

# Thread milling cutter for easy-to-machine materials



Tool material	Solid carbide				
Type	TM SP	TMU SP	TMC SP	DTMC SP	DTMC SP
Surface finish	○	○	○	○   ●	○   ●
Cooling	a	a	a	a	⊗

Material examples	
Material no.	Abbreviation
<b>Al and Al-alloys</b>	
3.0250	Al 99,5H
3.0280	AL 99,8H
3.3308	Al99,9Mg0,5
<b>Al wrought alloys</b>	
3.2315	AlMgSi1
3.1655	AlCuMgPb
3.4335	AlZn4,5Mg1
<b>Al cast alloys ≤ 10% Si</b>	
3.2134	GD-AlSi5Cu1Mg
3.2162	GD-AlSi8Cu3
3.2373	G-AlSi9Mg
<b>Cast iron</b>	
0.6015 (GG15)	EN-GJL150
0.6025 (GG25)	EN-GJL250
0.6040 (GG40)	EN-ILZ
<b>Spheroidal graphite cast iron</b>	
0.7040 (GGG40)	EN-GJS-400-15
0.7060 (GGG60)	EN-GJS-600-3
<b>Brass, short-chipping</b>	
2.0380	CuZn39Pb2
2.0401	CuZn39Pb3
2.0410	CuZn43Pb2
<b>Brass, long-chipping</b>	
2.0250	CuZn20
2.0280	CuZn33
2.0332	CuZn37Pb0,5
<b>Duroplastics</b>	
-	Bakelit Resopal Pertinax Moltopren
<b>Thermoplastics</b>	
-	Plexiglas Hostalor Novodur Makralon
<b>Magnesium-alloys</b>	
3.5200	MgMn2
3.5612	MgAl6Zn
3.5812	MgAl8Zn
3.5812.05	GDMgAl8Zn1
3.5612.05	GDMgAl6Zn1
3.5662.01	GMgAl6
<b>Titanium</b>	
3.7025	Ti
3.7065	Ti

Rec. parameters		see table "Cutting recommendations"				
Thread type	Thread depth	Guhring no. Ø-range Prices on page				
<b>M</b>	1.5 x D			3510 M3 - M20 p. 386	3775 3777 M4 - M16 p. 369	3774 3776 M3 - M16 p. 368/369
	2.0 x D	3734 M6 - M20 p. 380		3511 M3 - M20 p. 388	3779 3781 M4 - M16 p. 371	3778 3780 M3 - M16 p. 370/371
	2.5 x D	3735 M6 - M20 p. 381		3759 M3 - M20 p. 390	3783 3785 M4 - M16 p. 373	3782 3784 M3 - M16 p. 372/373
	16/20/25/ 33 mm		3523 ≥14 - ≥30 p. 404			
<b>MF</b>	1.5 x D			3512 M4x0,5 - M16x1,5 p. 392	3787 3789 M6x0,75 - M16x1,5 p. 375	3786 3788 M4x0,5 - M16x1,5 p. 374/375
	2.0 x D			3513 M4x0,5 - M16x1,5 p. 393	3791 3793 M6x0,75..M16x1,5 p. 377	3790 3792 M4x0,5 - M16x1,5 p. 376/377
	2.5 x D			3762 M4x0,5 - M16x1,5 p. 394	3795 3797 M8x0,75 - M16x1,5 p. 379	3794 3796 M8x0,75 - M16x1,5 p. 378/379
	16/20/25/ 33 mm		3523 ≥14 - ≥30 p. 404			
<b>UNC</b>	1.5 x D			3516 1/4-20 - 1/2-13 p. 395		
	2.0 x D			3517 1/4-20 - 1/2-13 p. 396		
<b>UNF</b>	1.5 x D			3518 1/4-28 - 1/2-20 p. 397		
	2.0 x D			3519 1/4-28 - 1/2-20 p. 398		
<b>G BSP</b>	1.5 x D			3514 G1/8 - G3/8 p. 399		
	2.0 x D	3745 G1/8 - G3/8 p. 382		3515 G1/8 - G3/8 p. 400		
	2.5 x D	3746 G1/8 - G3/8 p. ...383		3765 G1/8 - G3/8 p. 401		
	16/20/25/ 33 mm		3524 ≥1/4 - ≥1 p. 405			
<b>NPT</b>	std. length	3753 1/8 - 3/8 p. 384	3768 ≥1/2 - ≥1 p. 406	3520 1/8 - 3/8 p. 402		
<b>NPTF</b>	std. length	3756 1/8 - 3/8 p. 385	3771 ≥1/2 - ≥1 p. 407	3521 1/8 - 3/8 p. 403		

**a** With internal cooling, tools with axial coolant duct are, as a rule, only suitable for the machining of blind holes. Without internal cooling, i.e. external cooling, the tools are also suitable for through holes.

