

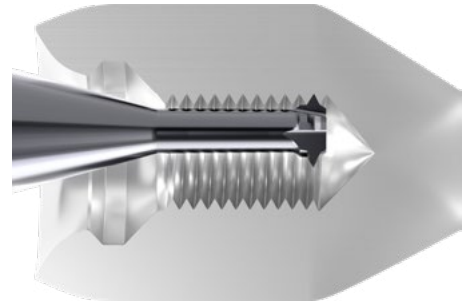
Single-profile and micro thread mills



TECHNICAL DATA

High-quality tools for thread milling in small parts

WhizThrill single-profile and micro thread mills are the best precision tools for producing fine threads in small components. With their precise cutting geometry and minimal cutting pressure, these thread mills ensure exceptional accuracy and consistency in every operation



BENEFITS

- Innovative shank design: Offers increased stability.
- High-quality coated carbide grade (B9): Ensures extra sharp cutting edges.
- Versatile thread milling options: Enables threading down to M1 (full profile) and M0.5 (partial profile) with minimal cutting forces, resulting in an excellent surface finish and extended tool life.
- Optimized exit angle: The 15° exit angle to the full diameter often allows shorter thread mills to be selected, which is particularly useful when threading dental implants.
- Custom solutions available: Special designs, micro thread mills with single or double deburring and additional flutes can be provided on request.

WHIZGUIDE

CHOOSE THE IDEAL MICRO THREAD MILL

1

WHEN TO USE A SINGLE-FLUTE THREAD MILL

- Ideal for milling micro or extra-long threads, as it minimizes cutting forces and thus ensures excellent thread quality and straightness.
- Perfect for milling hard materials, as it significantly reduces chatter.
- Suitable for different thread profiles, so that various thread types can be machined.

2

PARTIAL PROFILE VS. FULL PROFILE

- Partial profile: Best suited for long threads, harder materials and unstable machining conditions. This tool can be used for several thread sizes.
- Full profile: Essential when tight tolerances for outer and core diameter are required. It improves the quality of the thread form compared to the partial profile.

3

GRADES VS. MATERIAL

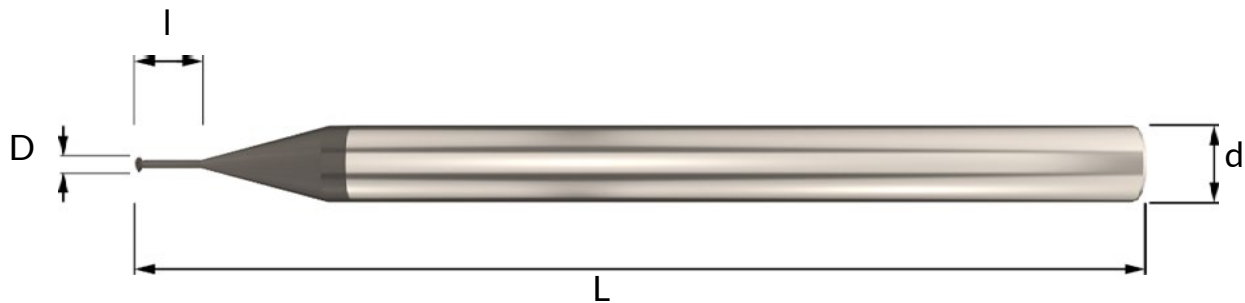
- WhizThrill uncoated grade 9M: A submicron carbide ISO K20-K30 that performs exceptionally well in soft materials.
- B9 coating: An AlCrN coating that provides additional cutting edge sharpness. Compared to an uncoated thread mill, tool life is extended 4 to 5 times when cutting titanium or stainless steel.

4

DETERMINE LENGTHS

- Always choose the shortest possible tool, as micro thread mills lose considerable rigidity with increasing length.
- WhizThrill has an exit angle of 15° from the core dimension (D) to the shank (d). If possible, create the chamfer before thread milling in order to calculate the thread length exactly from the end.

