

Shape	Designation		Pitch (mm)		TPI		RC	E
			External	Internal	External	Internal		
	XNJ	3010R/L16	-	-	16	-	0.25	2.49
		3014R/L12	-	-	12	-	0.33	2.49
		3020R/L8	-	-	8	-	0.49	2.49
	XNJP	3010R/L16	-	-	16	-	0.25	2.49
		3014R/L12	-	-	12	-	0.33	2.49
		3020R/L8	-	-	8	-	0.49	2.49
	XNJF	3005R/L32	-	-	32	-	0.13	3.58
		3006R/L28	-	-	28	-	0.15	3.58
		3007R/L24	-	-	24	-	0.17	3.58
		3008R/L20	-	-	20	-	0.20	3.58
		3009R/L18	-	-	18	-	0.22	3.58
		3010R/L16	-	-	16	-	0.25	3.58
		3012R/L14	-	-	14	-	0.28	3.58
	XNJK	3005R/L32	-	-	32	-	0.13	3.58
		3006R/L28	-	-	28	-	0.15	3.58
		3007R/L24	-	-	24	-	0.17	3.58
		3008R/L20	-	-	20	-	0.20	3.58
		3009R/L18	-	-	18	-	0.22	3.58
		3010R/L16	-	-	16	-	0.25	3.58
		3012R/L14	-	-	14	-	0.28	3.58

Shape	Designation		TPI	TRF	CF	RC	E	
								XNDC
	318VR75		18	0.75	-	0.08	3.66	
	314VR75		14	0.75	-	0.08	3.66	
	3115VR/L75		11.5	0.75	-	0.10	3.66	
	38VR/L75		8	0.75	-	0.13	2.54	
	310RDR/L75		10	0.75	-	0.36	3.18	
	38RDR/L75		8	0.75	-	0.43	3.18	
	XNDC		8115VR/L75M	11.5	0.75	-	0.10	2.59
	88VR/L75M		8	0.75	-	0.13	2.41	
	68RDR/L75M		8	0.75	-	0.41	2.62	
	XNWC		3R14E	14	-	-	0.235	3.43
	3R11E		11	-	-	0.300	3.43	
	XNWC		3L14I	14	-	-	0.235	3.43
	3L11I		11	-	-	0.300	3.43	

Shape	Designation		TPI	TRF	CF	RC	E
	XND	3040R/L	5	-	-	0.445	2.08
	(Partial Profile)	3038R/L	4	-	-	0.902	2.08
		4040R/L	5	-	-	0.445	3.25
		4050R/L	4	-	-	0.572	3.25
	XNDC	3040R/L3	5	3.00	-	0.445	3.73
	(Cresting)	4040R/L3	5	3.00	-	0.445	3.73
		4050R/L2	4	3.00	-	0.572	4.65
		4050R/L3	4	3.00	-	0.572	4.65
		4038R/L2	4	2.00	-	0.902	4.65
	XNA	3R/L16	16	-	0.523	-	3.79
		3R/L14	14	-	0.607	-	3.79
		3R/L12	12	-	0.719	-	3.79
		3R/L10	10	-	0.810	-	3.79
		4R/L10	10	-	0.810	-	5.13
		3R/L8	8	-	1.044	-	3.79
		4R/L8	8	-	1.044	-	5.13
		3R/L6	6	-	1.438	-	3.79
		4R/L6	6	-	1.438	-	5.13
		3R/L5	5	-	1.750	-	3.79
		4R/L5	5	-	1.750	-	5.13
		3R/L4	4	-	2.223	-	3.79
		4R/L4	4	-	2.223	-	5.13
		6R/L3	3	-	3.007	-	7.19
		6R/L25	2.5	-	3.635	-	7.19
		6R/L2	2	-	4.577	-	7.19

Shape	Designation		TPI	TRF	CF	RC	E
	XNS	3R/L16	16	-	0.605	-	3.79
		3R/L14	14	-	0.701	-	3.79
		3R/L12	12	-	0.828	-	3.79
		3R/L10	10	-	0.940	-	3.79
		3R/L8	8	-	1.209	-	3.79
		3R/L6	6	-	1.656	-	3.79
		3R/L5	5	-	2.014	-	3.79
	XNTB	2R/LA	16-20	-	0.076	-	3.20
		3R/LA	8-16	-	0.165	-	4.17
		4R/LA	4-6	-	0.254	-	5.23
	XNTB	2R/LB	16-20	-	0.076	-	0.25
		3R/LB	8-16	-	0.165	-	0.31
		4R/LB	4-6	-	0.254	-	0.41

