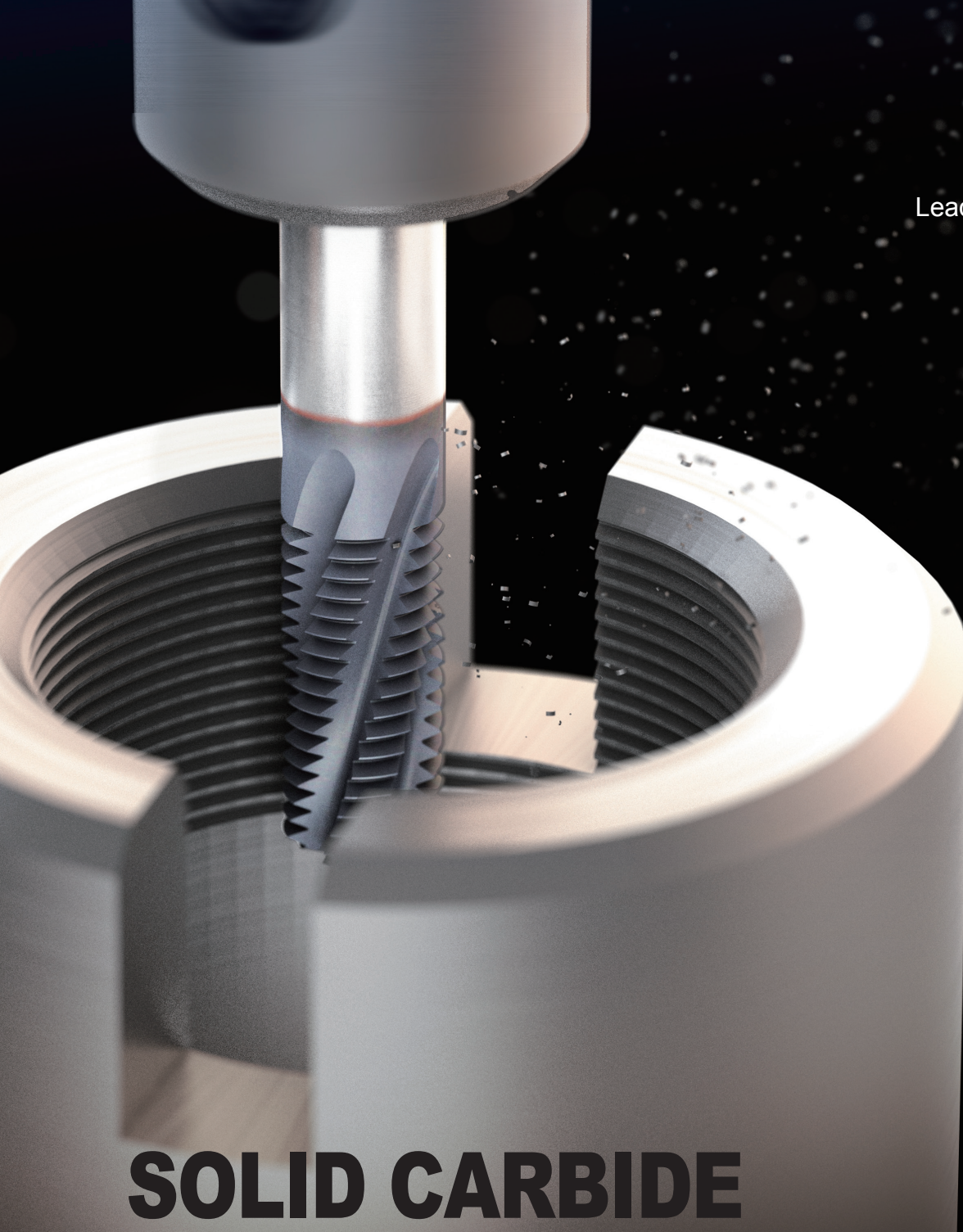




Leading Through Innovation



SOLID CARBIDE

THREAD MILL

GEWINDEFRÄSER

- Threading Large Diameter in High Quality
Available with Chamfer
- Zur Fertigung von Gewinden mit großen Durchmessern in hoher Qualität,
verfügbar mit Fase

SELECTION GUIDE



SOLID CARBIDE THREAD MILL

Threading Large Diameter in High Quality Available with Chamfer

Please visit globaly1.com/mat for material search. Recommended cutting conditions : p.B54

Table with columns: ISO, VDI 3323, Material Description, Composition / Structure / Heat Treatment, HB, HRc, and application suitability (circles) for various materials like Non-alloy steel, Low alloy steel, Stainless steel, Cast iron, Aluminum-cast alloy, Copper and Copper Alloys, Titanium Alloys, and Hardened steel.

Table with columns: TYPE, THREAD FORM (M, MF, UNC, UNF), HOLE TYPE (Blind/Through Hole), TOOL MATERIAL (CARBIDE), FLUTE TYPE (Helix), HELIX ANGLE (R15), SERIES NO. (L1211, L1212, L1213, L1214), SURFACE TREATMENT (TiAlN), and MODEL.

Table showing application suitability (circles) for various materials across different thread forms (M, MF, UNC, UNF) and hole types.

THREAD MILL

SYNCHRO TAP

PRIME TAP

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

Large table with columns: Thread Mill with Coolant Hole (M, MF, BSP(G)), Thread Mill with Coolant Hole & Chamfer (M, MF, UNC, UNF, NPT), Miniature Thread Mill (M, UNC), Miniature Thread Mill for Hard Materials (M, UNC), and Drill & Thread Mill with Chamfer (M). Includes application suitability (circles) and images of various tap models.

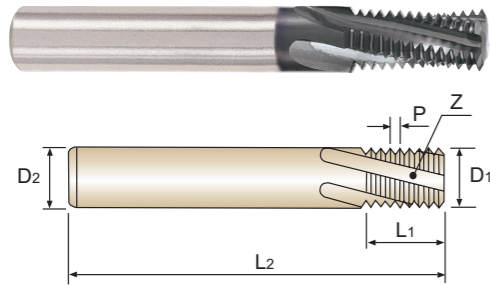
YG THREAD MILL

L1211 SERIES

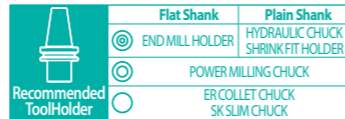
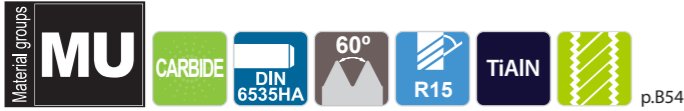
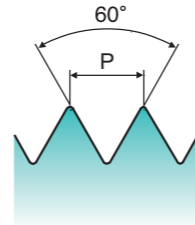
M Solid Carbide Thread Mill for ISO Metric Internal Thread - DIN 13
 ● VOLLHARTMETALL GEWINDEFÄHRER für ISO METRISCHES INNENGEWINDE - DIN 13
 ● FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
 ● Filettature interne, ISO metriche, passo grosso - DIN 13