THREAD MILL TABLE



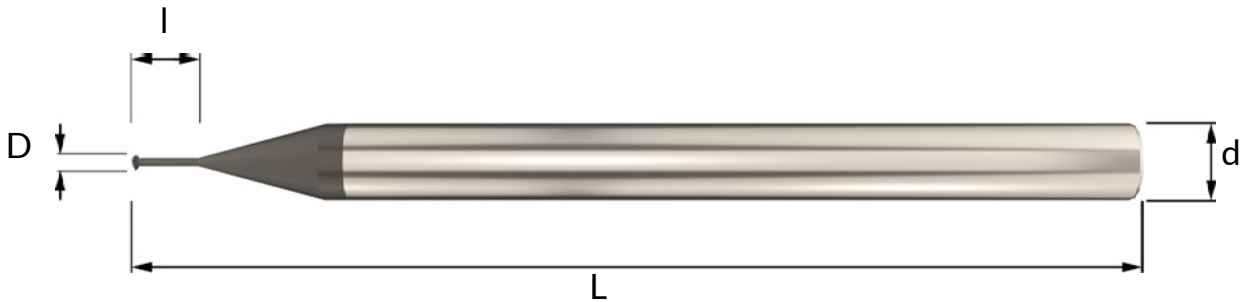
PARTIAL-PROFILE MICRO THREAD MILLS | NS

Thread mills	M coarse	M fine	S&UNM	UNC	UNF	I	D	d	Flutes	L	9M	A9	B9
NS03003C1.3 P60	M0.5	M0.5	0.5	#0000-160		1.3	0.36	3	3	39	o	-	•
NS03004C1.5 P60	M0.6	M0.6	0.6			1.5	0.43	3	3	39	o	-	•
NS03005C1.4 P60	M0.8	M0.8	0.8	#000-120		1.4	0.57	3	3	39	o	-	•
NS03005C2.0 P60	M0.8	M0.8	0.8	#000-120		2	0.57	3	3	39	o	-	•
NS03005C2.7 P60	M0.8	M0.8	0.8	#000-120		2.7	0.57	3	3	39	o	-	•
NS03005C3.5 P60	M0.8	M0.8	0.8	#000-120		3.5	0.57	3	3	39	o	-	o
NS03007C1.1 P60	M1.0	M1.0	1			1.1	0.71	3	3	39	o	-	•
NS03007C1.7 P60	M1.0	M1.0	1			1.7	0.71	3	3	39	o	-	•
NS03007C2.1 P60	M1.0	M1.0	1			2.1	0.71	3	3	39	o	-	•
NS03007C2.5 P60	M1.0	M1.0	1			2.5	0.71	3	3	39	o	-	•
NS03007C3.2 P60	M1.0	M1.0	1			3.2	0.71	3	3	39	o	-	•
NS03009C2.0 P60	M1.2	M1.2	1.2	#00-95<		2	0.91	3	3	39	o	-	•
NS03009C2.9 P60	M1.2	M1.2	1.2	#00-95<		2.9	0.91	3	3	39	o	-	•
NS03009C3.9 P60	M1.2	M1.2	1.2	#00-95<		3.9	0.91	3	3	39	o	-	•
NS03010C2.2 P60	M1.4	M1.4	1.4			2.2	1.05	3	3	39	o	-	•
NS03010C3.3 P60	M1.4	M1.4	1.4			3.3	1.05	3	3	39	o	-	•
NS03010C4.4 P60	M1.4	M1.4	1.4			4.4	1.05	3	3	39	o	-	•
NS03011D2.5 P60	M1.6	M1.4X0.2		#0-80		2.5	1.18	3	4	39	o	-	•
NS03011D3.6 P60	M1.6	M1.4X0.2		#0-80		3.6	1.18	3	4	39	o	-	•
NS03011D5.1 P60	M1.6	M1.4X0.2		#0-80		5.1	1.18	3	4	39	o	-	•
NS03013D2.8 P60	M1.8	M1.6X0.2		#1		2.8	1.39	3	4	39	o	-	•