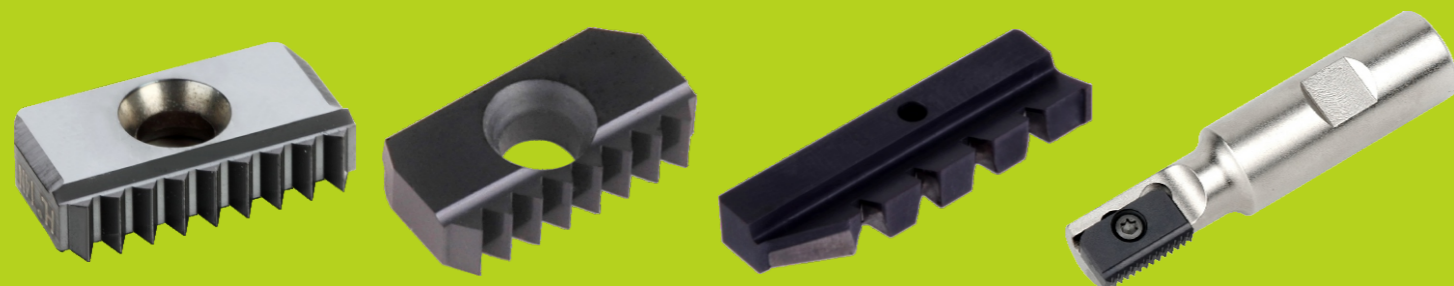
# MILLING THREADING

# MILLING THREADING



## CONTENTS

Technical Information for Thread Milling-----	075--076
Mill-Thread Inserts-----	077--080
Mill-Thread Holders-----	081--082
Spiral Mill-Thread Inserts-----	083--086
Spiral Mill-Thread Holders-----	087--088
Technical Information for Thread Milling-----	089--092



### Thread Milling Holders code system

<b>S</b>	<b>R</b>	<b>0025</b>	<b>-</b>	<b>K</b>	<b>21</b>	<b>C</b>	<b>-</b>	<b>2</b>
1	2	3	4	5	6	7		
Clamping Method	Hand	Cutting Dia.	Length of Holder	Cutting edge Length	Shank Type	Number of Inserts		

<b>1</b> Clamping Method S R 0025 - K 21 C - 2	<b>2</b> Hand S R 0025 - K 21 C - 2	<b>3</b> Cutting Diameter S R 0025 - K 21 C - 2
S: Screw only	R: right hand L: left hand	0025=25mm

<b>4</b> Length of Holder S R 0025 - K 21 C - 2	<b>5</b> Cutting edge Length S R 0025 - K 21 C - 2	<b>6</b> Shank Type S R 0025 - K 21 C - 2
F H J K M S R	12 12.0mm 14 14.0mm 21 21.0mm 30 30.0mm 40 40.0mm	Non: steel shank C: carbide shank

<b>7</b> Number of Insert S R 0025 - K 21 C - 2
Non: 1 insert 2: 2 inserts

### Thread Milling Inserts code system

<b>30</b>	<b>E</b>	<b>1.50</b>	<b>ISO</b>	<b>TTIM45</b>
1	2	3	4	5
Clamping Method	Hand	Cutting Dia.	Length of Holder	Cutting edge Length

<b>1</b> Cutting edge Length 30 E 1.50 ISO TTIM45	<b>2</b> Type of Insert 30 E 1.50 ISO TTIM45	<b>3</b> Pitch 30 E 1.50 ISO TTIM45
12 12.0mm 14 14.0mm 21 21.0mm 30 30.0mm 40 40.0mm	E: External I: Internal EI: External & Interna	mm: 0.5-6.0 TPI 48-6

<b>4</b> Standard 30 E 1.50 ISO TTIM45	<b>5</b> Carbide Grades 30 E 1.50 ISO TTIM45
ISO - ISO Metric UN - American UN (UNC, UNF, UNEF, UNS) W - Whit Worth (BSW, BSF, BSP, BSB) NPT - National Pipe Thread NPTF - National Pipe Thread BSPT - British Standard Pipe Thread (BSPT)	TTIP30 TTIM45

### Thread Milling Cutters code system

<b>S</b>	<b>R</b>	<b>0063</b>	<b>C</b>	<b>21</b>	<b>-</b>	<b>5</b>	<b>-</b>	<b>22</b>
1	2	3	4	5	6	7		
Clamping Method	Hand	Cutting Dia.	Tool Length	Cutting edge Length	Number of Inserts	Bore Dia		

