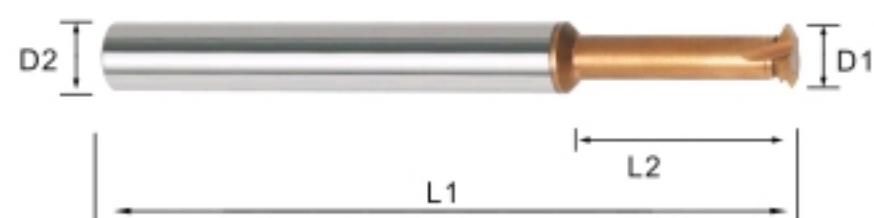




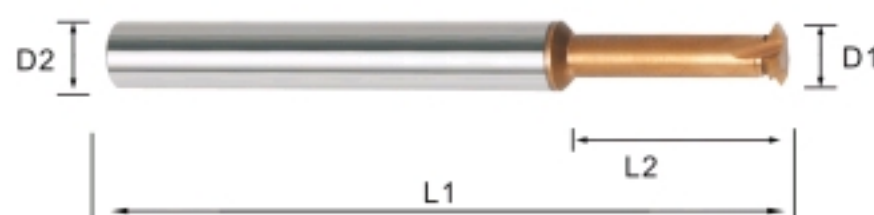
Solid carbide thread mills

INDEX 400...

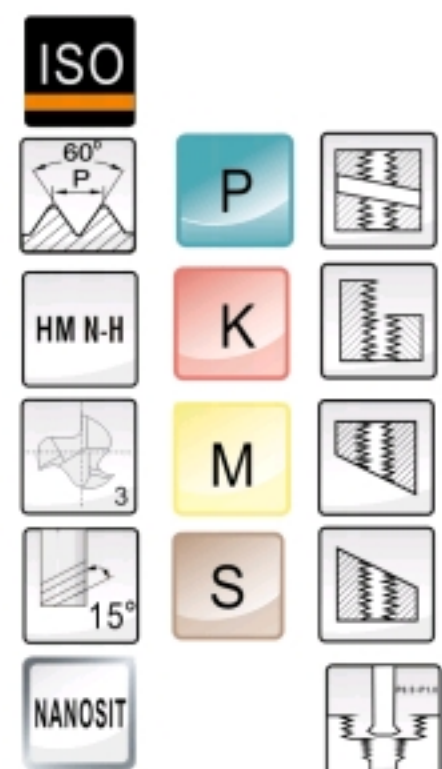
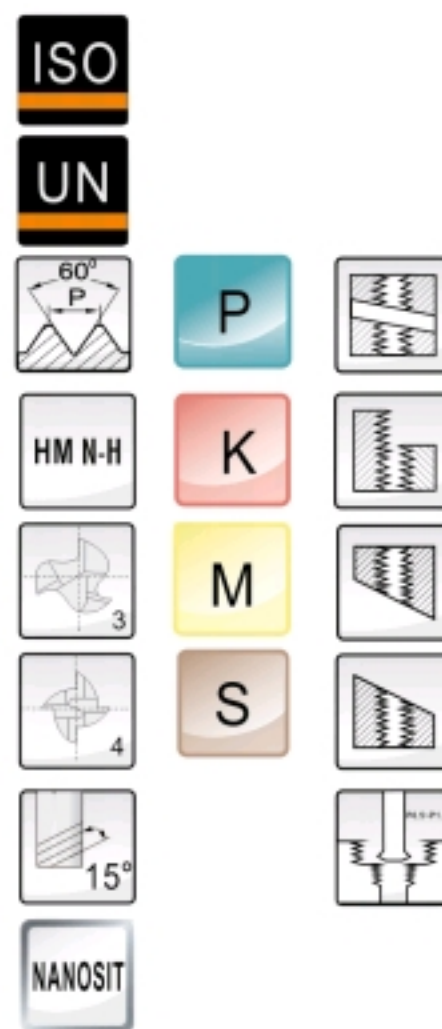


Pitch Range		D1	D2	L2	L1	Z	Article-No. NANOSIT	
MM	TPI							
0.35-0.6	72-40	2.0	3	6	50	3	400.020.A60	
0.5-0.8	48-32	2.5	3	7.7	50	3	400.025.A60	
0.5-0.8	48-32	3.2	4	10	50	3	400.032.A60	
0.5-1.0	48-24	4.0	4	12	50	3	400.040.A60	
0.5-1.25	48-20	4.7	6	15	60	3	400.047.A60	
0.5-1.25	48-20	6.0	6	18	60	3	400.060.A60	
0.75-1.5	32-16	8.0	8	24	60	3	400.080.A60	
1.0-2.5	24-10	10.0	10	30	80	4	400.100.A60	
1.0-2.5	24-10	12.0	12	36	80	4	400.120.A60	
1.0-2.5	24-10	16.0	16	49	100	4	400.160.A60	

INDEX 402...

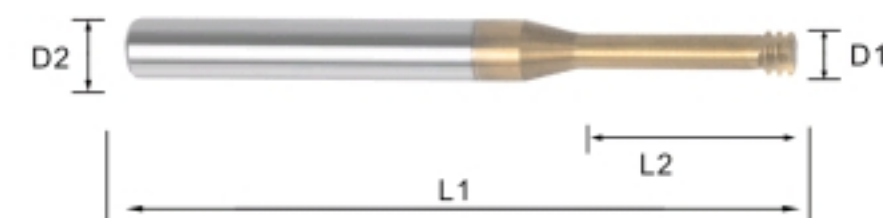


Thread size		Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NANOSIT	
M	MF									
M1.0		0.25	0.7	3	3.1	50	0.75	3	402.007.ISO025	
M1.2	M1.4	0.25	0.9	3	3.8	50	0.95, 1.15	3	402.009.ISO025	
M1.4		0.3	1.1	3	4.4	50	1.15, 1.1	3	402.011.ISO030	
M1.6	M2.0	0.35	1.2	3	5	50	1.25, 1.65	3	402.012.ISO035	
M1.8		0.35	1.4	3	5.6	50	1.5	3	402.014.ISO035	
M2.0		0.4	1.5	3	6.2	50	1.65	3	402.015.ISO040	
M2.5		0.45	2.0	3	7.7	50	2.1	3	402.020.ISO045	



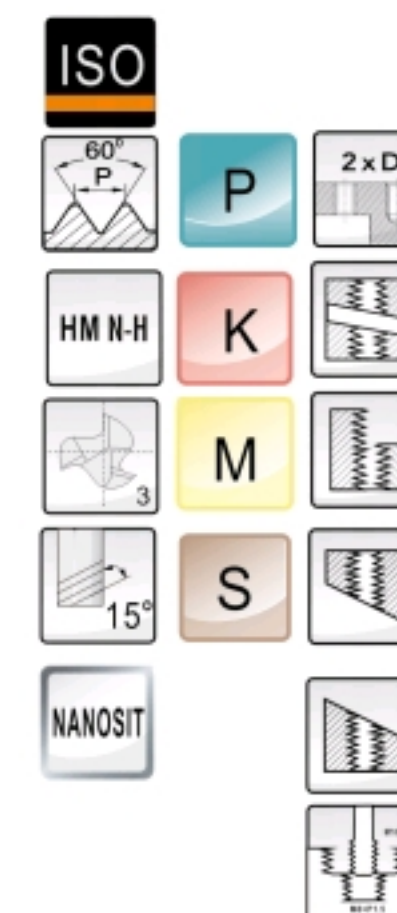
Solid carbide thread mills

INDEX 404...



Thread Length—Up To 2D(D=Nominal Thread Size)

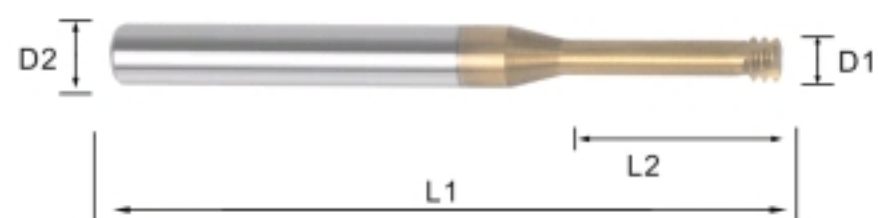
Thread size M	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NANOSIT	
M1.0	0.25	0.7	3	2.5	50	0.75	3	404.007.ISO025	
M1.2	0.25	0.9	3	2.8	50	0.95	3	404.009.ISO025	
M1.4	0.30	1.0	3	2.8	50	1.1	3	404.010.ISO030	
M1.6	0.35	1.2	4	3.3	50	1.25	3	404.012.ISO035	
M2	0.40	1.5	4	4.4	50	1.6	3	404.015.ISO040	
M2	0.40	1.5	6	4.4	50	1.6	3	404.015D.ISO040	
M2.2	0.45	1.6	4	4.8	50	1.8	3	404.016.ISO045	
M2.2	0.45	1.6	6	4.8	50	1.8	3	404.016D.ISO045	
M2.5	0.45	2.0	4	5.3	50	2.05	3	404.020.ISO045	
M2.5	0.45	2.0	6	5.3	50	2.05	3	404.020D.ISO045	
M3	0.50	2.4	4	6.4	50	2.5	3	404.024.ISO050	
M3	0.50	2.4	6	6.4	50	2.5	3	404.024D.ISO050	
M3.5	0.60	2.8	4	7.4	50	2.9	3	404.028.ISO060	
M3.5	0.60	2.8	6	7.4	50	2.9	3	404.028D.ISO060	
M4	0.70	3.2	6	8.6	60	3.3	3	404.032.ISO070	
M5	0.80	4.0	6	12.0	60	4.2	3	404.040.ISO080	
M6	1.00	4.8	6	13.0	60	5.0	3	404.048.ISO100	
M8	1.25	6.5	8	17.3	60	6.8	3	404.065.ISO125	
M10	1.50	8.0	8	22.0	60	8.5	3	404.080.ISO150	
M12	1.75	9.5	10	25.5	80	10.3	3	404.095.ISO175	
M14	2.00	10.0	10	29.0	80	12.0	3	404.100.ISO200	





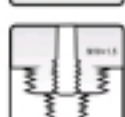
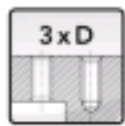
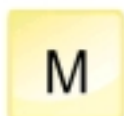
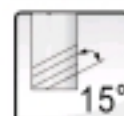
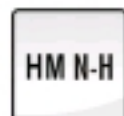
Solid carbide thread mills

INDEX 406...