NS03013D4.2 P60	M1.8	M1.6X0.2		#1		4.2	1.39	3	4	39	o	-	•
NS03013D5.6 P60	M1.8	M1.6X0.2		#1		5.6	1.39	3	4	39	o	-	•
NS03015D3.2 P60	M2.0	M1.8		#2		3.2	1.54	3	4	39	o	-	•
NS03015D3.8 P60	M2.0	M1.8		#2		3.8	1.54	3	4	39	o	-	•
NS03015D4.6 P60	M2.0	M1.8		#2		4.6	1.54	3	4	39	o	-	•
NS03015D5.4 P60	M2.0	M1.8		#2		5.4	1.54	3	4	39	o	-	•
NS03015D6.2 P60	M2.0	M1.8		#2		6.2	1.54	3	4	39	o	-	•
NS03019D4.3 P60	M2.5	M2.2X0.25		#3		4.3	1.93	3	4	39	o	-	•
NS03019D6.2 P60	M2.5	M2.2X0.25		#3		6.2	1.93	3	4	39	o	-	•
NS03021D4.9 P60		M2.5		#4		4.9	2.12	3	4	39	o	-	•
NS03021D7.1 P60		M2.5		#4		7.1	2.12	3	4	39	o	-	•
NS03023D5.4 P60	M3	M3		#5		5.4	2.38	3	4	39	o	-	•
NS03023D7.8 P60	M3	M3		#5		7.8	2.38	3	4	39	o	-	•
NS03026D6.1 P60	M3.5	M3		#6		6.1	2.62	3	4	39	o	-	•
NS03026D8.7 P60	M3.5	M3		#6		8.7	2.62	3	4	39	o	-	•
NS0303D7.1 P60	M4	M3.5-M4		#8		7.1	3	3	4	39	o	-	•
NS0303D10.2 P60	M4	M3.5-M4		#8		10.2	3	3	4	39	o	-	•
NS04036D8.3 P60	M4.5	M4.5		#10		8.3	3.65	4	4	51	o	-	•
NS04036D12.0 P60	M4.5	M4.5		#10		12	3.65	4	4	51	o	-	•
NS0404D10.0 P60	M5-M6	M5-M6		#12-1/4		10	4	4	4	51	o	-	•
NS0404D14.5 P60	M5-M6	M5-M6		#12-1/4		14.5	4	4	4	51	o	-	•
NS06045D13 P60 A9	M6 (2XD)	M6		5/16 - 3/8		13	4.5	6	4	63	-	•	-
NS06045D19 P60 A9	M6 (3XD)	M6		5/16 - 3/8		19	4.5	6	4	76	-	•	-
NS0606E17 P60 A9	M8 (2XD)	M8		7/16 - 1/2		17.3	6	6	5	63	-	•	-
NS0606E25 P60 A9	M8 (3XD)	M8		7/16 - 1/2		25.3	6	6	5	76	-	•	-