<b>1</b> Clamping Method S R 0063 C 21 - 5 - 22	<b>2</b> Hand S R 0063 C 21 - 5 - 22	<b>3</b> Cutting Diameter S R 0063 C 21 - 5 - 22
S: Screw only	R: right hand L: left hand	0063=63mm

<b>4</b> Tool Length S R 0063 C 21 - 5 - 22	<b>5</b> Cutting edge Length S R 0063 C 21 - 5 - 22	<b>6</b> Number of Insert S R 0063 C 21 - 5 - 22
C D E	12 12.0mm 14 14.0mm 21 21.0mm 30 30.0mm 40 40.0mm	3: 3 Inserts 4: 4 Inserts 5: 5 Inserts

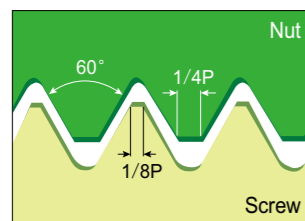
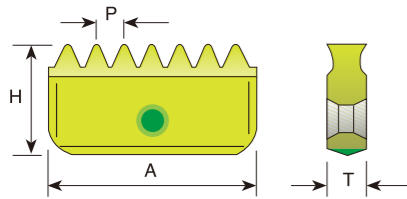
  

<b>7</b> Bore Diameter S R 0063 C 21 - 5 - 22
22=22.0mm 27=27.0mm 32=32.0mm



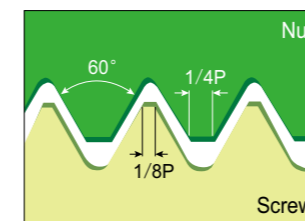
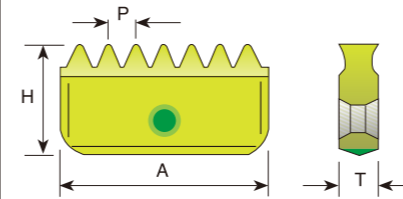
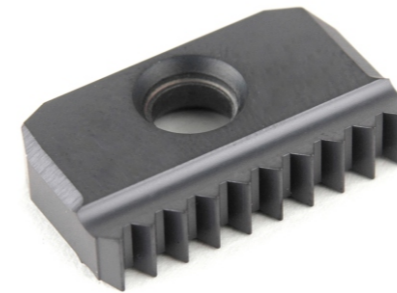
**ISO 60°METRIC**

	External	Internal	Pitch (mm)	A	H	T
		12I 0.50 ISO	0.5	12	6.3	2.9
		12I 0.75 ISO	0.75	12	6.3	2.9
		12I 1.00 ISO	1.0	12	6.3	2.9
		12I 1.25 ISO	1.25	12	6.3	2.9
		12I 1.50 ISO	1.5	12	6.3	2.9
		14I 0.50 ISO	0.5	14	7.5	3.1
14E 0.75 ISO	14I 0.75 ISO		0.75	14	7.5	3.1
14E 1.00 ISO	14I 1.00 ISO		1.0	14	7.5	3.1
14E 1.25 ISO	14I 1.25 ISO		1.25	14	7.5	3.1
14E 1.50 ISO	14I 1.50 ISO		1.5	14	7.5	3.1
14E 1.75 ISO	14I 1.75 ISO		1.75	14	7.5	3.1
14E 2.00 ISO	14I 2.00 ISO		2.0	14	7.5	3.1
14E 2.50 ISO	14I 2.50 ISO		2.5	14	7.5	3.1
21E 1.00 ISO	21I 1.00 ISO		1.0	21	12.0	4.7
21E 1.50 ISO	21I 1.50 ISO		1.5	21	12.0	4.7
	21I 1.50 ISO		1.75	21	12.0	4.7
21E 2.00 ISO	21I 2.00 ISO		2.0	21	12.0	4.7
21E 2.50 ISO	21I 2.50 ISO		2.5	21	12.0	4.7
21E 3.00 ISO	21I 3.00 ISO		3.0	21	12.0	4.7
	21I 3.50 ISO		3.5	21	12.0	4.7
30E 1.50 ISO	30I 1.50 ISO		1.5	30	16.0	5.5
30E 2.00 ISO	30I 2.00 ISO		2.0	30	16.0	5.5
30E 3.00 ISO	30I 3.00 ISO		3.0	30	16.0	5.5
30E 3.50 ISO	30I 3.50 ISO		3.5	30	16.0	5.5
30E 4.00 ISO	30I 4.00 ISO		4.0	30	16.0	5.5
	30I 4.50 ISO		4.5	30	16.0	5.5
	30I 5.00 ISO		5.0	30	16.0	5.5
40E 1.50 ISO	40I 1.50 ISO		1.5	40	20.0	6.3
40E 2.00 ISO	40I 2.00 ISO		2.0	40	20.0	6.3
40E 3.00 ISO	40I 3.00 ISO		3.0	40	20.0	6.3
	40I 3.50 ISO		3.5	40	20.0	6.3
40E 4.00 ISO	40I 4.00 ISO		4.0	40	20.0	6.3
	40I 4.50 ISO		4.5	40	20.0	6.3
40E 5.00 ISO	40I 5.00 ISO		5.0	40	20.0	6.3
	40I 5.50 ISO		5.5	40	20.0	6.3
40E 6.00 ISO	40I 6.00 ISO		6.0	40	20.0	6.3

