion/Cutting-oil
M 1.2	10'000-34'000	0.013-0.022	Titan	70	Emulsion
M 1.4	8'000-32'000	0.014-0.024	Alu	280	Emulsion/Petrol
M 1.8	7'000-26'000	0.015-0.028	Cu	140	Dry/Emulsion
M 2.0	6'000-24'000	0.016-0.032			
M 2.5	5'400-19'000	0.018-0.036			
M 3.0	4'500-16'000	0.020-0.042			



Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	10%
50 - 100 pcs =	20%

Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti	Al
----	------	-----------------------------------	-----------------------------------	----	----

Solid carbide thread end mill

With internal cooling supply

Art. No.	t	ISO	d1	d2	l ₁	l ₂			
65101.84.00001	0.40	M2.00	1.50	3h6	38	2.80	3	1	GL-12
65101.84.00002	0.45	M2.50	1.80	3h6	38	3.15	3	1	GL-12
65101.84.00003	0.50	M3.00	2.10	4h6	50	2.50	3	3	GL-12
65101.84.00004	0.50	M3.00	2.10	4h6	50	5.00	3	3	GL-12
65101.84.00005	0.70	M4.00	2.80	4h6	50	3.00	3	3	GL-12
65101.84.00006	0.70	M4.00	2.80	4h6	50	6.00	3	3	GL-12
65101.84.00007	0.80	M5.00	3.60	4h6	50	4.00	3	3	GL-12
65101.84.00008	0.80	M5.00	3.60	4h6	50	8.00	3	3	GL-12
65101.84.00009	1.00	M6.00	4.40	6h6	50	9.00	3	3	GL-12
65101.84.00010	1.25	M8.00	5.80	6h6	50	12.00	3	3	GL-12
65101.84.00011	1.50	M10.00	7.80	8h6	63	15.00	4	4	GL-12
65101.84.00012	1.75	M12.00	9.80	10h6	66	17.50	4	4	GL-12

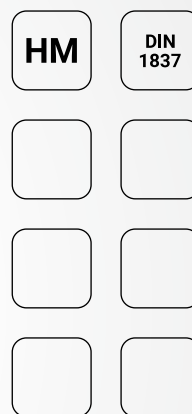
Solid carbide thread end mill

- Due to the connection of the logarithmic relief, with the internal coolant supply and the cooling channel outlets on each cutting edge, the process reliability and the tool life of the solid carbide thread end mills is increased multiple times.
- Gloor whirl thread are logarithmically relief ground, this gives you a better support of the cutting edge and this results in longer tool life
- **Available on request:**
 - External thread
 - Coating according to your application
 - Other dimensions, thread norm and designs

Cutting conditions and processing instructions

Material				RPM (1/min)					Feed per tooth fz (mm)				
ISO	d1	Steel<850N/mm2	Steel>850H/mm2	Inox	Titan	Alu	Cu	Steel<850N/mm2	Steel>850H/mm2	Inox	Titan	Alu	Cu
M2	1.5	21'200	17'000	12'800	13'800	59'000	30'000	0.015	0.013	0.01	0.012	0.025	0.025
M3	2.1	15'200	12'100	9'100	9'900	42'500	21'000	0.02	0.016	0.013	0.015	0.03	0.03
M4	2.8	11'400	9'100	6'800	7'400	32'000	16'000	0.022	0.02	0.015	0.018	0.035	0.035
M5	3.6	8'900	7'100	5'300	5'800	25'000	12'500	0.03	0.025	0.02	0.023	0.04	0.04
M6	4.4	7'200	5'800	4'300	4'700	20'000	10'000	0.035	0.03	0.025	0.028	0.045	0.045
M8	5.8	5'500	4'400	3'300	3'600	15'000	7'500	0.045	0.04	0.03	0.035	0.06	0.06
M10	7.8	4'100	3'300	2'500	2'700	11'500	5'800	0.06	0.05	0.04	0.045	0.07	0.07
M12	9.8	3'300	2'600	2'000	2'100	9'000	4'500	0.065	0.055	0.045	0.05	0.08	0.08

Material	Cutting speed Vc m/min	Lubrication
Steel<850N/mm2	100	Emulsion/Cutting-oil
Steel>850H/mm2	80	Emulsion/Cutting-oil
Inox	60	Emulsion/Cutting-oil
Titan	65	Emulsion
Alu	280	Emulsion/Petrol
Cu	140	Dry/Emulsion



Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	8%
50 - 99 pcs =	10%
100 pcs =	15%


Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti	Al	GJS
----	------	-----------------------------------	-----------------------------------	----	----	-----