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



EDP No.	Nominal Diameter [D]	Pitch P	Cutter Diameter D1	Shank Diameter		Thread Length		Overall Length L2	No. of Flute Z
				D2	D1	L1	L2		
L1211200	M3	0.5	2.2	6	2.2	5	57	3	
L1211240	M4	0.7	2.9	6	2.9	7	57	3	
L1211280	M5	0.8	3.8	6	3.8	8	57	3	
L1211310	M6	1.0	4.5	6	4.5	13	57	3	
L1211360	M8	1.25	6.0	6	6.0	17.5	65	3	
L1211420	M10	1.5	7.5	8	7.5	21	72	4	
L1211500	M12	1.75	9.5	10	9.5	26.25	80	4	
L1211540	M14	2.0	10.0	10	10.0	30	83	4	
L1211600	M16	2.0	12.0	12	12.0	34	92	4	
L1211650	M18	2.5	14.0	14	14.0	37.5	92	5	
L1211700	M20	2.5	16.0	16	16.0	42.5	105	5	

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M						K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HRC	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		

ISO Material Description	N										S						H						
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
HRC											15	30	25	38	34			55	60	42	55		
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550		
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		

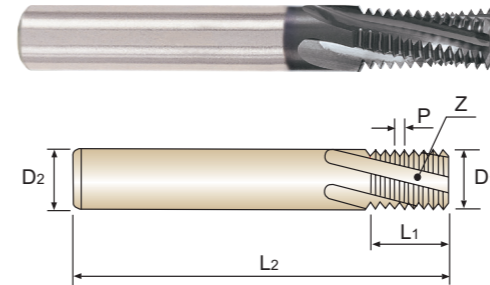
YG THREAD MILL

L1212 SERIES

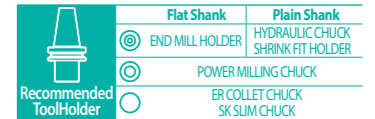
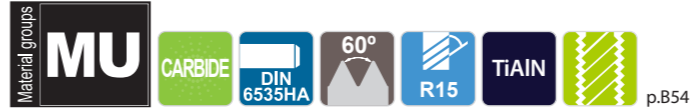
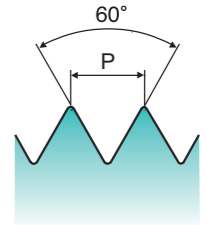
MF Solid Carbide Thread Mill for ISO Metric Internal Thread - DIN 13
 ● VOLLHARTMETALL GEWINDEFÄHRER für ISO METRISCH - FEIN INNENGEWINDE - DIN 13
 ● FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
 ● Filettature interne, ISO metriche, passo grosso - DIN 13

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
1.5×D



EDP No.	Nominal Diameter [D]	Pitch P	Cutter Diameter D1	Shank Diameter		Thread Length		Overall Length L2	No. of Flute Z
				D2	D1	L1	L2		
L1212370	M8	1.0	6.0	6	6.0	13	57	3	
L1212380	M8	0.75	6.0	6	6.0	12.75	57	3	
L1212440	M10	1.0	8.0	8	8.0	16	63	4	
L1212510	M12	1.5	9.5	10	9.5	19.5	72	4	
L1212520	M12	1.25	9.5	10	9.5	18.75	72	4	
L1212530	M12	1.0	9.5	10	9.5	19	72	4	
L1212550	M14	1.5	10.0	10	10.0	22.5	83	4	
L1212570	M14	1.0	10.0	10	10.0	22	83	4	
L1212610	M16	1.5	12.0	12	12.0	25.5	83	4	
L1212620	M16	1.0	12.0	12	12.0	25	83	4	
L1212670	M18	1.5	14.0	14	14.0	28.5	92	5	
L1212680	M18	1.0	14.0	14	14.0	28	92	5	
L1212720	M20	1.5	16.0	16	16.0	31.5	92	5	
L1212730	M20	1.0	16.0	16	16.0	31	92	5	

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M						K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HRC	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		

ISO Material Description	N										S						H						
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
HRC											15	30	25	38	34			55	60	42	55		
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550		
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		

YG THREAD MILL

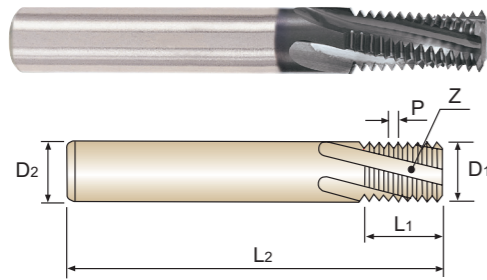
L1213 SERIES

UNC Solid Carbide Thread Mill for UNC Internal Thread - ANSI B 1.1

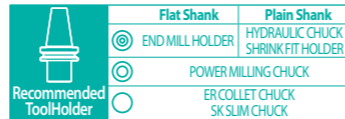
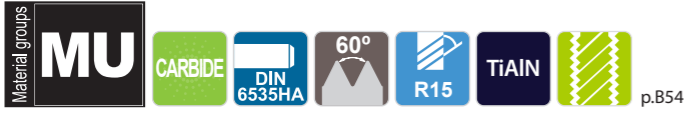
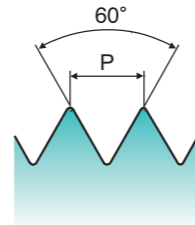
● VOLLHARTMETALL GEWINDEFÄHRER für UNC INNENGEWINDE, ANSI B 1.1
● FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE INTER UNC - ANSI B 1.1
● Filettature interne, unificato, passo grosso - ANSI B 1.1

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z
L1213400	1/4	20	4.5	6	14	57	3
L1213440	5/16	18	5.8	6	16.9	65	3
L1213480	3/8	16	7.0	8	20.6	72	4
L1213520	7/16	14	8.0	8	23.6	72	4
L1213560	1/2	13	9.5	10	27.4	80	4
L1213600	9/16	12	10.0	10	31.8	83	4
L1213640	5/8	11	12.0	12	34.6	92	4
L1213700	3/4	10	14.0	14	40.6	104	5

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRC	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

YG THREAD MILL

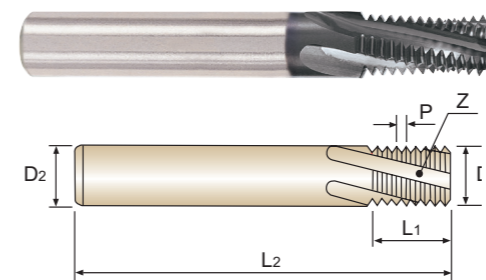
L1214 SERIES

UNF Solid Carbide Thread Mill for UNF Internal Thread - ANSI B 1.1

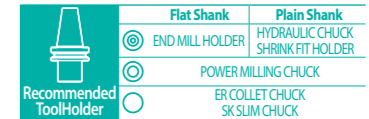
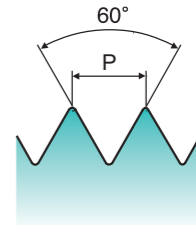
● VOLLHARTMETALL GEWINDEFÄHRER für UNF INNENGEWINDE, ANSI B 1.1
● FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE INTER UNC - ANSI B 1.1
● Filettature interne, unificato, passo grosso - ANSI B 1.1

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z
L1214420	1/4	28	5.0	6	13.6	57	3
L1214460	5/16	24	6.0	6	16.9	65	3
L1214500	3/8	24	8.0	8	20.1	72	4
L1214540	7/16	20	8.0	8	24.1	72	4
L1214580	1/2	20	10.0	10	26.7	80	4
L1214620	9/16	18	12.0	12	29.6	83	4
L1214660	5/8	18	12.0	12	33.9	92	4
L1214720	3/4	16	14.0	14	39.7	104	5