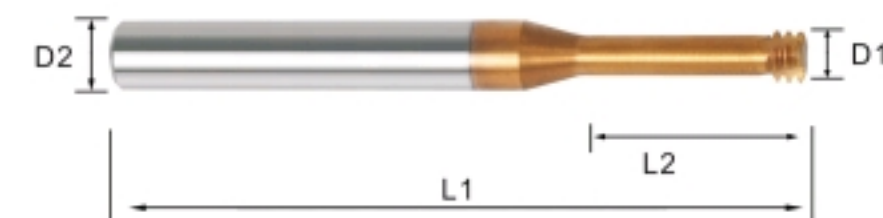
Thread Length—Up To 3D(D=Nominal Thread Size)

Thread size M	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NANOSIT
M1.4	0.30	1.0	3	3.9	50	1.1	3	406.010.ISO030
M1.6	0.35	1.2	3	5.1	50	1.25	3	406.012.ISO035
M2	0.40	1.5	3	6.1	50	1.6	3	406.015.ISO040
M2	0.40	1.5	6	6.1	50	1.6	3	406.015D.ISO040
M2.5	0.45	2.0	4	7.6	50	2.05	3	406.020.ISO045
M2.5	0.45	2.0	6	7.6	50	2.05	3	406.020D.ISO045
M3	0.50	2.4	4	9.3	50	2.5	3	406.024.ISO050
M3	0.50	2.4	6	9.3	50	2.5	3	406.024D.ISO050
M4	0.70	3.2	6	12.4	60	3.3	3	406.032.ISO070
M5	0.80	4.0	6	15.6	60	4.2	3	406.040.ISO080
M6	1.00	4.8	6	19.0	60	5.0	3	406.048.ISO100
M8	1.25	6.5	8	24.3	60	6.8	3	406.065.ISO125
M10	1.50	8.0	8	31.0	60	8.5	3	406.080.ISO150
M12	1.75	9.5	10	36.5	80	10.3	3	406.095.ISO175



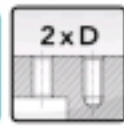
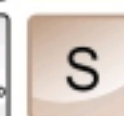
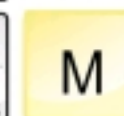
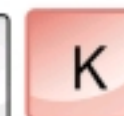
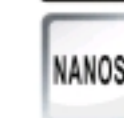
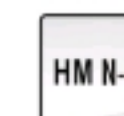
Solid carbide thread mills

INDEX 410...



Thread Length—Up To 2D(D=Nominal Thread Size)

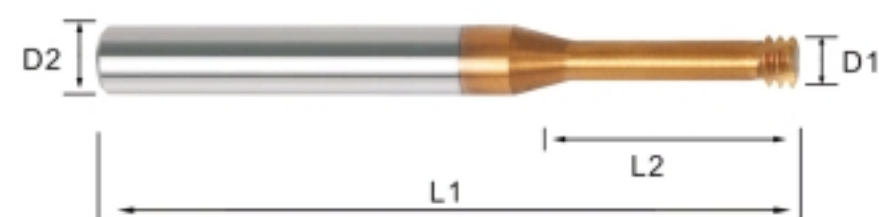
Thread size UNC	Thread size UNF	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NANOSIT
No1	No2	72	1.4	3	3.8	50	1.55	3	410.014.UN72
No1	No2	64	1.4	3	3.9	50	1.55,1.85	3	410.014.UN64
No2	No3	56	1.7	3	4.6	50	1.8,2.1	3	410.017.UN56
No2	No3	56	1.7	6	4.6	50	1.8,2.1	3	410.017D.UN56
No3	No4	48	1.9	4	5.4	50	2.1,2.4	3	410.019.UN48
No3	No4	48	1.9	6	5.4	50	2.1,2.4	3	410.019D.UN48
No4		40	2.1	4	6.2	50	2.3	3	410.021.UN40
No4		40	2.1	6	6.2	50	2.3	3	410.021D.UN40
No5	No6	40	2.5	4	7.1	50	2.6,2.9	3	410.025.UN40
No5	No6	40	2.5	6	7.1	50	2.6,2.9	3	410.025D.UN40
	No8	36	3.3	4	8.8	50	3.5	3	410.033.UN36
	No8	36	3.3	6	8.8	50	3.5	3	410.033D.UN36
No6		32	2.6	4	7.3	50	2.8	3	410.026.UN32
No8	No10	32	3.2	6	10.1	60	3.4,4.1	3	410.032.UN32
	1/4	28	5.2	6	14.0	60	5.5	3	410.052.UN28
No10		24	3.6	6	10.4	60	3.9	3	410.036.UN24
	5/16	24	6.7	8	16.7	60	6.9	3	410.067.UN24
1/4	7/16	20	4.9	6	13.7	60	5.1,9.9	3	410.049.UN20
	7/16	20	8.0	8	24.0	60	9.9	3	410.080.UN20
5/16		18	6.0	6	16.5	60	6.6	3	410.060.UN18
3/8		16	7.0	8	21.0	60	8.0	3	410.070.UN16
7/16		14	8.0	8	23.5	60	9.4	3	410.080.UN14
1/2		13	9.3	10	27.0	80	10.8	3	410.093.UN13
9/16		12	10.0	10	29.0	80	12.2	3	410.100.UN12
5/8		11	11.5	12	33.0	80	13.6	3	410.115.UN11





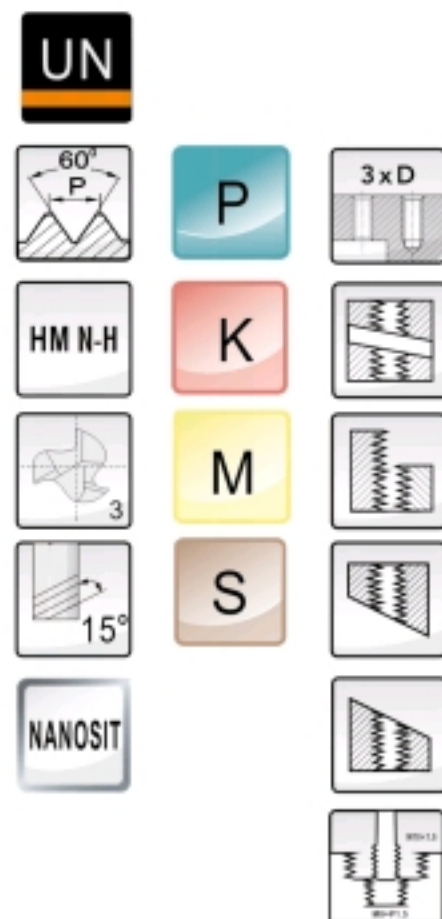
Solid carbide thread mills

INDEX **411...**



Thread Length—Up To 3D(D=Nominal Thread Size)

Thread size UNC	UNF	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NANOSIT
No0		80	1.2	3	3.9	50	1.25	3	411.012.UN80
No1		72	1.5	3	5.8	50	1.55	3	411.015.UN72
No2	No3	56	1.7	3	6.8	50	1.8,2.1	3	411.017.UN56
No4		40	2.1	4	8.1	50	2.3	3	411.021.UN40
No5	No6	40	2.5	4	9.8	50	2.6,2.9	3	411.025.UN40
No6		32	2.6	4	10.7	50	2.8	3	411.026.UN32
No8	No10	32	3.2	6	12.7	60	3.4,4.1	3	411.032.UN32
	1/4	28	5.2	6	19.3	60	5.5	3	411.052.UN28
	5/16	24	6.7	8	24.2	60	6.9	3	411.067.UN24
1/4	7/16	20	4.9	6	19.4	60	5.1,9.9	3	411.049.UN20



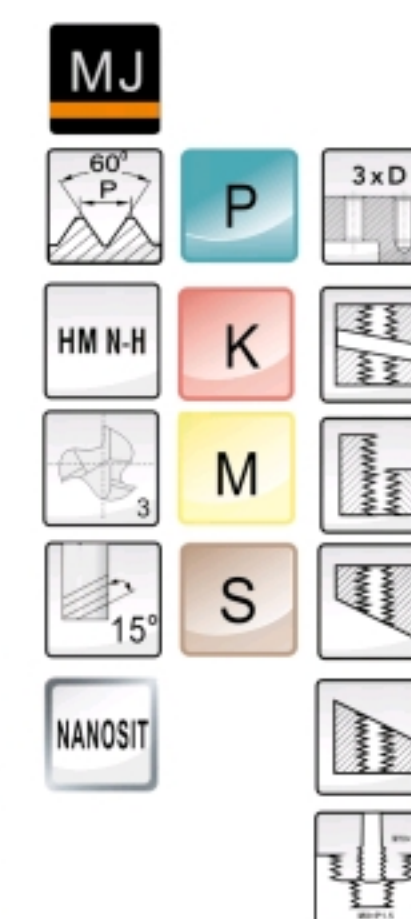
Solid carbide thread mills

INDEX **412...413...**

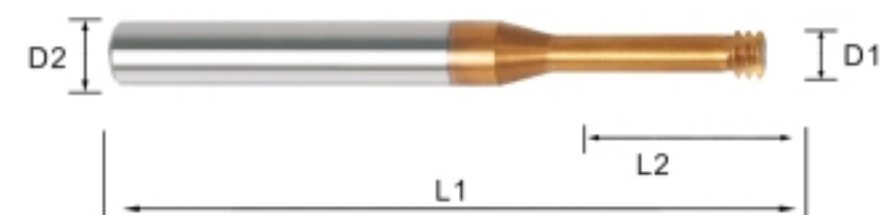


Thread Length—Up To 3D(D=Nominal Thread Size)

Thread size MJ	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. BIANK	NANOSIT
MJ3	0.50	2.4	6	9.2	60	2.6	3	412.024.MJ050	413.024.MJ050
MJ3.5	0.60	2.9	6	11	60	3.0	3	412.029.MJ060	413.029.MJ060
MJ4	0.70	3.2	6	12.3	60	3.4	3	412.032.MJ070	413.032.MJ070
MJ5	0.80	4.1	6	15.4	60	4.3	3	412.041.MJ080	413.041.MJ080
MJ6	1.00	4.8	6	18.5	60	5.1	3	412.048.MJ100	413.048.MJ100
MJ8	1.25	6.5	8	24.6	60	6.9	3	412.065.MJ125	413.065.MJ125
MJ10	1.50	8.2	10	30.8	80	8.7	3	412.082.MJ150	413.082.MJ150
MJ12	1.75	9.9	10	37	80	10.4	3	412.099.MJ175	413.099.MJ175
MJ14	2.00	11.9	12	42.5	80	12.25	3	412.119.MJ200	413.119.MJ200