Solid carbide slitting saw fine tooth pitch


Art. No.	D	B	d	Form A
65013.00.00001	15	0.10	5	64
65013.00.00002	15	0.20	5	64
65013.00.00003	15	0.30	5	64
65013.00.00004	15	0.40	5	64
65013.00.00005	15	0.50	5	48
65013.00.00006	15	0.60	5	48
65013.00.00007	15	0.70	5	48
65013.00.00008	15	0.80	5	40
65013.00.00009	15	0.90	5	40
65013.00.00010	15	1.00	5	40
65013.00.00011	15	1.10	5	40
65013.00.00012	15	1.20	5	40
65013.00.00013	15	1.30	5	40
65013.00.00014	15	1.40	5	40
65013.00.00015	15	1.50	5	40
65013.00.00016	15	1.60	5	40
65013.00.00017	15	1.70	5	40
65013.00.00018	15	1.80	5	40
65013.00.00019	15	1.90	5	40
65013.00.00020	15	2.00	5	40
65013.00.00021	15	2.50	5	40
65013.00.00022	15	3.00	5	40
65013.00.00023	15	3.50	5	40
65013.00.00024	15	4.00	5	40


Art. Nr	D	B	d	Form A
65013.00.00025	20	0.10	5	80
65013.00.00026	20	0.20	5	80
65013.00.00027	20	0.30	5	64
65013.00.00028	20	0.40	5	64
65013.00.00029	20	0.50	5	48
65013.00.00030	20	0.60	5	48
65013.00.00031	20	0.70	5	48
65013.00.00032	20	0.80	5	48
65013.00.00033	20	0.90	5	40
65013.00.00034	20	1.00	5	40
65013.00.00035	20	1.10	5	40
65013.00.00036	20	1.20	5	40
65013.00.00037	20	1.30	5	40
65013.00.00038	20	1.40	5	40
65013.00.00039	20	1.50	5	40
65013.00.00040	20	1.60	5	40
65013.00.00041	20	1.70	5	40
65013.00.00042	20	1.80	5	32
65013.00.00043	20	1.90	5	32
65013.00.00044	20	2.00	5	32
65013.00.00045	20	2.50	5	32
65013.00.00046	20	3.00	5	32
65013.00.00047	20	3.50	5	24
65013.00.00048	20	4.00	5	24

Solid carbide slitting saw fine tooth pitch


Art. No.	D	B	d	 Form A
65013.00.00049	25	0.30	8	80
65013.00.00050	25	0.40	8	64
65013.00.00051	25	0.50	8	64
65013.00.00052	25	0.60	8	64
65013.00.00053	25	0.70	8	48
65013.00.00054	25	0.80	8	48
65013.00.00055	25	0.90	8	48
65013.00.00056	25	1.00	8	48
65013.00.00057	25	1.10	8	48
65013.00.00058	25	1.20	8	48
65013.00.00059	25	1.30	8	40
65013.00.00060	25	1.40	8	40
65013.00.00061	25	1.50	8	40
65013.00.00062	25	1.60	8	40
65013.00.00063	25	1.70	8	40
65013.00.00064	25	1.80	8	40
65013.00.00065	25	1.90	8	40
65013.00.00066	25	2.00	8	40
65013.00.00067	25	2.50	8	40
65013.00.00068	25	3.00	8	40
65013.00.00069	25	3.50	8	32
65013.00.00070	25	4.00	8	32


Art. No.	D	B	d	 Form A
65013.00.00071	30	0.30	8	80
65013.00.00072	30	0.40	8	80
65013.00.00073	30	0.50	8	80
65013.00.00074	30	0.60	8	64
65013.00.00075	30	0.70	8	64
65013.00.00076	30	0.80	8	64
65013.00.00077	30	0.90	8	64
65013.00.00078	30	1.00	8	64
65013.00.00079	30	1.10	8	48
65013.00.00080	30	1.20	8	48
65013.00.00081	30	1.30	8	48
65013.00.00082	30	1.40	8	48
65013.00.00083	30	1.50	8	48
65013.00.00084	30	1.60	8	48
65013.00.00085	30	1.70	8	48
65013.00.00086	30	1.80	8	48
65013.00.00087	30	1.90	8	48
65013.00.00088	30	2.00	8	48
65013.00.00089	30	2.50	8	48
65013.00.00090	30	3.00	8	40
65013.00.00091	30	3.50	8	40
65013.00.00092	30	4.00	8	40