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRC	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

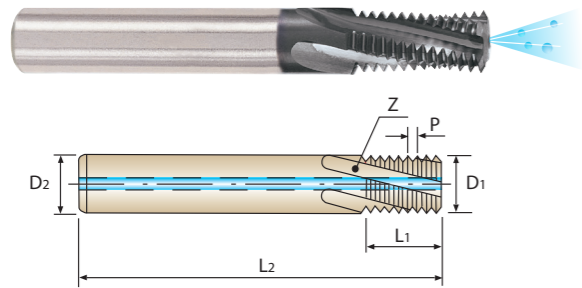
YG THREAD MILL

L4211 SERIES

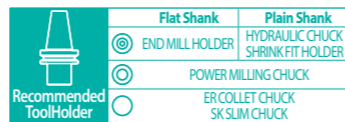
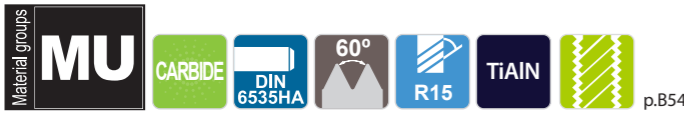
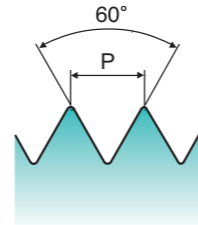
M Solid Carbide Thread Mill with Coolant Hole for ISO Metric Internal Thread - DIN 13
 VOLLHARTMETALL GEWINDEFÄHRER mit KÜHLKANAL für ISO METRISCHES INNENGEWINDE - DIN 13
 FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
 Con fori di lubrificazione, Filettature interne, ISO metriche, passo grosso - DIN 13

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN	D	P	D1	D2	L1	L2	Z
L4211310	M6	1.0	4.5	6	13.0	57	3
L4211360	M8	1.25	6.0	6	17.5	65	3
L4211420	M10	1.5	7.5	8	21.0	72	4
L4211500	M12	1.75	9.5	10	26.25	80	4
L4211540	M14	2.0	10.0	10	30.0	83	4
L4211600	M16	2.0	12.0	12	34.0	92	4
L4211700	M20	2.5	16.0	16	42.5	105	5

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	35	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO Material Description	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

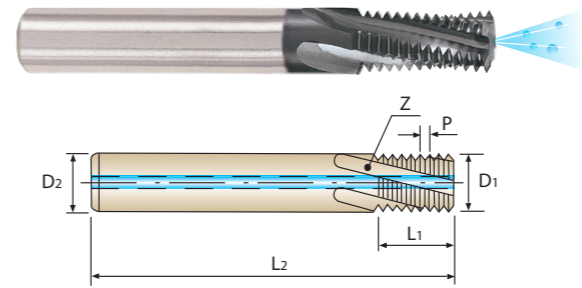
YG THREAD MILL

L4212 SERIES

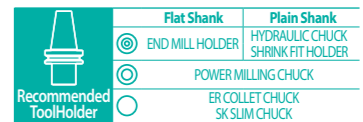
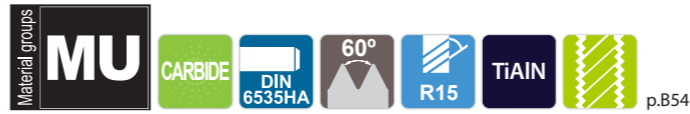
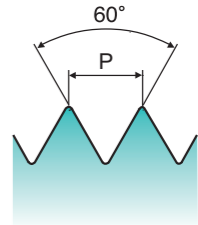
MF Solid Carbide Thread Mill with Coolant Hole for ISO Metric Internal Thread - DIN 13
 VOLLHARTMETALL GEWINDEFÄHRER mit KÜHLKANAL für ISO METRISCH - FEIN INNENGEWINDE - DIN 13
 FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
 Con fori di lubrificazione, Filettature interne, ISO metriche, passo grosso - DIN 13

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
1.5×D



EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN	D	P	D1	D2	L1	L2	Z
L4212370	M8	1.0	6.0	6	13.0	57	3
L4212380	M8	0.75	6.0	6	12.75	57	3
L4212440	M10	1.0	8.0	8	16.0	63	4
L4212510	M12	1.5	9.5	10	19.5	72	4
L4212520	M12	1.25	9.5	10	18.75	72	4
L4212530	M12	1.0	9.5	10	19.0	72	4
L4212550	M14	1.5	10.0	10	22.5	83	4
L4212570	M14	1.0	10.0	10	22.0	83	4
L4212610	M16	1.5	12.0	12	25.5	83	4
L4212620	M16	1.0	12.0	12	25.0	83	4
L4212670	M18	1.5	14.0	14	28.5	92	5
L4212680	M18	1.0	14.0	14	28.0	92	5
L4212720	M20	1.5	16.0	16	31.5	92	5
L4212730	M20	1.0	16.0	16	31.0	92	5

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	35	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO Material Description	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

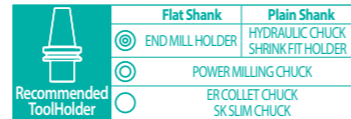
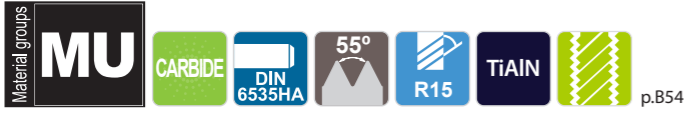
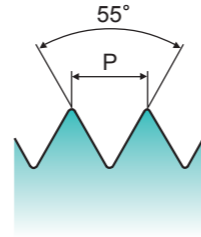
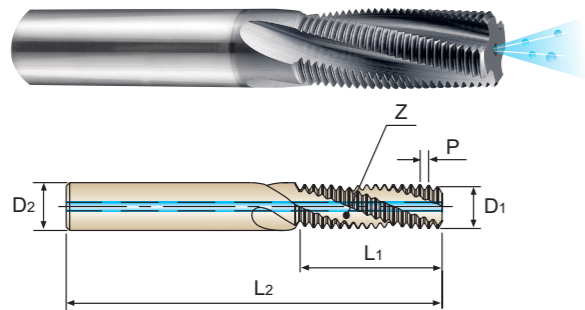
Y/G THREAD MILL

L6215 SERIES

BSP(G) Solid Carbide Thread Mill with Coolant Hole for BSP(G) Internal/External Thread
 ● VOLLHARTMETALL GEWINDEFÄSER mit KÜHLKANAL für BSP (G) INNEN- /AUSSENGEWINDE
 ● FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL POUR FILETAGE INTERNE/EXTERNE BSP(G)
 ● Fresa con fori di lubrificazione, filettature interne ed esterne, BSP(G)

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
L6215020	1/16	28	5.9	6	16.3	65	3
L6215200	1/8	28	7.9	8	20.0	70	4
L6215400	1/4	19	9.9	10	26.7	80	4
L6215480	3/8	19	13.9	14	33.4	92	4
L6215560	1/2	14	15.9	16	43.5	104	5
L6215700	3/4	14	17.9	18	34.5	100	5
L6215780	1	11	19.9	20	34.6	100	5