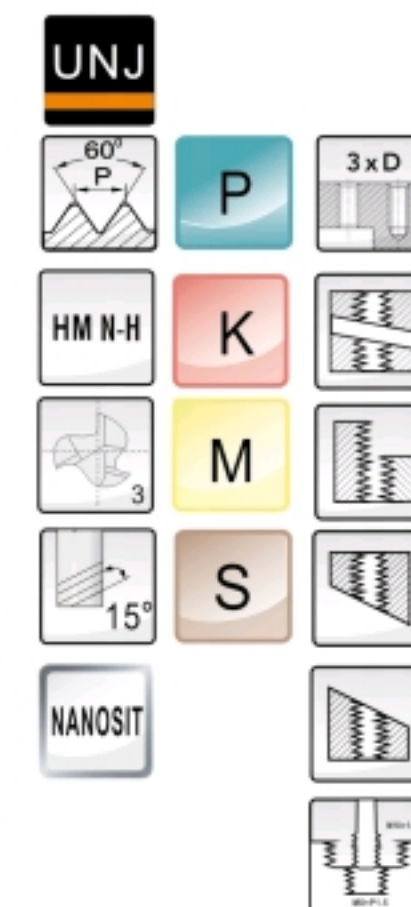


INDEX **414...415...**



Thread Length—Up To 3D(D=Nominal Thread Size)

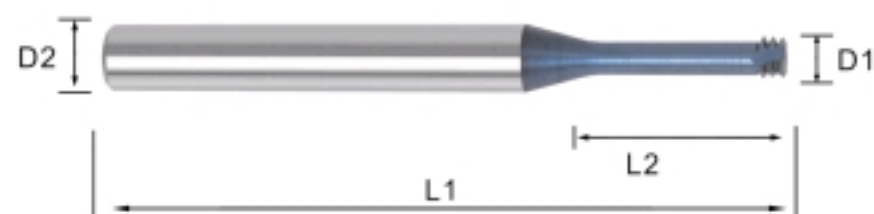
Thread size UNJC	UNJF	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. BIANK	NANOSIT
No6	No10	32	2.7	6	11	60	2.8,4.1	3	414.027.UNJ32	415.027.UNJ32
	1/4	28	5.4	6	19.5	60	5.6	3	414.054.UNJ28	415.054.UNJ28
No10		24	3.7	6	14.9	60	3.9	3	414.037.UNJ24	415.037.UNJ24
	5/16	24	6.7	8	24.1	60	6.9	3	414.067.UNJ24	415.067.UNJ24
1/4		20	5	6	19.5	60	5.1	3	414.050.UNJ20	415.050.UNJ20
	7/16	20	9.6	10	33.5	75	9.9	3	414.096.UNJ20	415.096.UNJ20
5/16	9/16	18	6.4	8	24.1	60	6.6,12.9	3	414.064.UNJ18	415.064.UNJ18
3/8	3/4	16	7.7	8	29	60	8,17.5	3	414.077.UNJ16	415.077.UNJ16
7/16	7/8	14	9.2	10	33.5	75	9.4,20.5	3	414.092.UNJ14	415.092.UNJ14
1/2		13	9.9	10	38.5	75	10.8	3	414.099.UNJ13	415.099.UNJ13





Solid carbide thread mills

INDEX **420...421...**

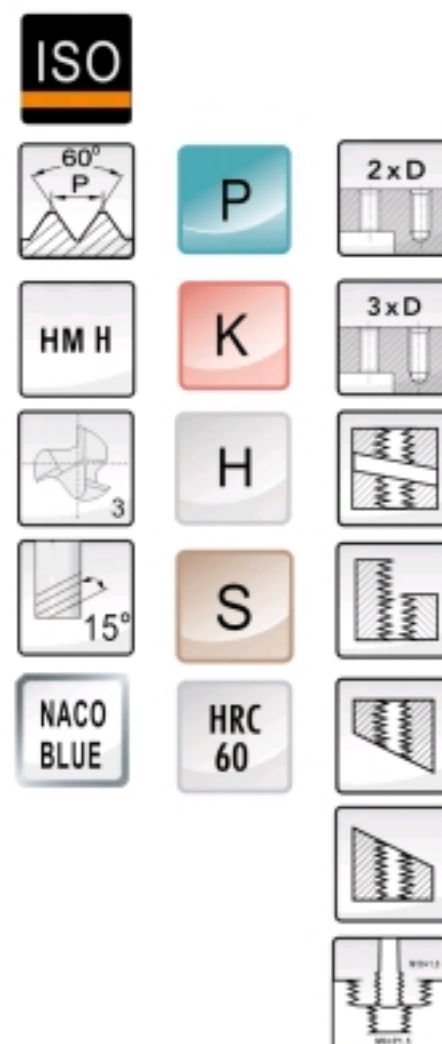


Thread Length—Up To 2D(D=Nominal Thread Size)

Thread size M	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NACOBUE
M1.6	0.35	1.2	3	3.3	50	1.25	3	420.012.ISO035
M2	0.40	1.5	3	4.4	50	1.6	3	420.015.ISO040
M2	0.40	1.5	6	4.4	50	1.6	3	420.015D.ISO040
M2.2	0.45	1.6	3	4.8	50	1.75	3	420.016.ISO045
M2.2	0.45	1.6	6	4.8	50	1.75	3	420.016D.ISO045
M2.5	0.45	2.0	4	5.3	50	2.05	3	420.020.ISO045
M2.5	0.45	2.0	6	5.3	50	2.05	3	420.020D.ISO045
M3	0.50	2.4	4	6.4	50	2.5	3	420.024.ISO050
M3	0.50	2.4	6	6.4	50	2.5	3	420.024D.ISO050
M3.5	0.60	2.8	4	7.4	50	2.9	3	420.028.ISO060
M3.5	0.60	2.8	6	7.4	50	2.9	3	420.028D.ISO060
M4	0.70	3.2	6	8.6	60	3.3	3	420.032.ISO070
M5	0.80	4.0	6	12.0	60	4.2	3	420.040.ISO080
M6	1.00	4.8	6	13.0	60	5.0	3	420.048.ISO100
M8	1.25	6.5	8	17.3	60	6.8	3	420.065.ISO125
M10	1.50	8.0	8	22.0	60	8.5	3	420.080.ISO150
M12	1.75	9.5	10	25.5	80	10.3	3	420.095.ISO175

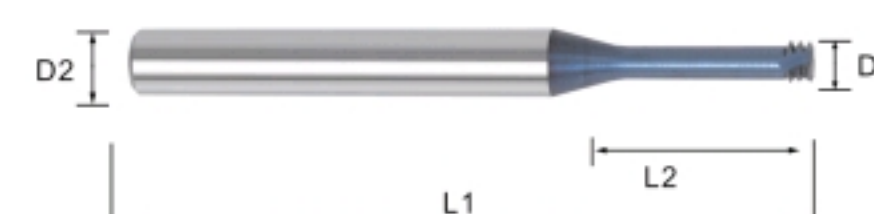
Thread Length—Up To 3D(D=Nominal Thread Size)

Thread size M	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NACOBUE
M1.6	0.35	1.2	3	5.1	50	1.25	3	421.012.ISO035
M2	0.40	1.5	3	6.1	50	1.6	3	421.015.ISO040
M2	0.40	1.5	6	6.1	50	1.6	3	421.015D.ISO040
M2.5	0.45	2.0	4	7.6	50	2.05	3	421.020.ISO045
M2.5	0.45	2.0	6	7.6	50	2.05	3	421.020D.ISO045
M3	0.50	2.4	4	9.3	50	2.5	3	421.024.ISO050
M3	0.50	2.4	6	9.3	50	2.5	3	421.024D.ISO050
M4	0.70	3.2	6	12.4	60	3.3	3	421.032.ISO070
M5	0.80	4.0	6	15.6	60	4.2	3	421.040.ISO080
M6	1.00	4.8	6	19.0	60	5.0	3	421.048.ISO100
M8	1.25	6.5	8	24.3	60	6.8	3	421.065.ISO125
M10	1.50	8.0	8	31.0	60	8.5	3	421.080.ISO150
M12	1.75	9.5	10	36.5	60	10.3	3	421.095.ISO175



Solid carbide thread mills

INDEX **422...423...**



Thread Length—Up To 2D(D=Nominal Thread Size)

Thread size UNC	UNF	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NACOBUE
No1	No2	72	1.4	3	3.8	50	1.55	3	422.014.UN72
No1	No2	64	1.4	3	3.9	50	1.55,1.85	3	422.014.UN64
No2	No3	56	1.7	3	4.6	50	1.8,2.1	3	422.017.UN56
No2	No3	56	1.7	6	4.6	50	1.8,2.1	3	422.017D.UN56
No3	No4	48	1.9	4	5.4	50	2.1,2.4	3	422.019.UN48
No3	No4	48	1.9	6	5.4	50	2.1,2.4	3	422.019D.UN48
No4		40	2.1	4	6.2	50	2.3	3	422.021.UN40
No4		40	2.1	6	6.2	50	2.3	3	422.021D.UN40
No5	No6	40	2.5	4	7.1	50	2.6,2.9	3	422.025.UN40
No5	No6	40	2.5	6	7.1	50	2.6,2.9	3	422.025D.UN40
	No8	36	3.3	4	8.8	60	3.5	3	422.033.UN36
	No8	36	3.3	6	8.8	60	3.5	3	422.033D.UN36
No6		32	2.6	6	7.8	60	2.8	3	422.026.UN32
No8	No10	32	3.2	6	10.3	60	3.4,3.4	3	422.032.UN32
	1/4	28	5.2	6	14.0	60	5.5	3	422.052.UN28
No10		24	3.6	6	10.4	60	3.9	3	422.036.UN24
	5/16	24	6.7	8	16.7	60	6.9	3	422.067.UN24
1/4	7/16	20	4.9	6	13.7	60	5.1,9.9	3	422.049.UN20
	7/16	20	8.0	8	24.0	60	9.9	3	422.080.UN20
5/16		18	6.0	6	16.5	60	6.6	3	422.060.UN18
3/8		16	6.9	8	20.0	60	8	3	422.069.UN16
7/16	5/16	14	8.0	8	23.5	60	9.4	3	422.080.UN14