• Available from stock o Delivery on request, - Not available

Single-profile and micro thread mills

THREAD MILL TABLE

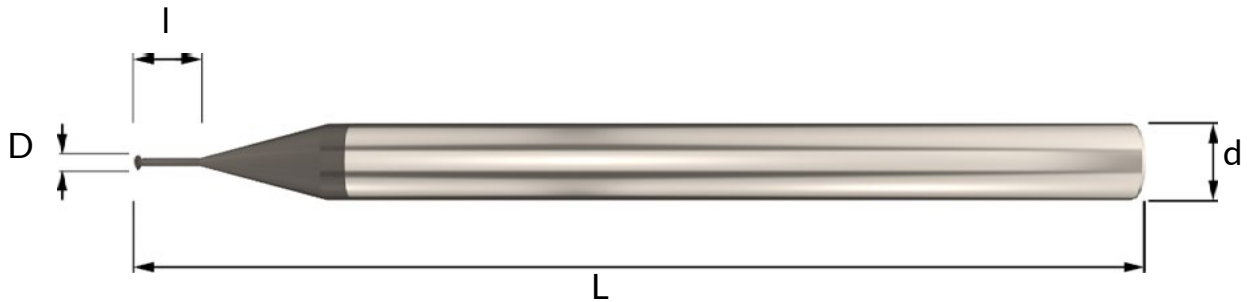


FULL-PROFILE MICRO THREAD MILLS ISO | NT-ISO M

Thread mills	M coarse	Pitch	d	D	Flutes	I	L	9M	B9
NT03007C1.7-0.25ISO	M1.0	0.25	3	0.72	3	1.7	39	o	•
NT03007C2.5-0.25ISO	M1.0	0.25	3	0.72	3	2.5	39	o	•
NT03007C3.5-0.25ISO	M1.0	0.25	3	0.72	3	3.5	39	o	•
NT03009C2.0-0.25ISO	M1.2	0.25	3	0.92	3	2	39	o	•
NT03009C2.9-0.25ISO	M1.2	0.25	3	0.92	3	2.9	39	o	•
NT03009C3.9-0.25ISO	M1.2	0.25	3	0.92	3	3.9	39	o	•
NT03010C2.3-0.3ISO	M1.4	0.3	3	1.06	3	2.3	39	o	•
NT03010C3.3-0.3ISO	M1.4	0.3	3	1.06	3	3.3	39	o	•
NT03010C4.4-0.3ISO	M1.4	0.3	3	1.06	3	4.4	39	o	•
NT03011D2.5-0.35ISO	M1.6	0.35	3	1.2	4	2.5	39	o	•
NT03011D3.6-0.35ISO	M1.6	0.35	3	1.2	4	3.6	39	o	•
NT03011D5.1-0.35ISO	M1.6	0.35	3	1.2	4	5.1	39	o	•
NT03013D2.8-0.35ISO	M1.8	0.35	3	1.4	4	2.8	39	o	•
NT03013D4.2-0.35ISO	M1.8	0.35	3	1.4	4	4.2	39	o	•
NT03013D5.6-0.35ISO	M1.8	0.35	3	1.4	4	5.6	39	o	•
NT03015D3.2-0.4ISO	M2.0	0.4	3	1.55	4	3.2	39	o	•
NT03015D4.7-0.4ISO	M2.0	0.4	3	1.55	4	4.7	39	o	•
NT03015D6.2-0.4ISO	M2.0	0.4	3	1.55	4	6.2	39	o	•

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THREAD MILL TABLE



FULL-PROFILE MICRO THREAD MILLS S/UNM | NT-ISO S

Thread mills	ISO S-1501	UNM	Pitch	d	D	Flutes	I	L	9M	B9
NT03007C2.5-S1.0UNM	S1.0	1.00 UNM	0.25	3	0.73	3	2.5	39	○	●
NT03009C2.9-S1.2UNM	S1.2	1.20 UNM	0.25	3	0.93	3	2.9	39	○	●
NT03010C3.3-S1.4UNM	S1.4	1.40 UNM	0.3	3	1.08	3	3.3	39	○	●

● Available from stock ○ Delivery on request, - Not available

FULL-PROFILE MICRO THREAD MILLS UN | NT-UN

Thread mills	UNC UNF	#	TPI	d	D	Flutes	I	L	9M	B9
NT03011C3.3-80UN	UNF	NO.0	80	3	1.16	3	3.3	39	○	●
NT03014D4.4-72UN	UNF	NO.1	72	3	1.45	4	4.4	39	○	●
NT03014D4.4-64UN	UNC	NO.1	64	3	1.41	4	4.4	39	○	●
NT03017D5.2-64UN	UNF	NO.2	64	3	1.74	4	5.2	39	○	●
NT03016D5.2-56UN	UNC	NO.2	56	3	1.68	4	5.2	39	○	●

● Available from stock ○ Delivery on request, - Not available