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	13	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

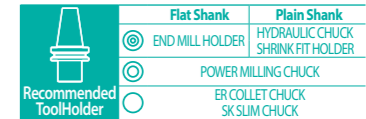
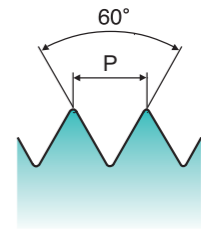
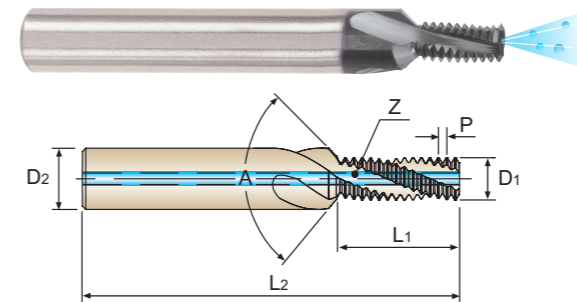
Y/G THREAD MILL

L4271 SERIES

M Solid Carbide Thread Mill with Coolant Hole & Chamfer for ISO Metric Internal Thread - DIN 13
 ● VOLLHARTMETALL GEWINDEFÄSER mit KÜHLKANAL & FASE für METRISCHES INNENGEWINDE - DIN 13
 ● FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE ISO INTER MÉTRIQUE DIN13
 ● Con fori di lubrificazione e taglianti per smussi, filettature interne, ISO metriche - DIN 13

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
L4271310	M6	1.0	4.8	8	12.4	62	90°	3
L4271360	M8	1.25	6.5	10	16.8	74	90°	3
L4271420	M10	1.5	8.2	12	20.15	80	90°	4
L4271500	M12	1.75	9.9	14	25.25	90	90°	4
L4271540	M14	2.0	11.6	16	28.85	100	90°	4
L4271600	M16	2.0	13.6	18	32.85	102	90°	4

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	13	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

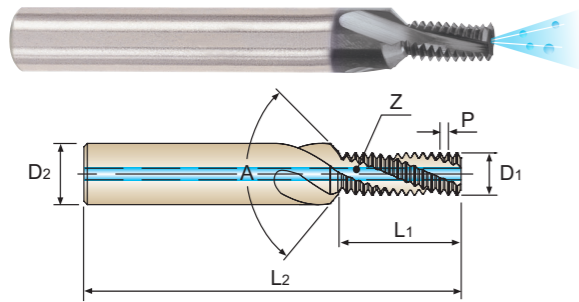
YG THREAD MILL

L4272 SERIES

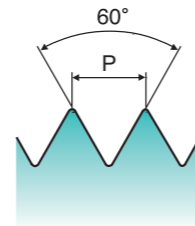
MF Solid Carbide Thread Mill with Coolant Hole & Chamfer for ISO Metric Internal Thread - DIN 13
 ● VOLLHARTMETALL GEWINDEFÄRER mit KÜHLKANAL & FASE für METRISCH - FEIN INNENGEWINDE - DIN 13
 ● FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE ISO INTER MÉTRIQUE DIN13
 ● Con fori di lubrificazione e taglienti per smussi, filettature interne, ISO metriche, passo fine - DIN 13

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
1.5×D



Material groups: **MU** CARBIDE DIN 6535HA 60° R15 TiAlN p.B54

Recommended ToolHolder: Flat Shank (END MILL HOLDER), Plain Shank (HYDRAULIC CHUCK, SHRINK FIT HOLDER), POWER MILLING CHUCK, ER COLLET CHUCK, SK SLIM CHUCK

EDP No.	Nominal Diameter [D]	Pitch P	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	Angle A	No. of Flute Z	
L4272370	M8	1.0	6.7	10	12.4	74	90°	3	
L4272430	M10	1.25	8.3	12	15.9	80	90°	4	
L4272440	M10	1.0	8.7	12	15.4	80	90°	4	
L4272510	M12	1.5	10.0	14	18.65	90	90°	4	
L4272520	M12	1.25	10.3	14	18.3	80	90°	4	
L4272530	M12	1.0	10.7	14	18.4	90	90°	4	
L4272550	M14	1.5	12.0	16	21.65	100	90°	4	
L4272610	M16	1.5	14.0	18	24.65	102	90°	5	

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

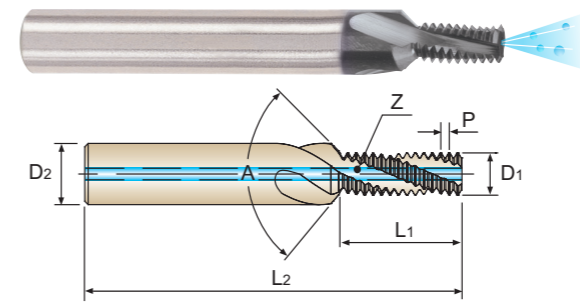
YG THREAD MILL

L4273 SERIES

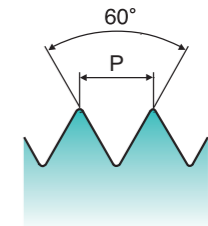
UNC Solid Carbide Thread Mill with Coolant Hole & Chamfer for UNC Internal Thread - ANSI B 1.1
 ● VOLLHARTMETALL GEWINDEFÄRER mit KÜHLKANAL & FASE für UNC INNENGEWINDE - ANSI B 1.1
 ● FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE INTER UNC - ANSI B 1.1
 ● Con fori di lubrificazione e taglienti per smussi, filettature interne, unificato, passo grosso - ANSI B 1.1

► Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

► Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Material groups: **MU** CARBIDE DIN 6535HA 60° R15 TiAlN p.B55

Recommended ToolHolder: Flat Shank (END MILL HOLDER), Plain Shank (HYDRAULIC CHUCK, SHRINK FIT HOLDER), POWER MILLING CHUCK, ER COLLET CHUCK, SK SLIM CHUCK

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	Angle A	No. of Flute Z	
L4273400	1/4	20	4.8	8	13.3	62	90°	3	
L4273440	5/16	18	6.2	10	16.18	74	90°	3	
L4273480	3/8	16	7.6	12	19.8	80	90°	4	
L4273520	7/16	14	8.9	12	22.62	80	90°	4	
L4273560	1/2	13	10.3	14	26.32	90	90°	4	
L4273600	9/16	12	11.7	16	30.63	100	90°	4	
L4273640	5/8	11	13.1	18	33.41	102	90°	4	
L4273700	3/4	10	16.0	20	39.29	110	90°	5	

► Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

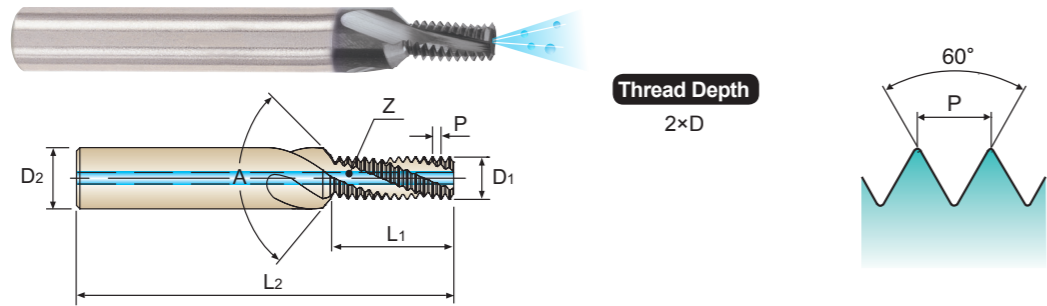
Y/G THREAD MILL

L4274 SERIES

UNF Solid Carbide Thread Mill with Coolant Hole & Chamfer for UNF Internal Thread - ANSI B 1.1