Thread Length—Up To 3D(D=Nominal Thread Size)

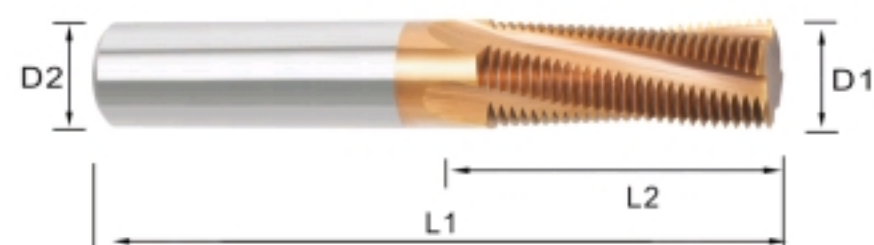
Thread size UNC	UNF	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No. NACOBUE
No5	No6	40	2.5	4	9.8	50	2.6,2.9	3	423.025.UN40
No5	No6	40	2.5	6	9.8	60	2.6,2.9	3	423.025D.UN40
No8	No10	32	3.2	6	12.7	60	3.4,4.1	3	423.032.UN32
	1/4	28	5.2	6	19.3	60	5.5	3	423.052.UN28
	5/16	24	6.7	8	24.2	60	6.9	3	423.067.UN24
1/4	7/16	20	4.9	6	29.4	60	5.1,9.9	3	423.049.UN20



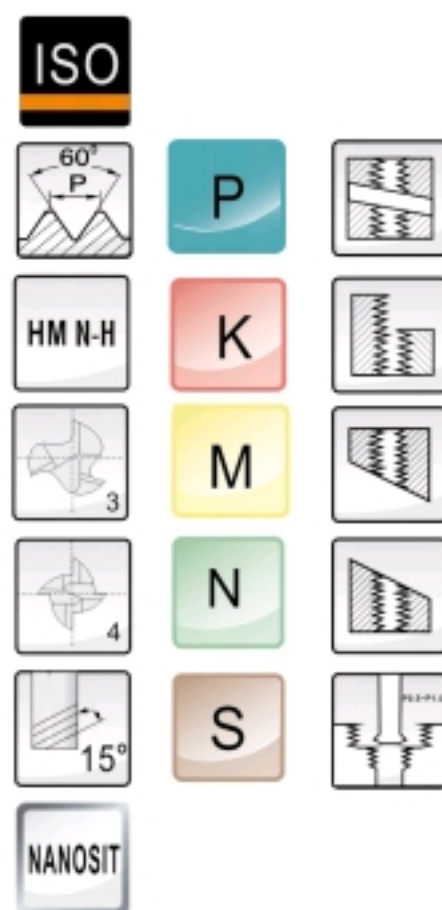


Solid carbide thread mills

INDEX **426...427...**

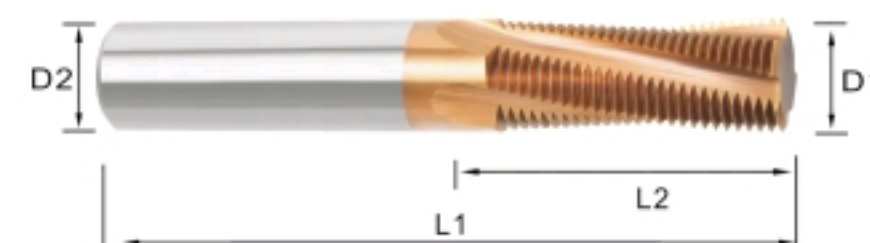


Thread Size	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
								BIANK	NANOSIT
M5	0.80	4.0	6	10.0	60	4.2	3	426.040.ISO080	427.040.ISO080
M6	1.00	4.8	6	11.5	60	5.0	3	426.048.ISO100	427.048.ISO100
M8	1.25	6.0	6	15.0	60	6.8	3	426.060.ISO125	427.060.ISO125
M10	1.50	8.0	8	20.0	60	8.5	3	426.080.ISO150	427.080.ISO150
M12	1.75	10.0	10	25.0	75	10.3	4	426.100.ISO175	427.100.ISO175
M14	2.00	10.0	10	25.0	75	12.0	4	426.100.ISO200	427.100.ISO200
M16	2.00	12.0	12	25.0	75	14.0	4	426.120.ISO200	427.120.ISO200
M20	2.50	16.0	16	40.0	100	17.5	4	426.160.ISO250	427.160.ISO250
M24	3.00	20.0	20	50.0	100	21.0	4	426.200.ISO300	427.200.ISO300

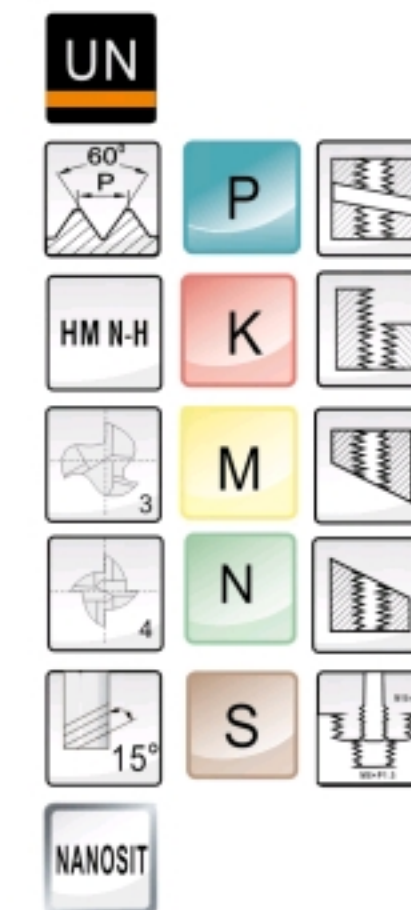


Solid carbide thread mills

INDEX **430...431...**



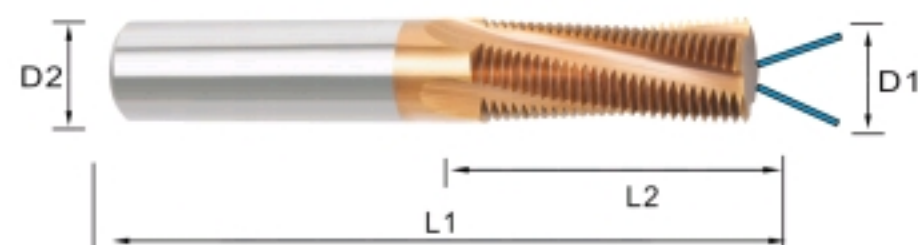
UNC	UNF	UNEF	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
										BIANK	NANOSIT
		5/16	32	6.0	6	15	60	7.15	3	430.060.UN32	431.060.UN32
		3/8	32	8.0	8	20	60	8.7	4	430.080.UN32	431.080.UN32
	1/4		28	5.0	6	15	60	5.5	3	430.050.UN28	431.050.UN28
		7/16, 1/2	28	8.0	8	20	60	10.2, 11.8	4	430.080.UN28	431.080.UN28
	5/16		24	6.0	6	15	60	6.9	3	430.060.UN24	431.060.UN24
	3/8		24	8.0	8	20	60	8.5	4	430.080.UN24	431.080.UN24
	9/16, 5/8		24	12.0	12	25	75	12.8, 14.5	4	430.120.UN24	431.120.UN24
	1/4		20	4.8	6	12	60	5.1	3	430.048.UN20	431.048.UN20
	7/16		20	8.0	8	20	60	9.9	3	430.080.UN20	431.080.UN20
	1/2		20	10.0	10	25	75	11.5	4	430.100.UN20	431.100.UN20
		3/4, 1	20	12.0	12	30	75	17.8, 24.1	4	430.120.UN20	431.120.UN20
	5/16		18	6.0	6	15	60	6.5	3	430.060.UN18	431.060.UN18
	9/16, 5/8		18	10.0	10	25	75	12.8, 14.5	4	430.100.UN18	431.100.UN18
	3/8		16	7.5	8	18.2	60	7.9	3	430.075.UN16	431.075.UN16
	3/4		16	12.0	12	30	75	17.5	4	430.120.UN16	431.120.UN16
	7/16		14	8.0	8	20	60	9.3	3	430.080.UN14	431.080.UN14
	7/8		14	12.0	12	25	75	20.5	4	430.120.UN14	431.120.UN14
	1/2		13	10.0	10	25	75	10.8	3	430.100.UN13	431.100.UN13
	9/16		12	11.5	12	27	75	12.2	4	430.115.UN12	431.115.UN12
	1		12	16.0	16	40	100	23.5	4	430.160.UN12	431.160.UN12
	5/8		11	12.0	12	32	75	13.5	3	430.120.UN11	431.120.UN11
	3/4		10	16.0	16	40	100	16.5	4	430.160.UN10	431.160.UN10
	7/8		9	16.0	16	40	100	19.5	4	430.160.UN09	431.160.UN09
	1		8	20.0	20	50	100	22.2	4	430.200.UN08	431.200.UN08





Solid carbide thread mills

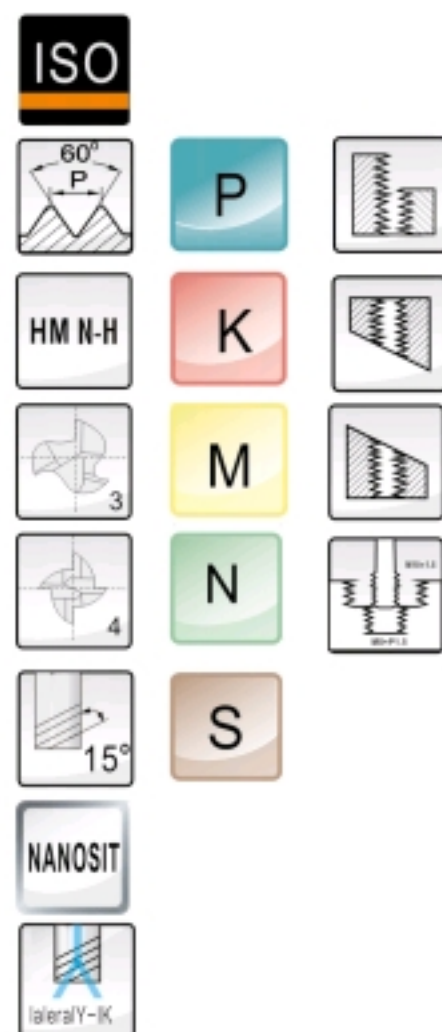
INDEX 440...441...