Art. No.	D	B	d	 Form A
65013.00.00093	40	0.30	10	100
65013.00.00094	40	0.40	10	100
65013.00.00095	40	0.50	10	100
65013.00.00096	40	0.60	10	80
65013.00.00097	40	0.70	10	80
65013.00.00098	40	0.80	10	80
65013.00.00099	40	0.90	10	64
65013.00.00100	40	1.00	10	64
65013.00.00101	40	1.10	10	64
65013.00.00102	40	1.20	10	64
65013.00.00103	40	1.30	10	64
65013.00.00104	40	1.40	10	64
65013.00.00105	40	1.50	10	64
65013.00.00106	40	1.60	10	64
65013.00.00107	40	1.70	10	64
65013.00.00108	40	1.80	10	48
65013.00.00109	40	1.90	10	48
65013.00.00110	40	2.00	10	48
65013.00.00111	40	2.50	10	48
65013.00.00112	40	3.00	10	48
65013.00.00113	40	3.50	10	48
65013.00.00114	40	4.00	10	40
65013.00.00115	40	4.50	10	40
65013.00.00116	40	5.00	10	40

Art. No.	D	B	d	 Form A
65013.00.00117	50	0.30	13	128
65013.00.00118	50	0.40	13	100
65013.00.00119	50	0.50	13	100
65013.00.00120	50	0.60	13	100
65013.00.00121	50	0.70	13	80
65013.00.00122	50	0.80	13	80
65013.00.00123	50	0.90	13	80
65013.00.00124	50	1.00	13	80
65013.00.00125	50	1.10	13	80
65013.00.00126	50	1.20	13	80
65013.00.00127	50	1.30	13	64
65013.00.00128	50	1.40	13	64
65013.00.00129	50	1.50	13	64
65013.00.00130	50	1.60	13	64
65013.00.00131	50	1.70	13	64
65013.00.00132	50	1.80	13	64
65013.00.00133	50	1.90	13	64
65013.00.00134	50	2.00	13	64
65013.00.00135	50	2.50	13	64
65013.00.00136	50	3.00	13	48
65013.00.00137	50	3.50	13	48
65013.00.00138	50	4.00	13	48
65013.00.00139	50	4.50	13	48
65013.00.00140	50	5.00	13	48

Solid carbide slitting saw fine tooth pitch

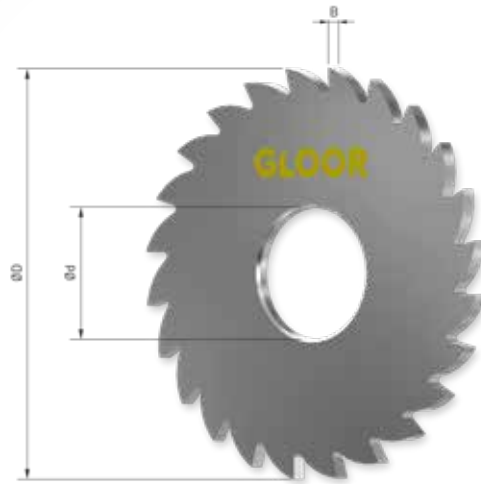
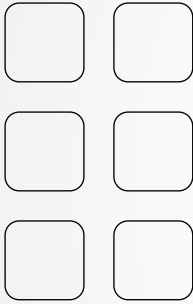
Art. No.	D	B	d	 Form A
65013.00.00141	63	0.30	16	128
65013.00.00142	63	0.40	16	128
65013.00.00143	63	0.50	16	128
65013.00.00144	63	0.60	16	100
65013.00.00145	63	0.70	16	100
65013.00.00146	63	0.80	16	100
65013.00.00147	63	0.90	16	100
65013.00.00148	63	1.00	16	100
65013.00.00149	63	1.10	16	80
65013.00.00150	63	1.20	16	80
65013.00.00151	63	1.30	16	80
65013.00.00152	63	1.40	16	80
65013.00.00153	63	1.50	16	80
65013.00.00154	63	1.60	16	80
65013.00.00155	63	1.70	16	80
65013.00.00156	63	1.80	16	80
65013.00.00157	63	1.90	16	80
65013.00.00158	63	2.00	16	80
65013.00.00159	63	2.50	16	64
65013.00.00160	63	3.00	16	64
65013.00.00161	63	3.50	16	64
65013.00.00162	63	4.00	16	64
65013.00.00163	63	4.50	16	64
65013.00.00164	63	5.00	16	64