● VOLLHARTMETALL GEWINDEFÄHRER mit KÜHLKANAL & FASE für UNF INNENGEWINDE - ANSI B 1.1
● FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE INTER UNC - ANSI B 1.1
● Con fori di lubrificazione e taglienti per smussi, filettature interne, unificato, passo fine - ANSI B 1.1

- ▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.
- ▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Material groups: **MU** CARBIDE DIN 6535HA 60° R15 TiAlN p.B55

Recommended ToolHolder: Flat Shank (END MILL HOLDER), Plain Shank (HYDRAULIC CHUCK, SHRINK FIT HOLDER), POWER MILLING CHUCK, ER COLLET CHUCK, SK SLIM CHUCK

Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	Angle A	No. of Flute Z
L4274420	1/4	28	5.1	8	13.21	62	90°	3
L4274460	5/16	24	6.5	10	16.37	74	90°	3
L4274500	3/8	24	8.1	12	19.54	80	90°	4
L4274540	7/16	20	9.4	12	22.19	80	90°	4
L4274580	1/2	20	11.0	14	26	90	90°	4
L4274620	9/16	18	12.4	16	28.88	100	90°	4
L4274660	5/8	18	14.0	18	33.12	102	90°	5
L4274720	3/4	16	17.0	20	38.86	110	90°	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)	Non Metallic Materials	Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron						
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

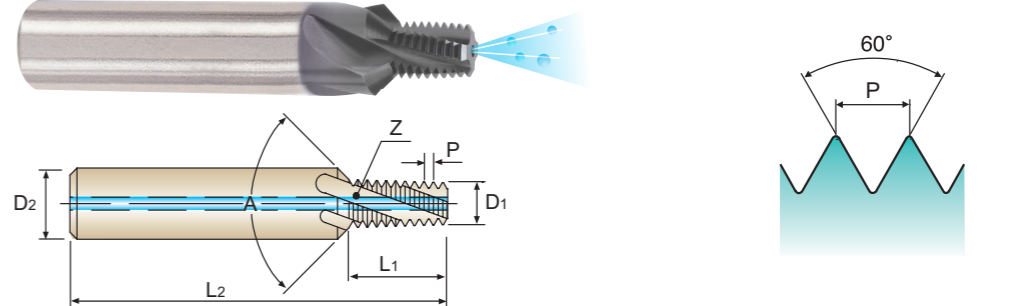
Y/G THREAD MILL

L4276 SERIES

NPT Solid Carbide Thread Mill with Coolant Hole & Chamfer for NPT Thread - ANSI B 1.20.1

● VOLLHARTMETALL GEWINDEFÄHRER mit KÜHLKANAL & FASE für NPT INNENGEWINDE - ANSI B 1.20.1
● FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE INTER NPT - ANSI B 1.20.1
● Con fori di lubrificazione e taglienti per smussi, filettature interne, unificato, passo fine - ANSI B 1.1

- ▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.
- ▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Material groups: **MU** CARBIDE DIN 6535HA 60° R15 TiAlN p.B55

Recommended ToolHolder: Flat Shank (END MILL HOLDER), Plain Shank (HYDRAULIC CHUCK, SHRINK FIT HOLDER), POWER MILLING CHUCK, ER COLLET CHUCK, SK SLIM CHUCK

Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	Angle A	No. of Flute Z
L4276020	NPT1/16	27	5.9	10	8.9	64	90°	3
L4276200	NPT1/8	27	7.8	12	8.9	70	90°	4
L4276400	NPT1/4	18	10.05	16	13.4	81	90°	4
L4276480	NPT3/8	18	13.45	18	13.4	81	90°	4

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)	Non Metallic Materials	Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron						
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

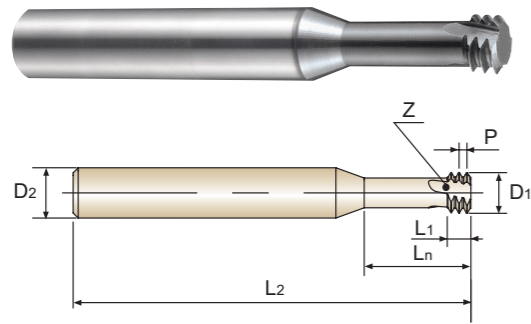
Y/G THREAD MILL

L12D1 SERIES

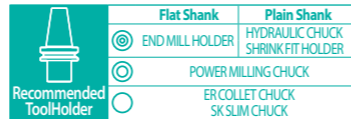
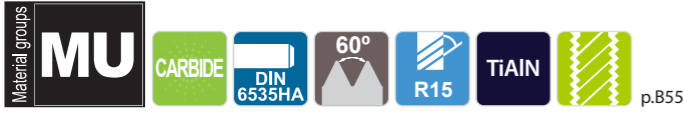
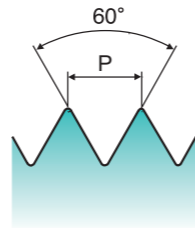
M Solid Carbide Miniature Thread Mill for ISO Metric Internal Thread - DIN 13
 ● VOLLHARTMETALL MINI-GEWINDEFÄRER für ISO METRISCHE INNENGEWINDE - DIN 13
 ● FRAISES A FILETER À TOURBILLONNER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN 13
 ● Mini frese per filettature interne ISO metriche passo grosso - DIN 13

▶ Short thread length

▶ Kurze Gewindelänge



Thread Depth
2×D



EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
TiAlN	[D]	P	D1	D2	L1	Ln	L2	Z
L12D1010	M1	0.25	0.70	3	0.75	2.1	30	3
L12D1050	M1.2	0.25	0.90	3	0.75	2.5	30	3
L12D1070	M1.4	0.3	1.04	3	0.90	2.9	30	3
L12D1090	M1.6	0.35	1.18	3	1.05	3.4	30	3
L12D1130	M2	0.4	1.52	6	1.2	4.2	57	3
L12D1150	M2.2	0.45	1.66	6	1.35	4.6	57	3
L12D1170	M2.5	0.45	1.96	6	1.35	5.3	57	3
L12D1200	M3	0.5	2.4	6	1.5	6.3	57	3
L12D1240	M4	0.7	3.16	6	2.1	8.4	57	3
L12D1280	M5	0.8	4.04	6	2.4	10.5	57	3
L12D1310	M6	1.0	4.8	6	3.0	12.6	57	3
L12D1360	M8	1.25	6.5	8	3.75	16.8	63	3
L12D1420	M10	1.5	8.2	10	4.5	21.0	73	3
L12D1500	M12	1.75	9.9	10	5.25	25.2	73	3