Thread Milling Cutters Compass

# Thread milling cutter for steels and Nickel-alloys



Tool material	Solid carbide		
Type	TM SP	TMU SP	TMC SP
Surface finish			
Cooling			

Material examples	
Material no.	Abbreviation
<b>Structural steels</b>	
1.0035	S 185 (St 33)
1.0039	S 235 JRH
1.0036	S 235JRG1+CR
1.0060	E 335 (St 60-2)
<b>Free cutting steels</b>	
1.0718	11SMnPb30
1.0721	10S20
1.0758	60SPb20
1.0726	35S20
<b>Case hardened steels</b>	
1.0401	(C 15)
1.7016	17 CR3
1.7131	16MnCr5
1.5919	15CrNi6
<b>Unalloyed heat-treatable steels</b>	
1.0402	C 22
1.1151	C22E (Ck 22)
1.0503	C 45
1.1191	C45E (Ck 45)
<b>Alloyed heat-treatable steels</b>	
1.6511	36 CrNiMo 4
1.7033	34 Cr 4
1.7225	42 CrMo 4
<b>Tool steels</b>	
1.2316	X 36 CrMo 17
1.2067	10 S20
<b>High speed tool steels</b>	
1.3343	HS 6-5-2
1.3344	HS 6-5-3
1.3243	HS 6-5-2-5
1.3247	HS 2-19-1-8
<b>Sulphured steels</b>	
1.4005	X 12 CrS 13
1.4104	X 14 CrMo S 17
1.4105	X 6 CrMo S 17
1.4305	X 8CrNi S 18-9
<b>Austenitic steels</b>	
1.4300	X 12 CrNi 18-8
1.4301	X 5 CrNi 18-10
1.4541	X 6 CrNiTi 18-10
<b>Martensitic steels</b>	
1.4057	X 17 CrNi 16-2
1.4112	X 90 CrMoV 18
1.4006	X 12 Cr 13
<b>Ferritic steels</b>	
1.4000	X 6 Cr 13
1.4008	GX7CrNiMo12-1
1.4113	X 6 CrMo 17-1
<b>Special alloys</b>	
2.4610	Hastelloy C4
2.4876	Incoloy 800
2.4816	Inconel 600
2.4668	Inconel 718
2.4634	Nimonic 105
	CuNi12Zn24
	CuNi18Zn20

Rec. parameters		see table "Cutting recommendations"		
Thread type	Thread depth	Guhring no. $\emptyset$ -range Prices on page		
<b>M</b>	1.5 x D			<b>3525</b> M3 - M20 p. 387
	2.0 x D	<b>3737</b> M6 - M20 p. 380		<b>3526</b> M3 - M20 p. 389
	2.5 x D	<b>3740</b> M6 - M20 p. 381		<b>3760</b> M3 - M20 p. 391
	16/20/25/ 33 mm		<b>3541</b> $\geq 14 - \geq 30$ p. 404	
<b>MF</b>	1.5 x D			<b>3527</b> M4x0.5 - M16x1.5 p. 392
	2.0 x D			<b>3528</b> M4x0.5 - M16x1.5 p. 393
	2.5 x D			<b>3763</b> M4x0.5 - M16x1.5 p. 394
	16/20/25/ 33 mm		<b>3541</b> $\geq 14 - \geq 30$ p. 404	
<b>UNC</b>	1.5 x D			<b>3534</b> 1/4-20 - 1/2-13 p. 395
	2.0 x D			<b>3535</b> 1/4-20 - 1/2-13 p. 396
<b>UNF</b>	1.5 x D			<b>3536</b> 1/4-28 - 1/2-20 p. 397
	2.0 x D			<b>3537</b> 1/4-28 - 1/2-20 p. 398
<b>G BSP</b>	1.5 x D			<b>3529</b> G1/8 - G3/8 p. 399
	2.0 x D	<b>3748</b> G1/8 - G3/8 p. 382		<b>3533</b> G1/8 - G3/8 p. 400
	2.5 x D	<b>3750</b> G1/8 - G3/8 p. 383		<b>3766</b> G1/8 - G3/8 p. 401
	16/20/25/ 33 mm		<b>3542</b> $\geq 1/4 - \geq 1$ p. 405	
<b>NPT</b>	std. length	<b>3754</b> 1/8 - 3/8 p. 384	<b>3769</b> $\geq 1/2 - \geq 1$ p. 406	<b>3538</b> 1/8 - 3/8 p. 402
<b>NPTF</b>	std. length	<b>3757</b> 1/8 - 3/8 p. 385	<b>3772</b> $\geq 1/2 - \geq 1$ p. 407	<b>3539</b> 1/8 - 3/8 p. 403