Thread Size		Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
M	MF								BIANK	NANOSIT
M3	MF3.5	0.50	2.4	4	4.7	50	2.5,3	3	440.024.ISO050	441.024.ISO050
M4		0.70	3.2	4	6.6	50	3.3	3	440.032.ISO070	441.032.ISO070
M5		0.80	3.9	4	7.6	50	4.2	3	440.039.ISO080	441.039.ISO080
M6	MF8	1.00	4.8	6	9.5	60	5.7	3	440.048.ISO100	441.048.ISO100
M8		1.25	6.5	8	13.1	60	6.8	3	440.065.ISO125	441.065.ISO125
M10	MF12	1.50	8.2	10	15.7	75	8.5,10.5	3	440.082.ISO150	441.082.ISO150
M12		1.75	9.9	10	18.4	75	10.2	4	440.099.ISO175	441.099.ISO175
M14	MF18	2.00	11.6	12	21	75	12,16	4	440.116.ISO200	441.116.ISO200
M16	MF18	2.00	13.6	14	25	100	14,16	4	440.136.ISO200	441.136.ISO200

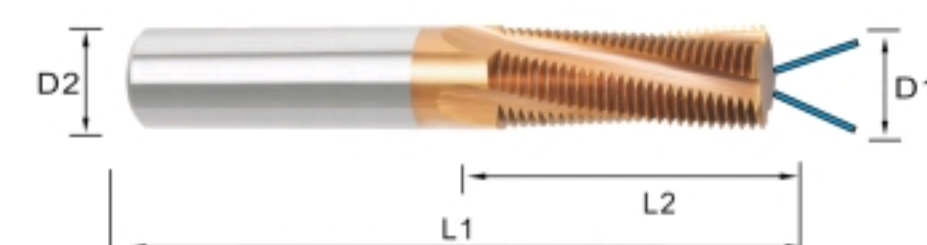
INDEX 442...443...

Thread Size		Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
M	MF								BIANK	NANOSIT
M3	MF3.5	0.50	2.4	4	6.2	50	2.5,3	3	442.024.ISO050	443.024.ISO050
	MF4	0.50	3.2	4	8.2	50	3.5	3	442.032.ISO050	443.032.ISO050
	MF5	0.50	4.2	6	10.2	60	4.5	3	442.042.ISO050	443.042.ISO050
M4		0.70	3.2	4	8.7	50	3.3	3	442.032.ISO070	443.032.ISO070
	MF6	0.75	5	6	12.4	60	5.3	3	442.050.ISO075	443.050.ISO075
M5		0.80	3.9	4	10.8	50	4.2	3	442.039.ISO080	443.039.ISO080
M6	MF8	1.00	4.8	6	12.5	60	5.7	3	442.048.ISO100	443.048.ISO100
	MF8	1.00	6.7	8	16.5	60	7	3	442.067.ISO100	443.067.ISO100
	MF10	1.00	8.7	10	20.5	75	9	3	442.087.ISO100	443.087.ISO100
	MF12	1.00	10.7	12	24.5	75	11	4	442.107.ISO100	443.107.ISO100
M8		1.25	6.5	8	16.9	60	6.8	3	442.065.ISO125	443.065.ISO125
	MF10	1.25	8.5	10	20.6	75	8.8	3	442.085.ISO125	443.085.ISO125
M10	MF12	1.50	8.2	10	20.2	75	8.5,10.5	3	442.182.ISO150	443.082.ISO150
	MF12	1.50	9.9	10	24.7	75	10.5	4	442.099.ISO150	443.099.ISO150
	MF14	1.50	11.9	12	29.2	75	12.5	4	442.119.ISO150	443.119.ISO150
	MF16	1.50	13.9	14	32.2	100	14.5	4	442.139.ISO150	443.139.ISO150
M12	MF18	1.75	9.9	10	25.4	75	10.3,16.3	4	442.099.ISO175	443.099.ISO175
M14	MF18	2.00	11.6	12	29	80	12,16	4	442.116.ISO200	443.116.ISO200
M16		2.00	13.6	14	33	100	14	4	442.136.ISO200	443.136.ISO200
M18		2.50	14.8	16	36.2	100	15.5	4	442.148.ISO250	443.148.ISO250
M20		2.50	17.1	18	41.2	100	17.5	4	442.171.ISO250	443.171.ISO250
M24		3.00	19.9	20	49.5	100	21	4	442.199.ISO300	443.199.ISO300



Solid carbide thread mills

INDEX 444...445...



Thread size		Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
UNC	UNF	UNEF							BIANK	NANOSIT
No10	No12	32	3.8	4	9.9	50	4,1,4,7	3	444.038.UN32	445.038.UN32
	No12	32	4.4	6	11.5	60	5.6	3	444.044.UN32	445.044.UN32
	No12,1/4	28	4.4	6	11.3	60	4,6,5,5	3	444.044.UN28	445.044.UN28
	1/4	28	5.2	6	13.1	60	5.5	3	444.052.UN28	445.052.UN28
	7/16,1/2	28	10.0	10	22.2	75	10,2,11,8	3	444.100.UN28	445.100.UN28
No10		24	3.6	4	7.9	50	3.9	3	444.036.UN24	445.036.UN24
No10		24	3.6	4	10.0	50	3.9	3	444.036D.UN24	445.036D.UN24
No12		24	4.2	6	9.0	60	4.5	3	444.042.UN24	445.042.UN24
No12		24	4.2	6	11.1	60	4.5	3	444.042D.UN24	445.042D.UN24
	5/16	24	6.7	8	16.4	60	6.9	3	444.067.UN24	445.067.UN24
	3/8	24	8.2	10	19.6	75	8.5	3	444.082.UN24	445.082.UN24
	9/16,5/8	24	13.0	14	29.1	100	13,2,14,8	4	444.130.UN24	445.130.UN24
1/4		20	4.9	6	9.5	60	5.1	3	444.049.UN20	445.049.UN20
1/4		20	4.9	6	13.3	60	5.1	3	444.049D.UN20	445.049D.UN20
	7/16,1/2	20	9.6	10	22.2	75	9,9,11,5	3	444.096.UN20	445.096.UN20
	1/2	20	11.0	12	26.0	75	11.5	4	444.110.UN20	445.110.UN20
	3/4,7/8	20	17.4	18	38.7	100	17,8,20,95	4	444.174.UN20	445.174.UN20
5/16		18	6.2	8	12.0	60	6.6	3	444.062.UN18	445.062.UN18
5/16		18	6.2	8	16.3	60	6.6	3	444.062D.UN18	445.062D.UN18
9/16,5/8		18	12.5	14	28.9	100	12,9,14,5	4	444.125.UN18	445.125.UN18
5/8		18	14.0	16	31.7	100	14.5	4	444.140.UN18	445.140.UN18
3/8		16	7.7	8	15.1	60	8.0	3	444.077.UN16	445.077.UN16
3/8		16	7.7	8	19.8	60	8.0	3	444.077D.UN16	445.077D.UN16
	3/4	16	17.0	18	38.8	100	17.5	4	444.170.UN16	445.170.UN16
7/16		14	9.0	10	17.2	75	9.4	3	444.090.UN14	445.090.UN14
7/16		14	9.0	10	22.7	75	9.4	3	444.090D.UN14	445.090D.UN14
	7/8	14	20.0	20	44.4	100	20.5	4	444.200.UN14	445.200.UN14
1/2		13	10.4	12	20.5	80	10.9	4	444.104.UN13	445.104.UN13
1/2		13	10.4	12	26.4	80	10.9	4	444.104D.UN13	445.104D.UN13
9/16		12	11.8	12	22.2	80	12.2	4	444.118.UN12	445.118.UN12
9/16		12	11.8	12	28.6	80	12.2	4	444.118D.UN12	445.118D.UN12
	1,1 1/8	12	20.0	20	51.9	100	23,2,26,5	4	444.200.UN12	445.200.UN12
5/8		11	13.2	14	33.5	100	13.6	4	444.132.UN11	445.132.UN11
3/4		10	16.0	16	39.4	100	16.6	4	444.160.UN10	445.160.UN10
7/8		9	19.0	20	46.6	100	19.5	4	444.190.UN09	445.190.UN09
1		8	20.0	20	52.4	100	22.2	4	444.200.UN08	445.200.UN08





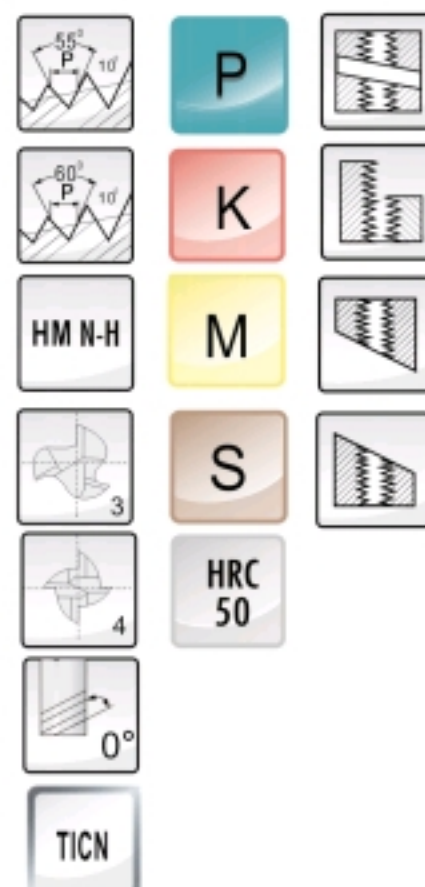
Solid carbide thread mills

INDEX **446...447...**



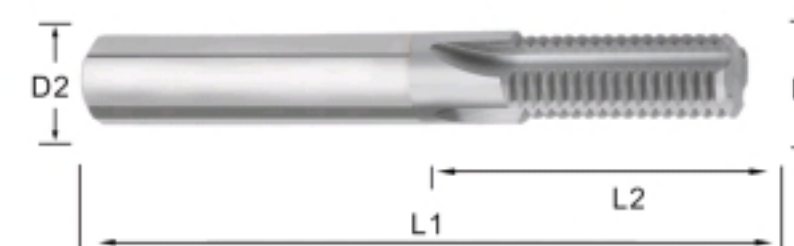
Angle (α)	Pitch	Thread taper	Thread height	D3	D1	D2	L2	L1	Z	Article-No. TICN
55°	0.30	20°	0.18	2.8	1.5	3	3.9	50	3	446.015.A55030
55°	0.35	20°	0.20	3.9	1.8	4	6.3	50	3	446.018.A55035
55°	0.40	20°	0.29	5.9	2.5	6	10.0	60	3	446.025.A55040
55°	0.50	20°	0.33	5.9	2.9	6	9.0	60	3	446.029.A55050
55°	0.60	20°	0.47	5.9	3.8	6	6.6	60	3	446.038.A55060