Art. No.	D	B	d	 Form A
65013.00.00165	80	0.80	22	128
65013.00.00166	80	0.90	22	100
65013.00.00167	80	1.00	22	100
65013.00.00168	80	1.10	22	100
65013.00.00169	80	1.20	22	100
65013.00.00170	80	1.30	22	100
65013.00.00171	80	1.40	22	100
65013.00.00172	80	1.50	22	100
65013.00.00173	80	1.60	22	100
65013.00.00174	80	1.70	22	80
65013.00.00175	80	1.80	22	80
65013.00.00176	80	1.90	22	80
65013.00.00177	80	2.00	22	80
65013.00.00178	80	2.50	22	80
65013.00.00179	80	3.00	22	80
65013.00.00180	80	3.50	22	64
65013.00.00181	80	4.00	22	64
65013.00.00182	80	4.50	22	64
65013.00.00183	80	5.00	22	64

Art. No.	D	B	d	 Form A
65013.00.00184	100	1.00	22	128
65013.00.00185	100	1.10	22	128
65013.00.00186	100	1.20	22	128
65013.00.00187	100	1.30	22	100
65013.00.00188	100	1.40	22	100
65013.00.00189	100	1.50	22	100
65013.00.00190	100	1.60	22	100
65013.00.00191	100	1.70	22	100
65013.00.00192	100	0.80	22	100
65013.00.00193	100	1.90	22	100
65013.00.00194	100	2.00	22	100
65013.00.00195	100	2.50	22	100
65013.00.00196	100	3.00	22	80
65013.00.00197	100	3.50	22	80
65013.00.00198	100	4.00	22	80
65013.00.00199	100	4.50	22	80
65013.00.00200	100	5.00	22	80

HM

DIN
1838



Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	8%
50 - 99 pcs =	10%
100 pcs =	15%


Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti	Al	GJS
----	------	-----------------------------------	-----------------------------------	----	----	-----


Solid carbide slitting saw large tooth pitch


Art. No.	D	B	d	Form B
65023.00.00001	15	0.20	5	20
65023.00.00002	15	0.30	5	20
65023.00.00003	15	0.40	5	20
65023.00.00004	15	0.50	5	20
65023.00.00005	15	0.60	5	20
65023.00.00006	15	0.70	5	20
65023.00.00007	15	0.80	5	20
65023.00.00008	15	0.90	5	20
65023.00.00009	15	1.00	5	20
65023.00.00010	15	1.10	5	20
65023.00.00011	15	1.20	5	20
65023.00.00012	15	1.30	5	20
65023.00.00013	15	1.40	5	20
65023.00.00014	15	1.50	5	20
65023.00.00015	15	1.60	5	20
65023.00.00016	15	1.70	5	20
65023.00.00017	15	1.80	5	20
65023.00.00018	15	1.90	5	20
65023.00.00019	15	2.00	5	20
65023.00.00020	15	2.50	5	20
65023.00.00021	15	3.00	5	20
65023.00.00022	15	3.50	5	20
65023.00.00023	15	4.00	5	20


Art. No.	D	B	d	Form B
65023.00.00024	20	0.20	5	20
65023.00.00025	20	0.30	5	20
65023.00.00026	20	0.40	5	20
65023.00.00027	20	0.50	5	20
65023.00.00028	20	0.60	5	20
65023.00.00029	20	0.70	5	20
65023.00.00030	20	0.80	5	20
65023.00.00031	20	0.90	5	20
65023.00.00032	20	1.00	5	20
65023.00.00033	20	1.10	5	20
65023.00.00034	20	1.20	5	20
65023.00.00035	20	1.30	5	20
65023.00.00036	20	1.40	5	20
65023.00.00037	20	1.50	5	20
65023.00.00038	20	1.60	5	20
65023.00.00039	20	1.70	5	20
65023.00.00040	20	1.80	5	20
65023.00.00041	20	1.90	5	20
65023.00.00042	20	2.00	5	20
65023.00.00043	20	2.50	5	20
65023.00.00044	20	3.00	5	20
65023.00.00045	20	3.50	5	20
65023.00.00046	20	4.00	5	20

Solid carbide slitting saw large tooth pitch


Art. No.	D	B	d	 Form B
65023.00.00047	25	0.30	8	20
65023.00.00048	25	0.40	8	20
65023.00.00049	25	0.50	8	20
65023.00.00050	25	0.60	8	20
65023.00.00051	25	0.70	8	20
65023.00.00052	25	0.80	8	20
65023.00.00053	25	0.90	8	20
65023.00.00054	25	1.00	8	20
65023.00.00055	25	1.10	8	20
65023.00.00056	25	1.20	8	20
65023.00.00057	25	1.30	8	20
65023.00.00058	25	1.40	8	20
65023.00.00059	25	1.50	8	20
65023.00.00060	25	1.60	8	20
65023.00.00061	25	1.70	8	20
65023.00.00062	25	1.80	8	16
65023.00.00063	25	1.90	8	16
65023.00.00064	25	2.00	8	16
65023.00.00065	25	2.50	8	16
65023.00.00066	25	3.00	8	16
65023.00.00067	25	3.50	8	16
65023.00.00068	25	4.00	8	16