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

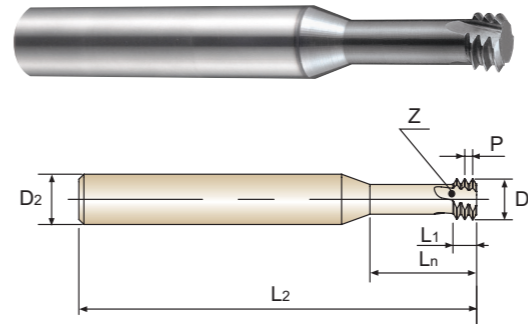
Y/G THREAD MILL

L12D3 SERIES

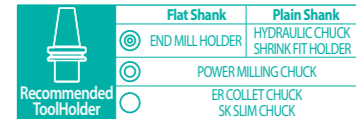
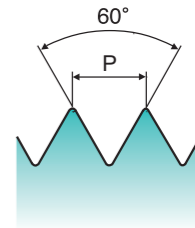
UNC Solid Carbide Miniature Thread Mill for UNC Internal Thread - ANSI B 1.1
 ● VOLLHARTMETALL MINI-GEWINDEFÄRER für UNC INNENGEWINDE - ANSI B 1.1
 ● FRAISES A FILETER À TOURBILLONNER CARBURE MONOBLOC POUR FILETAGE POUR FILETAGE INTER UNC-ANSI B 1.1
 ● Mini frese per filettature interne unificato passo grosso - ANSI B 1.1

▶ Short thread length

▶ Kurze Gewindelänge



Thread Depth
2×D



EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
TiAlN	[D]	TPI	D1	D2	L1	Ln	L2	Z
L12D3040	#1	64	1.38	6	1.19	3.9	57	3
L12D3080	#2	56	1.64	6	1.36	4.6	57	3
L12D3160	#4	40	2.08	6	1.91	6.0	57	3
L12D3240	#6	32	2.55	6	2.38	7.4	57	3
L12D3280	#8	32	3.21	6	2.38	8.7	57	3
L12D3320	#10	24	3.56	6	3.18	10.1	57	3
L12D3360	#12	24	4.22	6	3.18	11.5	57	3
L12D3400	1/4	20	4.83	6	3.81	13.3	57	3
L12D3440	5/16	18	6.24	8	4.23	16.7	63	3
L12D3480	3/8	16	7.62	8	4.76	20.0	63	3
L12D3520	7/16	14	8.94	10	5.44	23.3	73	3

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

YG THREAD MILL

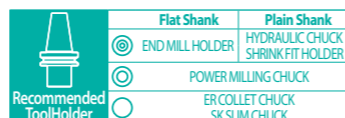
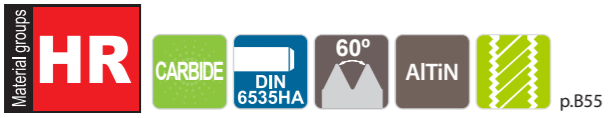
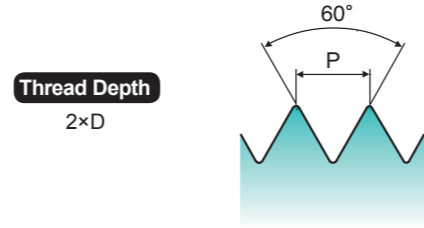
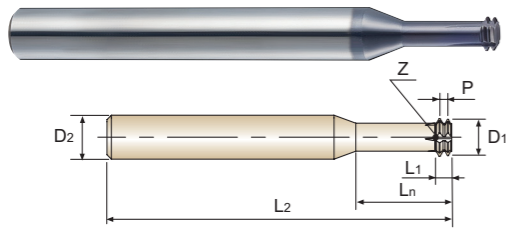
L19E1 SERIES

M Solid Carbide Miniature Thread Mill for Hard Materials, ISO Metric Internal Thread - DIN 13

- VOLLHARTMETALL MINI-GEWINDEFÄHRER für GEHÄRTETE MATERIALIEN, ISO METRISCHE INNENGEWINDE - DIN 13
- FRAISES À TOURBILLONNER CARBURE MONOBLOC POUR MATÉRIEAUX DURS, FILETAGE ISO INTER MÉTRIQUE - DIN13
- Mini frese per acciai temprati ISO metriche passo grosso - DIN 13

- ▶ Left hand Cut (CNC code : M04)
- ▶ Short thread length
- ▶ Straight Flute
- ▶ The work direction is from top to bottom (Climb Milling)
- ▶ For hard materials up to HRC62

- ▶ Linksschneidend (CNC Befehl : M04)
- ▶ Kurze Gewindelänge
- ▶ Linksschneidend, geradegenutet
- ▶ Die Fräsrichtung ist von oben nach unten (Gleichlauf)
- ▶ Für gehärtete Materialien bis zu HRC62



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch P	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Neck Length Ln	Overall Length L2	No. of Flute Z
L19E1130	M2	0.4	1.52	6	0.8	4.2	57	4
L19E1150	M2.2	0.45	1.66	6	0.9	4.6	57	4
L19E1170	M2.5	0.45	1.96	6	0.9	5.3	57	4
L19E1200	M3	0.5	2.4	6	1.0	6.3	57	4
L19E1240	M4	0.7	3.16	6	1.4	8.4	57	4
L19E1280	M5	0.8	4.04	6	1.6	10.5	57	4
L19E1310	M6	1.0	4.8	6	2.0	12.6	57	5
L19E1360	M8	1.25	6.5	8	2.5	16.8	63	5
L19E1420	M10	1.5	8.2	10	3.0	21.0	73	6
L19E1500	M12	1.75	9.9	10	3.5	25.2	73	6

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M				K							
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron			Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
HRC	13	25	28	32	38	10	29	32	38	45	15	35	15	23	10	10	26	3	25	13	21	
HB	125	190	250	270	300	180	275	300	350	400	200	325	200	240	180	180	260	160	250	130	230	
Recommended						○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎

YG THREAD MILL

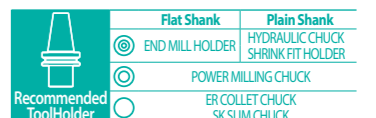
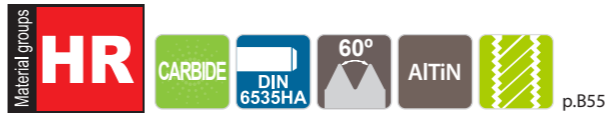
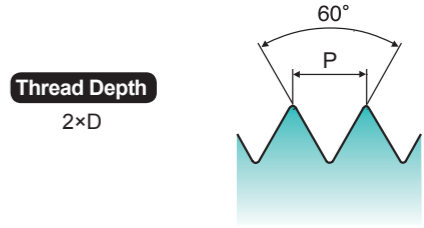
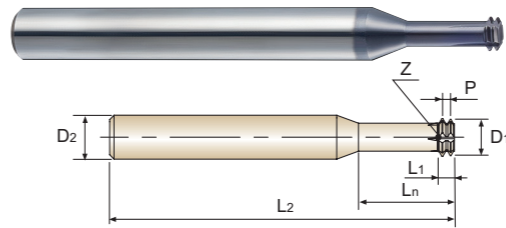
L19E3 SERIES

UNC Solid Carbide Miniature Thread Mill for Hard Materials, UNC Internal Thread - ANSI B 1.1