Angle (α)	Pitch	Thread taper	Thread height	D3	D1	D2	L2	L1	Z	Article-No. TICN
60°	0.30	20°	0.19	5.9	1.9	6	12	50	3	447.019.A60030
60°	0.40	20°	0.26	5.9	2.3	6	10.8	50	3	447.023.A60040
60°	0.50	20°	0.32	5.9	2.9	6	9	50	3	447.029.A60050

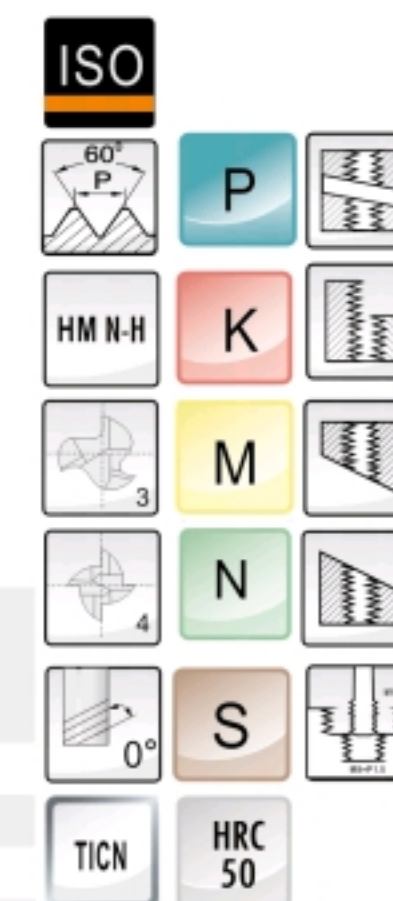


Solid carbide thread mills

INDEX **450...451...**



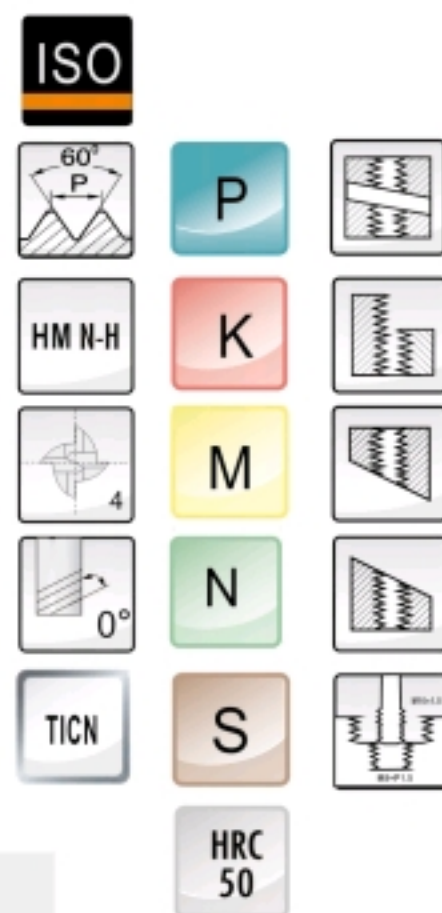
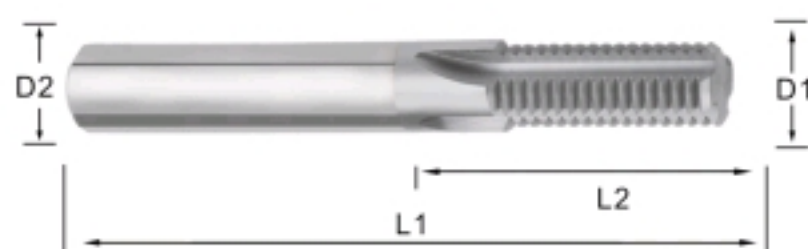
Thread size M MF	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
								BIANK	TICN
MF5	0.50	4.0	4	12.0	50	4.5	3	450.040.ISO050	451.040.ISO050
	0.50	5.0	6	15.0	60	5.5	3	450.050.ISO050	451.050.ISO050
	0.50	6.0	6	16.0	60	7.5	3	450.060.ISO050	451.060.ISO050
	0.75	4.8	6	15.0	60	5.3	3	450.048.ISO075	451.048.ISO075
MF6	0.75	6.0	6	16.0	60	7.3	3	450.060.ISO075	451.060.ISO075
	0.75	8.0	8	20.2	75	9.3	3	450.080.ISO075	451.080.ISO075
	0.75	10.0	10	23.5	75	11.3	4	450.100.ISO075	451.100.ISO075
	0.80	4.0	4	12.0	50	4.2	3	450.040.ISO080	451.040.ISO080
M6	1.00	4.6	6	15.0	60	5.0	3	450.046.ISO100	451.046.ISO100
	1.00	6.0	6	16.0	60	7.0	3	450.060.ISO100	451.060.ISO100
	1.00	8.0	8	20.0	75	9.0	3	450.080.ISO100	451.080.ISO100
	1.00	10.0	10	23.0	75	11.0	4	450.100.ISO100	451.100.ISO100
MF16	1.00	12.0	12	25.0	75	15.0	4	450.120.ISO100	451.120.ISO100
	1.25	6.0	6	16.0	60	6.8	3	450.060.ISO125	451.060.ISO125
	1.25	8.0	8	20.0	75	8.8	3	450.080.ISO125	451.080.ISO125
	1.25	9.0	10	23.0	75	10.8	4	450.090.ISO125	451.090.ISO125
MF14	1.25	10.0	10	25.0	75	12.8	4	450.100.ISO125	451.100.ISO125
	1.25	12.0	12	25.0	75	14.8	4	450.120.ISO125	451.120.ISO125
	1.50	7.0	8	20.0	75	8.5	3	450.070.ISO150	451.070.ISO150
	1.50	8.0	8	20.0	75	8.5	3	450.080.ISO150	451.080.ISO150
MF12	1.50	9.0	10	23.0	75	10.5	4	450.090.ISO150	451.090.ISO150
	1.50	10.0	10	25.0	75	12.5	4	450.100.ISO150	451.100.ISO150
	1.50	12.0	12	25.0	75	14.5	4	450.120.ISO150	451.120.ISO150
	1.75	9.0	10	23.0	75	10.3	4	450.090.ISO175	451.090.ISO175
M14	2.00	10.0	10	25.0	75	12.0	4	450.100.ISO200	451.100.ISO200
	2.00	12.0	12	25.0	75	14.0	4	450.120.ISO200	451.120.ISO200





Solid carbide thread mills

INDEX **452...453...**

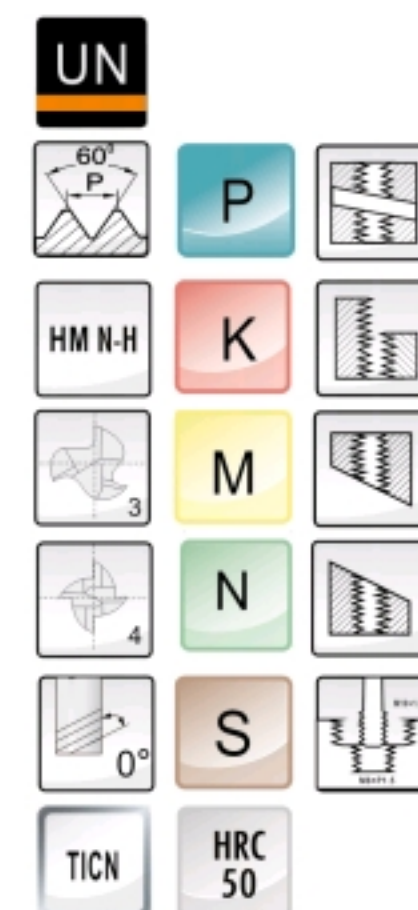
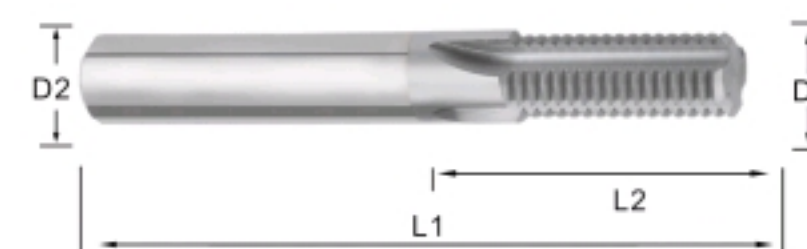


Thread size		Pitch					Drill hole size	Z	Article-No.		
M	MF		D1	D2	L2	L1			BIANK	TICN	
	MF16	1.00	12.0	12	30	100	15.0	4	452.120.ISO100	453.120.ISO100	
	MF20	1.00	16.0	16	30	100	19.0	4	452.160.ISO100	453.160.ISO100	
	MF16	1.25	12.0	12	30	100	14.8	4	452.120.ISO125	453.120.ISO125	
	MF20	1.25	16.0	16	30	100	18.8	4	452.160.ISO125	453.160.ISO125	
	MF16	1.50	12.0	12	30	100	14.5	4	452.120.ISO150	453.120.ISO150	
	MF20	1.50	16.0	16	30	100	18.5	4	452.160.ISO150	453.160.ISO150	
M16		2.00	12.0	12	30	100	14.0	4	452.120.ISO200	453.120.ISO200	
	MF20	2.00	16.0	16	30	100	18.0	4	452.160.ISO200	453.160.ISO200	
M20		2.50	16.0	16	30	100	17.5	4	452.160.ISO250	453.160.ISO250	
	MF24	2.50	20.0	20	30	100	21.5	4	452.200.ISO250	453.200.ISO250	
M24		3.00	16.0	16	30	100	21.0	4	452.160.ISO300	453.160.ISO300	