Art. No.	D	B	d	 Form B
65023.00.00069	30	0.30	8	30
65023.00.00070	30	0.40	8	30
65023.00.00071	30	0.50	8	30
65023.00.00072	30	0.60	8	30
65023.00.00073	30	0.70	8	24
65023.00.00074	30	0.80	8	24
65023.00.00075	30	0.90	8	24
65023.00.00076	30	1.00	8	24
65023.00.00077	30	1.10	8	20
65023.00.00078	30	1.20	8	20
65023.00.00079	30	1.30	8	20
65023.00.00080	30	1.40	8	20
65023.00.00081	30	1.50	8	20
65023.00.00082	30	1.60	8	20
65023.00.00083	30	1.70	8	20
65023.00.00084	30	1.80	8	20
65023.00.00085	30	1.90	8	20
65023.00.00086	30	2.00	8	20
65023.00.00087	30	2.50	8	20
65023.00.00088	30	3.00	8	18
65023.00.00089	30	3.50	8	18
65023.00.00090	30	4.00	8	18


Art. No.	D	B	d	 Form B
65023.00.00091	40	0.30	10	40
65023.00.00092	40	0.40	10	40
65023.00.00093	40	0.50	10	40
65023.00.00094	40	0.60	10	40
65023.00.00095	40	0.70	10	32
65023.00.00096	40	0.80	10	32
65023.00.00097	40	0.90	10	32
65023.00.00098	40	1.00	10	32
65023.00.00099	40	1.10	10	32
65023.00.00100	40	1.20	10	32
65023.00.00101	40	1.30	10	32
65023.00.00102	40	1.40	10	32
65023.00.00103	40	1.50	10	32
65023.00.00104	40	1.60	10	32
65023.00.00105	40	1.70	10	32
65023.00.00106	40	1.80	10	24
65023.00.00107	40	1.90	10	24
65023.00.00108	40	2.00	10	24
65023.00.00109	40	2.50	10	24
65023.00.00110	40	3.00	10	24
65023.00.00111	40	3.50	10	24
65023.00.00112	40	4.00	10	20
65023.00.00113	40	4.50	10	20
65023.00.00114	40	5.00	10	20

Art. No.	D	B	d	 Form B
65023.00.00115	50	0.30	13	48
65023.00.00116	50	0.40	13	48
65023.00.00117	50	0.50	13	48
65023.00.00118	50	0.60	13	48
65023.00.00119	50	0.70	13	40
65023.00.00120	50	0.80	13	40
65023.00.00121	50	0.90	13	40
65023.00.00122	50	1.00	13	40
65023.00.00123	50	1.10	13	40
65023.00.00124	50	1.20	13	40
65023.00.00125	50	1.30	13	32
65023.00.00126	50	1.40	13	32
65023.00.00127	50	1.50	13	32
65023.00.00128	50	1.60	13	32
65023.00.00129	50	1.70	13	32
65023.00.00130	50	1.80	13	32
65023.00.00131	50	1.90	13	32
65023.00.00132	50	2.00	13	32
65023.00.00133	50	2.50	13	32
65023.00.00134	50	3.00	13	24
65023.00.00135	50	3.50	13	24
65023.00.00136	50	4.00	13	24
65023.00.00137	50	4.50	13	24
65023.00.00138	50	5.00	13	24

Solid carbide slitting saw large tooth pitch

Art. No.	D	B	d	 Form B
65023.00.00139	63	0.30	16	64
65023.00.00140	63	0.40	16	64
65023.00.00141	63	0.50	16	64
65023.00.00142	63	0.60	16	48
65023.00.00143	63	0.70	16	48
65023.00.00144	63	0.80	16	48
65023.00.00145	63	0.90	16	48
65023.00.00146	63	1.00	16	48
65023.00.00147	63	1.10	16	40
65023.00.00148	63	1.20	16	40
65023.00.00149	63	1.30	16	40
65023.00.00150	63	1.40	16	40
65023.00.00151	63	1.50	16	40
65023.00.00152	63	1.60	16	40
65023.00.00153	63	1.70	16	40
65023.00.00154	63	1.80	16	40
65023.00.00155	63	1.90	16	40
65023.00.00156	63	2.00	16	40
65023.00.00157	63	2.50	16	32
65023.00.00158	63	3.00	16	32
65023.00.00159	63	3.50	16	32
65023.00.00160	63	4.00	16	32
65023.00.00161	63	4.50	16	32
65023.00.00162	63	5.00	16	32