- VOLLHARTMETALL MINI-GEWINDEFÄHRER für GEHÄRTETE MATERIALIEN, UNC INNENGEWINDE - ANSI B 1.1
- FRAISES À TOURBILLONNER CARBURE MONOBLOC POUR MATÉRIEAUX DURS POUR FILETAGE INTER UNC - ANSI B 1.1
- Mini frese per acciai temprati unificato passo grosso - ANSI B 1.1

- ▶ Left hand Cut (CNC code : M04)
- ▶ Short thread length
- ▶ Straight Flute
- ▶ The work direction is from top to bottom (Climb Milling)
- ▶ For hard materials up to HRC62

- ▶ Linksschneidend (CNC Befehl : M04)
- ▶ Kurze Gewindelänge
- ▶ Linksschneidend, geradegenutet
- ▶ Die Fräsrichtung ist von oben nach unten (Gleichlauf)
- ▶ Für gehärtete Materialien bis zu HRC62



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Neck Length Ln	Overall Length L2	No. of Flute Z
L19E3080	#2	56	1.64	6	0.91	4.6	57	4
L19E3160	#4	40	2.08	6	1.27	6.0	57	4
L19E3240	#6	32	2.55	6	1.59	7.4	57	4
L19E3280	#8	32	3.21	6	1.59	8.7	57	4
L19E3320	#10	24	3.56	6	2.12	10.1	57	4
L19E3360	#12	24	4.22	6	2.12	11.5	57	4
L19E3400	1/4	20	4.83	6	2.54	13.3	57	5
L19E3440	5/16	18	6.24	8	2.82	16.7	63	5
L19E3480	3/8	16	7.62	8	3.18	20.0	63	6
L19E3520	7/16	14	8.94	10	3.63	23.3	73	6

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M				K							
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron			Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
HRC	13	25	28	32	38	10	29	32	38	45	15	35	15	23	10	10	26	3	25	13	21	
HB	125	190	250	270	300	180	275	300	350	400	200	325	200	240	180	180	260	160	250	130	230	
Recommended						○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎

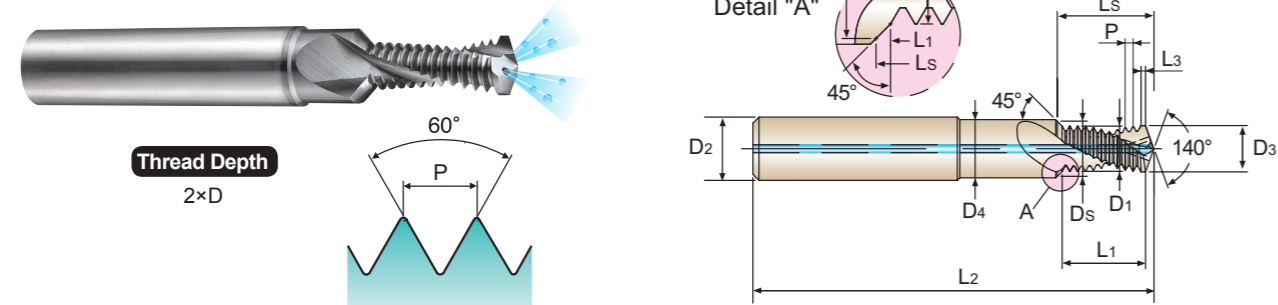
ISO Material Description	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎

YG THREAD MILL

UNCOATED **L41A1** SERIES
 TiAlN **L42A1** SERIES

M Solid Carbide Drill and Thread Mill with Chamfer for ISO Metric Internal Thread - DIN 13
 VOLLHARTMETALL BOHRGEWINDEFÄHRER MIT SENKFASE für ISO METRISCHE INNENGEWINDE - DIN 13
 FRAISES À FILETER ET À PERCER CARBURE MONOBLOC AVEC CHANFREIN POUR FILETAGE INTER - DIN13
 Fresa fora, fileta e smussa , filettature interne, ISO metriche passo grosso - DIN 13

- No. of Flute : 2
- Drill Point : 140° / Countersink : 90°
- Drilling, Chamfering and Thread milling
- Anz. der Nuten : 2
- 140° Spitzenwinkel, 90° Senkwinkel
- Bohren, Senken und Gewindefräsen



Material groups: **GG** **AI** CARBIDE DIN 6535HA 60° R25 Bright TiAlN p.B55

Recommended ToolHolder: Flat Shank (END MILL HOLDER), Plain Shank (HYDRAULIC CHUCK, SHRINK FIT HOLDER), POWER MILLING CHUCK, ER COLLET CHUCK, SK SLIM CHUCK

EDP No.		Nominal Diameter [D]	Pitch P	Cutter Diameter D1	Shank Diameter D2	Effect. Diameter Ds	Drill Diameter D3	Max. C'sink D4	Thread Length L1	Effect. Length Ls	Drill Length L3	Overall Length L2
L41A1310	L42A1310	M6	1.0	4.75	8	6.3	5.00	6.6	13.00	14.68	1.00	62
L41A1360	L42A1360	M8	1.25	6.35	10	8.3	6.75	9.0	16.27	18.48	1.25	74
L41A1420	L42A1420	M10	1.5	7.95	12	10.3	8.50	11.0	21.05	23.77	1.50	79
L41A1500	L42A1500	M12	1.75	9.95	14	12.3	10.25	13.5	24.21	27.25	1.50	89
L41A1540	L42A1540	M14	2.0	11.20	16	14.3	12.00	15.5	29.58	33.32	1.50	102

Other coatings are available on your request.

© : Excellent ○ : Good

ISO Material Description	P										M					K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	45	15	35	15	23	10	10	26	3	25	21	
HB	125	190	250	270	300	180	275	300	350	200	200	325	200	240	180	180	260	160	250	130	230
Recommended																◎	◎	◎	◎	◎	◎

ISO Material Description	N										S					H					
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc																					
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎											

YG THREAD MILL

RECOMMENDED CUTTING CONDITIONS
 EMPFOHLENE SCHNEIDKONDITIONEN

For THREAD MILL

unit : mm

Materials	Hardness (HB)	Strength (N/mm ²)	Feed per Tooth (fz)	
			Cutter Diameter ≤Ø8.0	Cutter Diameter >Ø8.0
Low Carbon Steels	≤ 200	≤ 700	0.02 - 0.04	0.04 - 0.10
Medium Carbon Steels High Carbon Steels	≤ 250	≤ 850	0.02 - 0.04	0.04 - 0.10
Alloy Steels	≤ 250	≤ 850	0.02 - 0.04	0.04 - 0.10
Heat Treated Steels	≤ 400	≤ 1400	0.02 - 0.04	0.04 - 0.10
Stainless Steels	≤ 300	≤ 1000	0.01 - 0.02	0.02 - 0.06
Cast Iron	≤ 300	≤ 1000	0.02 - 0.04	0.04 - 0.10
Chrome-Nickel Alloys Titanium Alloys	≤ 350	≤ 1200	0.01 - 0.02	0.02 - 0.06
Non Ferrous Materials	≤ 200	≤ 700	0.03 - 0.07	0.05 - 0.10