Solid carbide thread mills

INDEX **454...455...**

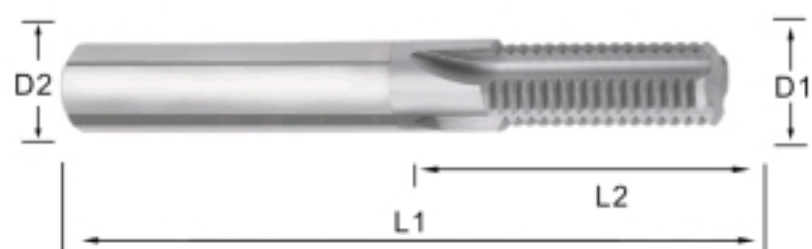


Thread size			Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
UNC	UNF	UNEF								BIANK	TICN
		1/4	32	5.0	6	16	60	5.5	3	454.050.UN32	455.050.UN32
		5/16	32	6.0	6	16	60	7.15	3	454.060.UN32	455.060.UN32
		3/8	32	7.0	8	20	75	8.7	3	454.070.UN32	455.070.UN32
	1/4		28	5.0	6	16	60	5.5	3	454.050.UN28	455.050.UN28
		7/16	28	8.0	8	23	75	10.2	3	454.080.UN28	455.080.UN28
		1/2	28	10.0	10	23	75	11.8	4	454.100.UN28	455.100.UN28
	5/16		24	6.0	6	16	60	6.9	3	454.060.UN24	455.060.UN24
	3/8		24	7.0	8	20	75	8.5	3	454.070.UN24	455.070.UN24
		5/8	24	12.0	12	25	75	14.8	4	454.120.UN24	455.120.UN24
1/4			20	4.6	6	16	60	5.1	3	454.046.UN20	455.046.UN20
	7/16		20	8.0	8	23	75	9.8	3	454.080.UN20	455.080.UN20
	1/2		20	10.0	10	23	75	11.4	4	454.100.UN20	455.100.UN20
5/16			18	6.0	6	16	60	6.6	3	454.060.UN18	455.060.UN18
	5/8		18	12.0	12	25	75	14.5	4	454.120.UN18	455.120.UN18
3/8			16	7.0	8	20	75	8.0	3	454.070.UN16	455.070.UN16
7/16			14	8.0	8	23	75	9.4	3	454.080.UN14	455.080.UN14
1/2			13	10.0	10	23	75	10.8	4	454.100.UN13	455.100.UN13
9/16			12	10.0	10	23	75	12.2	4	454.100.UN12	455.100.UN12
5/8			11	12.0	12	25	75	13.5	4	454.120.UN11	455.120.UN11



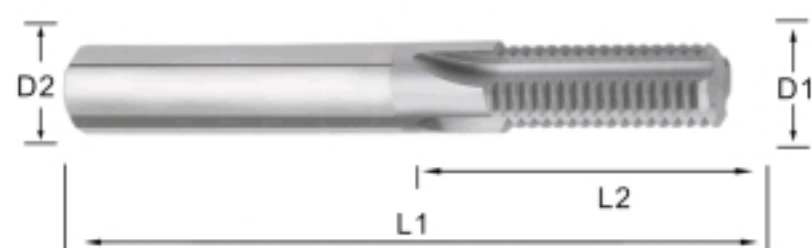
Solid carbide thread mills

INDEX 454...455...

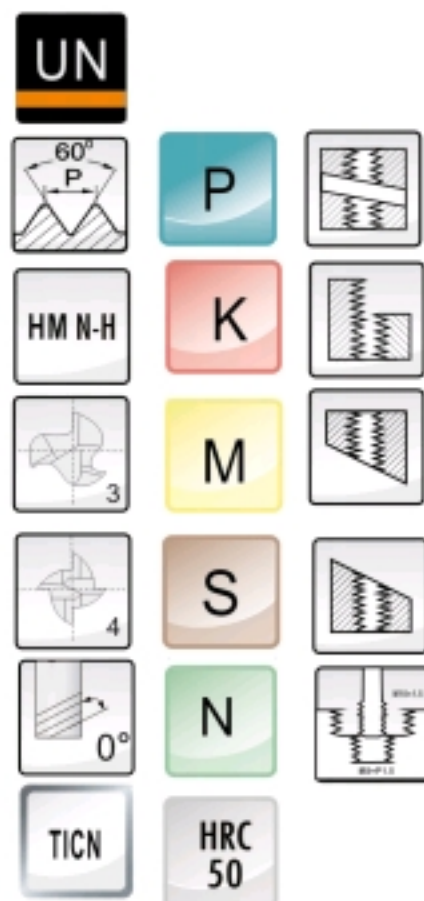


Thread size	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
								BIANK	TICN
7/16	32	8	8	23	75	10.3	3	454.080.UN32	455.080.UN32
1/2	32	10	10	23	75	11.9	4	454.100.UN32	455.100.UN32
5/8	32	12	12	25	75	15.1	4	454.120.UN32	455.120.UN32
5/16	28	6	6	16	60	7.0	3	454.060.UN28	455.060.UN28
5/8	28	12	12	25	75	15.0	4	454.120.UN28	455.120.UN28
7/16	24	8	8	23	75	10.1	3	454.080.UN24	455.080.UN24
1/2	24	10	10	23	75	11.6	4	454.100.UN24	455.100.UN24
5/16	20	6	6	16	60	6.7	3	454.060.UN20	455.060.UN20
5/8	20	12	12	25	75	14.6	4	454.120.UN20	455.120.UN20
7/16	18	8	8	23	75	9.7	3	454.080.UN18	455.080.UN18
1/2	18	10	10	23	75	11.3	4	454.100.UN18	455.100.UN18
7/16	16	8	8	23	75	9.5	3	454.080.UN16	455.080.UN16
1/2	16	10	10	23	75	11.1	4	454.100.UN16	455.100.UN16
5/8	16	12	12	25	75	14.3	4	454.120.UN16	455.120.UN16
5/8	12	12	12	25	75	13.8	4	454.120.UN12	455.120.UN12

INDEX 456...457...

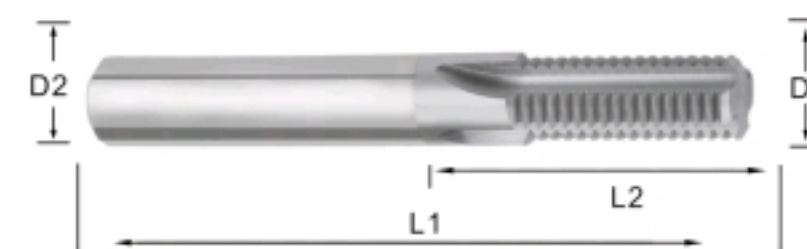


Thread size	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
								BIANK	TICN
7/8	16	16	16	30	100	20.6	4	456.160.UN16	457.160.UN16
7/8	14	16	16	30	100	20.4	4	456.160.UN14	457.160.UN14
5/8	12	12	12	30	100	13.8	4	456.120.UN12	457.120.UN12
7/8	12	16	16	30	100	20.1	4	456.160.UN12	457.160.UN12
5/8	11	12	12	30	100	13.6	4	456.120.UN11	457.120.UN11
3/4	10	14	14	30	100	16.5	4	456.140.UN10	457.140.UN10
7/8	10	16	16	30	100	19.7	4	456.160.UN10	457.160.UN10
7/8	9	16	16	30	100	19	4	456.160.UN09	457.160.UN09
7/8	8	16	16	30	100	19.1	4	456.160.UN08	457.160.UN08



Solid carbide thread mills

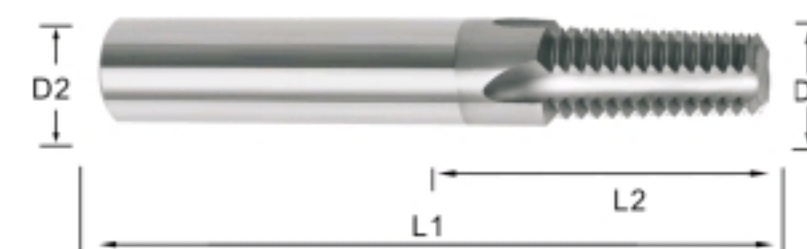
INDEX 460...461...



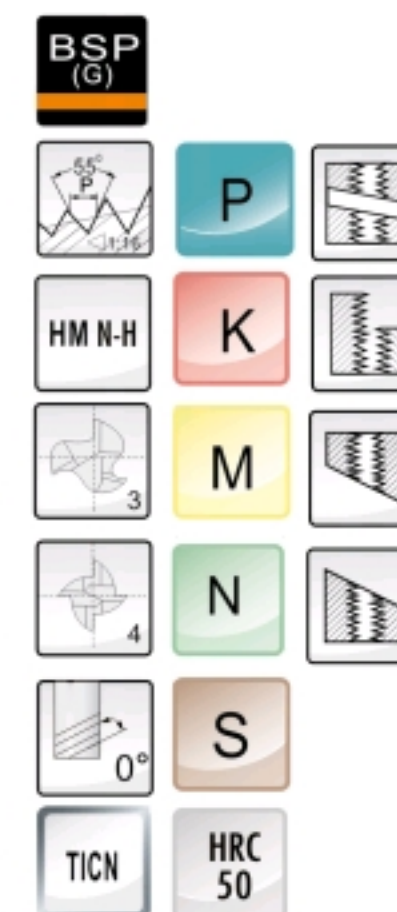
Thread size	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
								BIANK	TICN
1/16	28	6	6	16	60	6.8	3	460.060.BSP28	461.060.BSP28
1/8	28	8	8	20	75	8.8	3	460.080.BSP28	461.080.BSP28
1/4	19	10	10	23	75	11.7	4	460.100.BSP19	461.100.BSP19
3/8	19	12	12	25	100	15.2	4	460.120.BSP19	461.120.BSP19
1/2	14	12	12	25	100	18.9	4	460.120.BSP14	461.120.BSP14
3/4	14	16	16	30	100	24.3	4	460.160.BSP14	461.160.BSP14
1	11	16	16	30	100	30.5	4	460.160.BSP11	461.160.BSP11
1	11	20	20	30	100	30.5	4	460.200.BSP11	461.200.BSP11



INDEX 462...463...