Art. No.	D	B	d	 Form B
65023.00.00163	80	0.80	22	64
65023.00.00164	80	0.90	22	48
65023.00.00165	80	1.00	22	48
65023.00.00166	80	1.10	22	48
65023.00.00167	80	1.20	22	48
65023.00.00168	80	1.30	22	48
65023.00.00169	80	1.40	22	48
65023.00.00170	80	1.50	22	48
65023.00.00171	80	1.60	22	48
65023.00.00172	80	1.70	22	40
65023.00.00173	80	1.80	22	40
65023.00.00174	80	1.90	22	40
65023.00.00175	80	2.00	22	40
65023.00.00176	80	2.50	22	40
65023.00.00177	80	3.00	22	40
65023.00.00178	80	3.50	22	32
65023.00.00179	80	4.00	22	32
65023.00.00180	80	4.50	22	32
65023.00.00181	80	5.00	22	32

Art. No.	D	B	d	 Form B
65023.00.00182	100	1.00	22	64
65023.00.00183	100	1.10	22	64
65023.00.00184	100	1.20	22	64
65023.00.00185	100	1.30	22	48
65023.00.00186	100	1.40	22	48
65023.00.00187	100	1.50	22	48
65023.00.00188	100	1.60	22	48
65023.00.00189	100	1.70	22	48
65023.00.00190	100	0.80	22	48
65023.00.00191	100	1.90	22	48
65023.00.00192	100	2.00	22	48
65023.00.00193	100	2.50	22	48
65023.00.00194	100	3.00	22	40
65023.00.00195	100	3.50	22	40
65023.00.00196	100	4.00	22	40
65023.00.00197	100	4.50	22	40
65023.00.00198	100	5.00	22	40

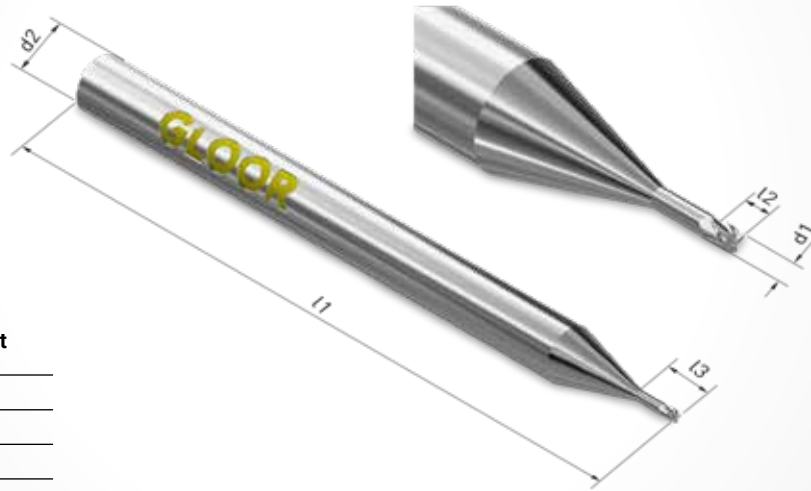
Solid carbide slitting saws

- Gloor slitting saws fine and large tooth pitch according to DIN 1837 and 1838, achieve first-class results in slitting and cutting work.
- The Gloor standard slitting saws have the diameter range from 15mm - 100mm and are made of ultra-fine grain carbide.
- **Available on request:**
 - Coating
 - Keyway
 - Intermediate size
 - Extra fine pitch
 - Tooth forms: AW, BW, C according to drawing
 - Special tooth shapes: Staggered tooth, two- and three cutting faces
 - Other special versions according to customer can be produced.
 - In a diameter range of 4mm - 160mm

Cutting conditions and processing instructions

Material	RPM (1/min)						Feed per tooth fz (mm)					
	Steel<850N/mm2	Steel>850H/mm2	Inox	Titan	Alu	Cu	Steel<850N/mm2	Steel>850H/mm2	Inox	Titan	Alu	Cu
Ø												
15	4'050	2'900	2'600	2'600	10'500	6'500						
20	3'000	2'150	2'000	2'000	8'000	4'800						
25	2'500	1'700	1'600	1'600	6'500	3'900						
30	2'000	1'450	1'350	1'350	5'500	3'200						
40	1'500	1'100	1'000	1'000	4'000	2'400	0.03	0.02	0.02	0.03	0.04	0.035
50	1'200	870	800	800	3'200	1'900						
63	960	700	650	650	2'500	1'500						
80	760	550	500	500	2'000	1'200						
100	600	430	400	400	1'600	960						