With internal cooling, tools with axial coolant duct are, as a rule, only suitable for the machining of blind holes. Without internal cooling, i.e. external cooling, the tools are also suitable for through holes.

- bright
- steam tempered
- nitrided
- TiAlN
- TiCN
- TiN
- AlCrN
- MolyGlide

# Thread milling cutter for non-ferrous metals



Through holes and blind holes

Tool material	Solid carbide		
Type	TM SP	TMU SP	TMC SP
Surface finish			
Cooling			

Material examples	
Material no.	Abbreviation
<b>Al cast alloys &gt; 10% Si</b>	
3.2581	G-AISi12
3.2583	G-AISi12Cu
3.2581	G-AISi10Mg
<b>Malleable cast iron</b>	
0.8035	EN-GJMW-350-4
0.8040	EN-GJMW-400-5
0.8135	EN-GJMB-350-10
<b>Spheroidal graphite cast iron</b>	
0.7040 (GGG40)	EN-GJS-400-15
0.7060 (GGG60)	EN-GJS-600-3
<b>Cast iron with vermicular graphite</b>	
-	GGV
<b>Glass-/carbon-reinforced plastics</b>	
-	Polypropylen GFK CFK
<b>Titanium-alloys</b>	
3.7115	TiAl 5Sn2
3.7165	TiAl 6 V4

With internal cooling, tools with axial coolant duct are, as a rule, only suitable for the machining of blind holes. Without internal cooling, i.e. external cooling, the tools are also suitable for through holes.

Rec. parameters		see table "Cutting recommendations"		
Thread type	Thread depth	Guhring no. Ø-range Prices on page		
<b>M</b>	1.5 x D			<b>3543</b> M3 - M20 p. 387
	2.0 x D	<b>3743</b> M6 - M20 p. 380		<b>3544</b> M3 - M20 p. 389
	2.5 x D	<b>3744</b> M6 - M20 p. 381		<b>3761</b> M3 - M20 p. 391
	16/20/25/ 33 mm		<b>3556</b> ≥14 - ≥30 p. 404	
<b>MF</b>	1.5 x D			<b>3545</b> M4x0.5 - M16x1.5 p. 392
	2.0 x D			<b>3546</b> M4x0.5 - M16x1.5 p. 393
	2.5 x D			<b>3764</b> M4x0.5 - M16x1.5 p. 394
	16/20/25/ 33 mm		<b>3556</b> ≥14 - ≥30 p. 404	
<b>UNC</b>	1.5 x D			<b>3549</b> 1/4-20 - 1/2-13 p. 395
	2.0 x D			<b>3550</b> 1/4-20 - 1/2-13 p. 396
<b>UNF</b>	1.5 x D			<b>3551</b> 1/4-28 - 1/2-20 p. 397
	2.0 x D			<b>3552</b> 1/4-28 - 1/2-20 p. 398
<b>G BSP</b>	1.5 x D			<b>3547</b> G1/8 - G3/8 p. 399
	2.0 x D	<b>3751</b> G1/8 - G3/8 p. 382		<b>3548</b> G1/8 - G3/8 p. 400
	2.5 x D	<b>3752</b> G1/8 - G3/8 p. 383		<b>3767</b> G1/8 - G3/8 p. 401
	16/20/25/ 33 mm		<b>3557</b> ≥1/4 - ≥1 p. 405	
<b>NPT</b>	std. length	<b>3755</b> 1/8 - 3/8 p. 384	<b>3770</b> ≥1/2 - ≥1 p. 406	<b>3553</b> 1/8 - 3/8 p. 402
<b>NPTF</b>	std. length	<b>3758</b> 1/8 - 3/8 p. 385	<b>3773</b> ≥1/2 - ≥1 p. 407	<b>3554</b> 1/8 - 3/8 p. 403

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