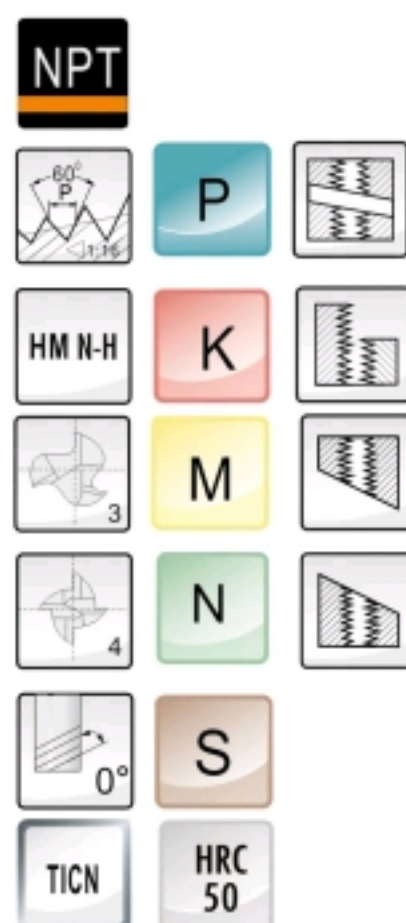
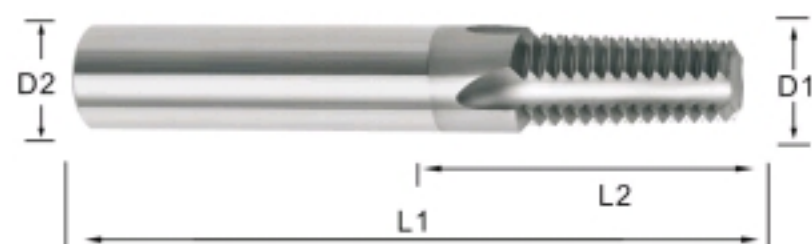
Thread size	Pitch	D1	D2	L2	L1	Drill hole size	Z	Article-No.	
								BIANK	TICN
1/16	28	6	6	16	60	6.5	3	462.060.BSPT28	463.060.BSPT28
1/8	28	8	8	20	75	8.5	3	462.080.BSPT28	463.080.BSPT28
1/4	19	10	10	23	75	11.5	4	462.100.BSPT19	463.100.BSPT19
3/8	19	12	12	25	75	14.7	4	462.120.BSPT19	463.120.BSPT19
1/2	14	12	12	25	75	17.8	4	462.120.BSPT14	463.120.BSPT14
3/4	14	16	16	30	100	23.2	4	462.160.BSPT14	463.160.BSPT14
1	11	16	16	30	100	29.2	4	462.160.BSPT11	463.160.BSPT11
1	11	20	20	30	100	29.2	4	462.200.BSPT11	463.200.BSPT11





Solid carbide thread mills

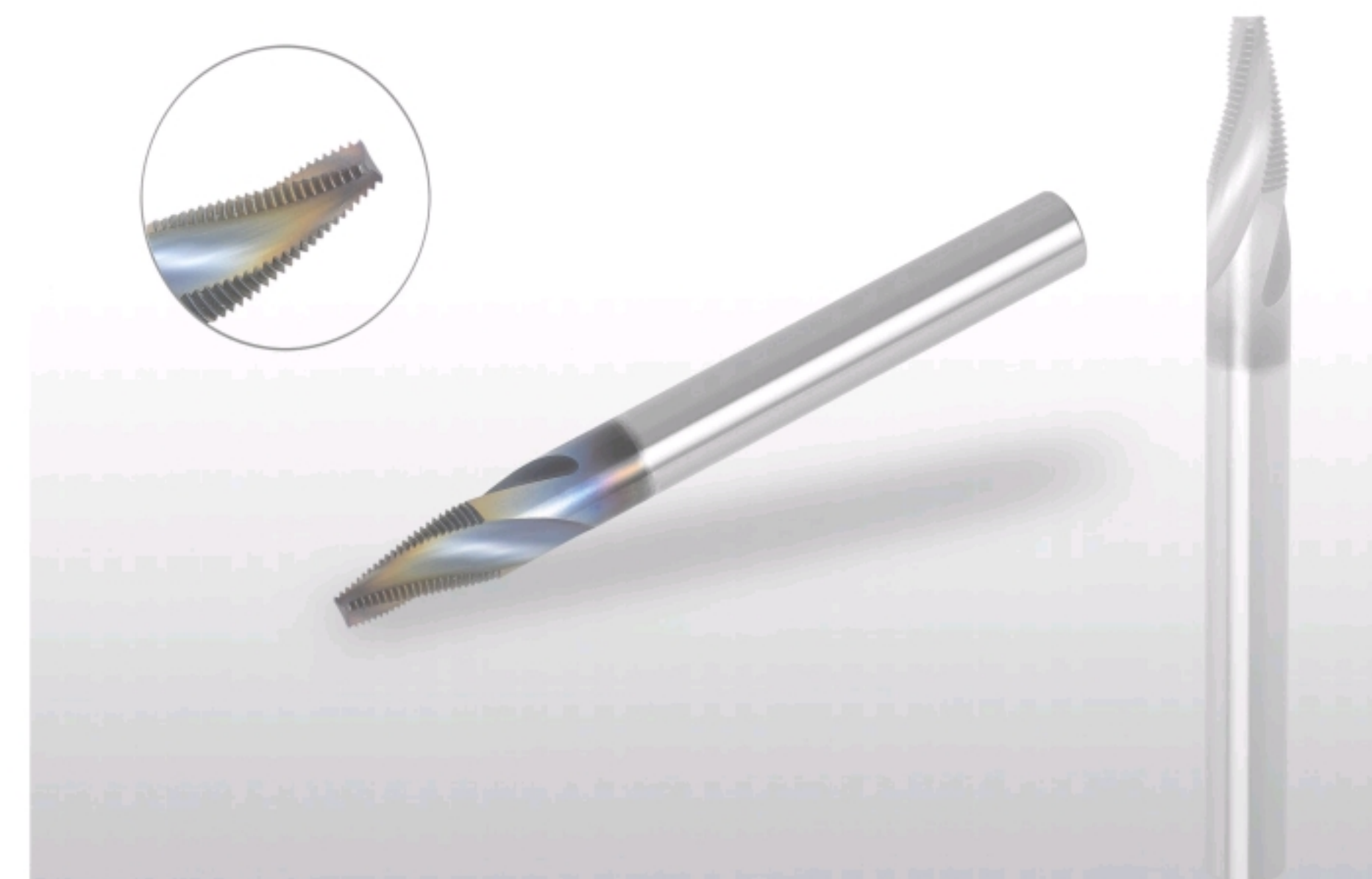
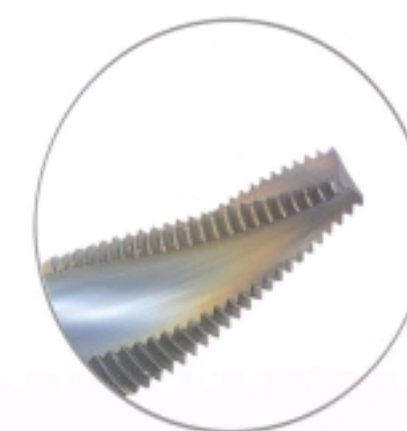
INDEX **464...465...**



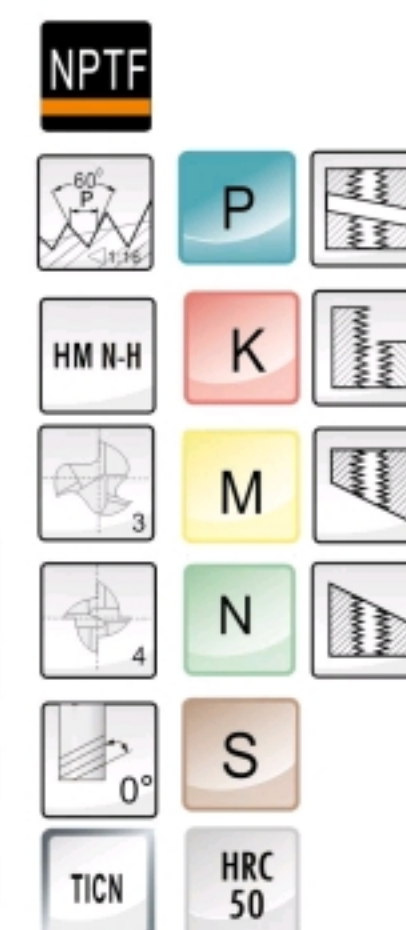
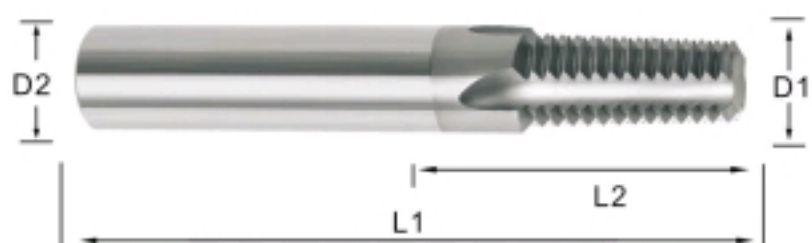
Thread size	Pitch	D 1	D 2	L 2	L 1	Drill hole size	Z	Article-No.	
								BIANK	TICN
1/16	27	6	6	16	60	6.9	3	464.060.NPT27	465.060.NPT27
1/8	27	8	8	20	75	9.3	3	464.080.NPT27	465.080.NPT27
1/4	18	10	10	23	75	12.2	4	464.100.NPT18	465.100.NPT18
3/8	18	12	12	25	75	15.6	4	464.120.NPT18	465.120.NPT18
1/2	14	12	12	25	75	19.4	4	464.120.NPT14	465.120.NPT14
3/4	14	16	16	30	100	24.7	4	464.160.NPT14	465.160.NPT14
1	11.5	16	16	30	100	31.0	4	464.160.NPT11.5	465.160.NPT11.5
1	11.5	20	20	30.7	100	31.0	4	464.200.NPT11.5	465.200.NPT11.5



Solid carbide thread mills



INDEX **466...467...**



Thread size	Pitch	D 1	D 2	L 2	L 1	Drill hole size	Z	Article-No.	
								BIANK	TICN
1/16	27	6	6	16	60	6.9	3	466.060.NPTF27	467.060.NPTF27
1/8	27	8	8	20	75	9.3	3	466.080.NPTF27	467.080.NPTF27
1/4	18	10	10	23	75	12.2	4	466.100.NPTF18	467.100.NPTF18
3/8	18	12	12	25	75	15.6	4	466.120.NPTF18	467.120.NPTF18
1/2	14	12	12	25	75	19.4	4	466.120.NPTF14	467.120.NPTF14
3/4	14	16	16	30	100	24.7	4	466.160.NPTF14	467.160.NPTF14
1	11.5	16	16	30	100	31.0	4	466.160.NPTF11.5	467.160.NPTF11.5
1	11.5	20	20	30	100	31.0	4	466.200.NPTF11.5	467.200.NPTF11.5