Material	Cutting speed Vc m/min	Lubrication
Steel<850N/mm2	190	Emulsion/Cutting-oil
Steel>850H/mm2	135	Emulsion/Cutting-oil
Inox	125	Emulsion/Cutting-oil
Titan	125	Emulsion
Alu	500	Emulsion/Petrol
Cu	300	Dry/Emulsion



Quantity	Discount
10 - 24 pcs =	5%
25 - 49 pcs =	8%
50 - 99 pcs =	10%
100 - 199 pcs =	12%
200 - 299 pcs =	15%

INOX	Steel >850 N / mm ²	Steel <850 N / mm ²	Ti
-------------	--	--	-----------

Solid carbide end mill for Torx

Art. No.	Torx	d1	d2	l ₁	l ₂	l ₃			
65153.20.00001	T4	0.2	3h6	38	0.25	0.60	3	0.03	GL-23
65153.20.00002	T4	0.2	3h6	38	0.70	0.90	3	0.03	GL-23
65153.20.00003	T6	0.3	3h6	38	0.40	0.90	3	0.03	GL-23
65153.20.00004	T6	0.3	3h6	38	0.90	1.50	3	0.03	GL-23
65153.20.00005	T8	0.4	3h6	38	0.60	1.50	4	0.05	GL-23
65153.20.00006	T10	0.5	3h6	38	0.60	2.00	4	0.05	GL-23
65153.20.00007	T15	0.6	3h6	38	0.80	2.00	4	0.05	GL-23
65153.20.00008	T25	0.8	3h6	38	1.10	3.00	4	0.05	GL-23

Solid carbide end mill for Torx

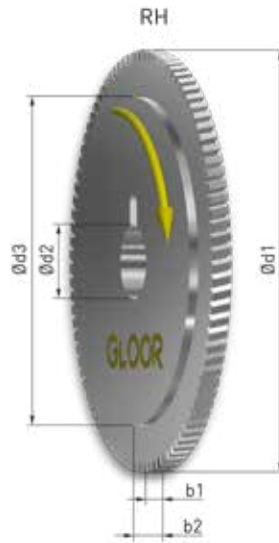
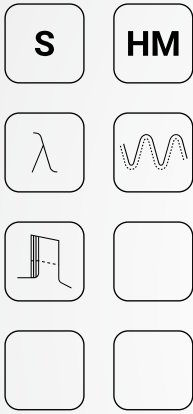
- Gloor standard end mill for Torx meet the highest requirements, offer first-class quality and are specially designed for milling the Torx contour in titanium and stainless steel for the medical industry.
- Due to ideal precision in design and concentricity the Gloor Torx cutters are predestined for process-reliable milling in series production.
- Lapped cutting edges with minimal protective chamfer, in connection with an innovative coating, enable top surfaces and tool life.
- **Available on request:**
 - Other dimensions and designs.
 - Other manufacturing processes for the production of Torx screws.

Cutting conditions and processing instructions

Material	Cutting speed Vc m/min	Ø0.2	Ø0.3	RPM (1/min)	Ø0.4	Ø0.5	Ø0.6	Ø0.80	Ø1
Steel<850N/mm2	40-70	65000	62000	56000	45000	37000	28000	23000	
Steel>850N/mm2	38-60	60000	55000	40000	34000	30000	24000	20000	
INOX	35-50	55000	50000	36000	32000	27000	20000	17000	
Titan	35-50	55000	50000	36000	320000	27000	20000	17000	

Material	Cutting speed Vc m/min	Ø0.2	Ø0.3	Feed mm/U	Ø0.4	Ø0.5	Ø0.6	Ø0.80	Ø1
Steel<850N/mm2	40-70	0.0015	0.0018	0.0220	0.0025	0.0030	0.0035	0.0045	
Steel>850N/mm2	38-60	0.0012	0.0016	0.0020	0.0022	0.0027	0.0032	0.0042	
INOX	35-50	0.0010	0.0014	0.0018	0.0020	0.0025	0.0030	0.0040	
Titan	35-50	0.0015	0.0018	0.0022	0.0025	0.0030	0.0035	0.0045	

Material	Lubrication
Steel<850N/mm2	Emulsion/Cutting-oil
Steel>850H/mm2	Emulsion/Cutting-oil
Inox	Emulsion/Cutting-oil
Titan	Emulsion