For Drill and THREAD MILL

unit : mm

Material	Hardness (HB)	Strength (N/mm ²)	Fz(Thread Milling) - Feed per Tooth		Fdr(Drilling) - Feed per revolution	
			Cutter Diameter ≤Ø8.0	Cutter Diameter >Ø8.0	Cutter Diameter ≤Ø8.0	Cutter Diameter >Ø8.0
Cast Iron	≤ 200	≤ 700	0.03-0.08	0.08-0.12	0.10-0.20	0.20-0.25
Aluminium Aluminium-alloy Magnesium	≤ 180	≤ 600	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30
Plastics	-	-	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30

For Hard Material Miniature THREAD MILL

unit : mm

Material	Hardness (HB)	Strength (N/mm ²)	Feed(mm/tooth)	
			Cutter Diameter ≤Ø6.0	Cutter Diameter >Ø6.0
Alloy Steel	295-415HB	1000-1400	0.02-0.04	0.04-0.06
Stainless Steel	280-415HB	950-1250	0.02-0.04	0.04-0.06
Cast Iron	≤ HB300	≤ 1000	0.03-0.05	0.05-0.07
Chrome-Nickel Alloys Titanium Alloys	≤ HB445	≤ 1500	0.02-0.03	0.03-0.05
Hardened Material	45-50HRc	-	0.03-0.05	0.05-0.07
	51-55HRc	-	0.02-0.04	0.04-0.06
	56-62HRc	-	0.01-0.03	0.03-0.05

HSS

HSS



RECOMMENDED CUTTING CONDITIONS
EMPFOLHENE SCHNEIDKONDITIONEN



RECOMMENDED CUTTING CONDITIONS
EMPFOLHENE SCHNEIDKONDITIONEN

THREAD MILL

SYNCHRO TAP

PRIME TAP

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

THREAD MILL

SYNCHRO TAP

PRIME TAP

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

				L1211	L1212	L1213	L1214	L4211	L4212	L6215	L4271	L4272	
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)								
P	1	Non-alloy steel	125		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	2		190	13	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	3		250	25	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	4		270	28	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	5		300	32	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	6	Low alloy steel	180	10	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	7		275	29	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	8		300	32	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	9		350	38	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	10		High alloyed steel, and tool steel	200	15	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	11	325		35	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
M	12	Stainless steel	200	15	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
	13		240	23	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
	14		180	10	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
K	15	Grey cast iron	180	10	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	
	16		260	26	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	
	17	Nodular cast iron	160	3	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	
	18		250	25	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	
	19		Malleable cast iron	130		50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
20	230	21		50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100		
N	21	Aluminum-wrought alloy	60		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	
	22		100		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	
	23	Aluminum-cast, alloyed	75		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	
	24		90		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	
	25		130		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	
	26		110		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	
	27		Copper and Copper Alloys (Bronze / Brass)	90		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	28			100		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	29					100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	30		Non Metallic Materials			100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
S	31	Heat Resistant Super Alloys	200	15	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	32		280	30	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	33		250	25	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	34		350	38	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	35		320	34	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	36	Titanium Alloys	400Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	37		1050Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
H	38	Hardened steel	550	55					25-60	25-60			
	39		630	60					25-50	25-50			
	40	Chilled Cast Iron	400	42					25-70	25-70			
	41		550	55					25-60	25-60			

				L4273	L4274	L4276	L12D1	L12D3	L19E1	L19E3	L41A1 L42A1	
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)							
P	1	Non-alloy steel	125		80-120	80-120	80-120	80-120	80-120			
	2		190	13	80-120	80-120	80-120	80-120	80-120			
	3		250	25	80-120	80-120	80-120	80-120	80-120			
	4		270	28	80-120	80-120	80-120	80-120	80-120			
	5		300	32	80-120	80-120	80-120	80-120	80-120			
	6	Low alloy steel	180	10	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	7		275	29	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	8		300	32	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	9		350	38	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	10		High alloyed steel, and tool steel	200	15	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	11	325		35	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
M	12	Stainless steel	200	15	40-80	40-80	40-80	40-80	40-80	40-80		
	13		240	23	40-80	40-80	40-80	40-80	40-80	40-80		
	14		180	10	40-80	40-80	40-80	40-80	40-80	40-80		
K	15	Grey cast iron	180	10	50-100	50-100	50-100	50-100	50-100	50-100	80-150	
	16		260	26	50-100	50-100	50-100	50-100	50-100	50-100	80-150	
	17	Nodular cast iron	160	3	50-100	50-100	50-100	50-100	50-100	50-100	80-150	
	18		250	25	50-100	50-100	50-100	50-100	50-100	50-100	80-150	
	19		Malleable cast iron	130		50-100	50-100	50-100	50-100	50-100	50-100	80-150
20	230	21		50-100	50-100	50-100	50-100	50-100	50-100	80-150		
N	21	Aluminum-wrought alloy	60		100-300	100-300	100-300	100-300	100-300		100-300	
	22		100		100-300	100-300	100-300	100-300	100-300		100-300	
	23	Aluminum-cast, alloyed	75		100-300	100-300	100-300	100-300	100-300		100-300	
	24		90		100-300	100-300	100-300	100-300	100-300		100-300	
	25		130		100-300	100-300	100-300	100-300	100-300		100-300	
	26		110		100-300	100-300	100-300	100-300	100-300		100-300	
	27		Copper and Copper Alloys (Bronze / Brass)	90		100-300	100-300	100-300	100-300	100-300		100-300
	28			100		100-300	100-300	100-300	100-300	100-300		100-300
	29					100-300	100-300	100-300	100-300	100-300		80-150
	30		Non Metallic Materials			100-300	100-300	100-300	100-300	100-300		80-150
S	31	Heat Resistant Super Alloys	200	15	20-60	20-60	20-60	20-60	20-60	20-60		
	32		280	30	20-60	20-60	20-60	20-60	20-60	20-60		
	33		250	25	20-60	20-60	20-60	20-60	20-60	20-60		
	34		350	38	20-60	20-60	20-60	20-60	20-60	20-60		
	35		320	34	20-60	20-60	20-60	20-60	20-60	20-60		
	36	Titanium Alloys	400Rm		20-60	20-60	20-60	20-60	20-60	20-60		
	37		1050Rm		20-60	20-60	20-60	20-60	20-60	20-60		
H	38	Hardened steel	550	55						25-60	25-60	
	39		630	60						25-50	25-50	
	40	Chilled Cast Iron	400	42						25-70	25-70	
	41		550	55						25-60	25-60	

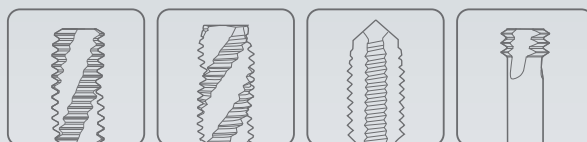
TO CALCULATE SPEED & FEED RATES
SCHNITTGESCHWINDIGKEIT & VORSCHUB KALKULIEREN

Calculate RPM of Cutter	Calculate Feed per Revolution	Finally Calculate Feed at Tool Center Line
$n = \frac{1000 \times V}{d \times \pi}$	$F_1 = F_z \times Z \times N$	$F_2 = \frac{F_1 \times (D - d)}{D}$

- N** RPM
- V** Recommended Cutting Speed
- d** Diameter of Cutter
- Fz** Recommended Feed per Tooth
- Z** Number of Teeth
- F2** Feed at Center Line of Cutting
- F1** Feed at Cutting Edge
- D** Major Diameter of Component



Global Cutting Tool Leader **YG-1**



THREADING