Quantity	Discount
ab 2-4 pcs =	5%
ab 5-9 pcs =	8%
ab 10 pcs =	10%

Cu	INOX	Steel >850 N / mm ²	Steel <850 N / mm ²
-----------	-------------	--	--

Solid carbide thread milling cutter for lathe




























Art. No.	S	P	d1	d2	b2	b1	d3	↻
65201.00.00001	0.40	0.100	45	8	3	1.00	36	RH
65201.00.00002	0.50	0.125	45	8	3	1.10	36	RH
65201.00.00003	0.60	0.150	45	8	3	1.35	36	RH
65201.00.00004	0.60	0.150	45	8	3	3.00	36	RH
65201.00.00005	0.70	0.175	45	8	3	1.60	36	RH
65201.00.00006	0.70	0.175	45	8	3	3.00	36	RH
65201.00.00007	0.80	0.200	45	8	3	1.30	36	RH
65201.00.00008	0.80	0.200	45	8	3	1.80	36	RH
65201.00.00009	0.80	0.200	45	8	3	3.00	36	RH
65201.00.00010	0.90	0.225	45	8	3	2.00	36	RH
65201.00.00011	0.90	0.225	45	8	3	3.00	36	RH
65201.00.00012	1.00	0.250	45	8	3	3.00	36	RH
65201.00.00013	1.40	0.300	45	8	3	3.00	36	RH

* For larger tool wear and more complex regrinding = price on request

Solid carbide thread milling cutter for lathe

- Fine-grain carbide with excellent balance of hardness and toughness - resulting in high performance.
- State-of-the-art grinding processes guarantee lasting quality and maximum profile accuracy over the entire tool life
- Long service life and easy regrindability as a result of a constant profile
- Reduced burr formation due to optimum cutting edge geometry
- **Available on request:**
 - Different standards available (M, MF, NIHS, etc.)
 - Other outer \varnothing available ($\varnothing 28\text{mm}$, $\varnothing 40\text{mm}$, etc.)
 - More teeth can be produced
 - Single and multiple starts grindable
 - Full profile and software corrected profiles possible
 - Can be designed for left and right hand threads
 - Coating on request
 - Can be used as a milling set

Legend

	Metric DIN		Number of teeth
	NIHS 06-02		Coating
	ISO 60°		through hole / blind hole
	Carbide		internal thread milling
	Cylindrical shank according DIN 6535 form HA		Torx
	Coolant hole		tap drill hole
	Helix		copper
	Corner radius		Inox steel
	Polised		steel tensile strength
	Center milling		steel tensile strength
	Norm		Titan
	Norm		Aluminium
	Full profile		Cast iron
	Constant profile		

Legend

Whirling end mill

P	Thread lead
l1	Total length
l2	Useful length
d1	Diameter of milling cutter
d2	Shank diameter

Thread end mill

t	Thread lead
d1	Diameter of milling cutter
d2	Shank diameter
l1	Total length
l2	cutting edge length

Slitting saws

D	Outside Diameter Width
B	Width
d	Bore diameter

End mill for Torx

d1	Diameter of milling cutter
d2	Shank diameter
l1	Total length
l2	Useful length
l3	cutting edge length

Thread milling cutter for lathe

d1	Diameter of milling cutter
d2	Bore diameter
b2	Total width
b1	Useful width
d3	Collar diameter

Notes on cutting values

If the specified cutting speed (v_c), respectively the speed (n), cannot be achieved with the available spindle, the maximum speed (n) must be taken and keep the recommended feed (f_z). Cutting depths for high reduce the cutting speed (v_c), respectively the speed (n) and keep the recommended feed (f_z). Cutting depths for low (e.g. for Torx 0.2xØ), the cutting speed (V_c) or the speed (n) can be increased and keep the recommended feed rate (f_z).

Location:

By car

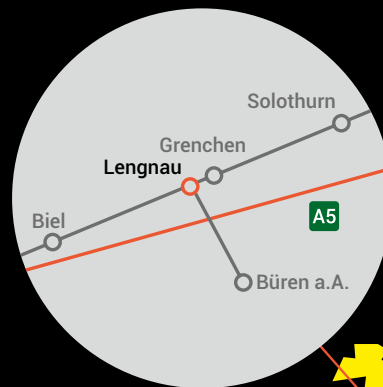
From Zurich: Motorway A1 to Solothurn > motorway A5 towards Biel to exit Lengnau.

From Lausanne: Motorway A1 to Yverdon > motorway A5 to Biel > motorway A5 towards Solothurn to exit Lengnau.

In Lengnau: Follow the signs.

By train

About 5 minutes' walk from Lengnau station to wards the sports ground.



Gloor Precision Tools Ltd.
Lindenweg 15c
2543 Lengnau
Switzerland
Phone +41 32 653 21 61
info@gloor-tools.ch
www.gloor-tools.ch