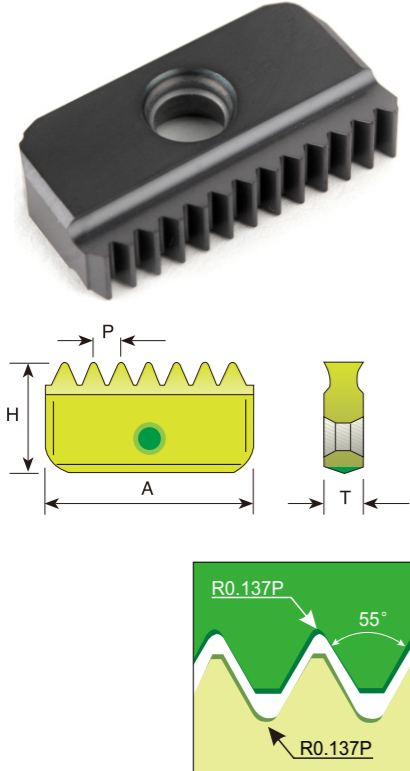


**UN 60°AMERICAN UN (UNC UNF UNEF UNS)**

	External	Internal	TPI	A	H	T
		12I 32 UN	32	12	6.3	2.9
		12I 28 UN	28	12	6.3	2.9
		12I 24 UN	24	12	6.3	2.9
		12I 20 UN	20	12	6.3	2.9
		12I 18 UN	18	12	6.3	2.9
		12I 16 UN	16	12	7.9	3.2
14E 32 UN	14I 32 UN		32	14	7.5	3.1
14E 28 UN	14I 28 UN		28	14	7.5	3.1
	14I 27 UN		27	14	7.5	3.1
14E 24 UN	14I 24 UN		24	14	7.5	3.1
14E 20 UN	14I 20 UN		20	14	7.5	3.1
14E 18 UN	14I 18 UN		18	14	7.5	3.1
14E 16 UN	14I 16 UN		16	14	7.5	3.1
14E 14 UN	14I 14 UN		14	14	7.5	3.1
14E 12 UN	14I 12 UN		12	14	7.5	3.1
	14I 11 UN		11	14	7.5	3.1
	14I 10 UN		10	14	7.5	3.1
21E 24 UN	21I 24 UN		24	21	12.0	4.7
21E 20 UN	21I 20 UN		20	21	12.0	4.7
21E 18 UN	21I 18 UN		18	21	12.0	4.7
21E 16 UN	21I 16 UN		16	21	12.0	4.7
21E 14 UN	21I 14 UN		14	21	12.0	4.7
21E 12 UN	21I 12 UN		12	21	12.0	4.7
21E 10 UN	21I 10 UN		10	21	12.0	4.7
	21I 8 UN		8	21	12.0	4.7
	21I 7 UN		7	21	12.0	4.7
30E 20 UN	30I 20 UN		20	30	16.0	5.5
30E 18 UN	30I 18 UN		18	30	16.0	5.5
30E 16 UN	30I 16 UN		16	30	16.0	5.5
30E 14 UN	30I 14 UN		14	30	16.0	5.5
30E 12 UN	30I 12 UN		12	30	16.0	5.5
30E 10 UN	30I 10 UN		10	30	16.0	5.5
30E 8 UN	30I 8 UN		8	30	16.0	5.5
30E 6 UN	30I 6 UN		6	30	16.0	5.5
	30I 5 UN		5	30	16.0	5.5
40E 16 UN	40I 16 UN		16	40	20.0	6.3
40E 14 UN	40I 14 UN		14	40	20.0	6.3
40E 12 UN	40I 12 UN		12	40	20.0	6.3
40E 10 UN	40I 10 UN		10	40	20.0	6.3
40E 8 UN	40I 8 UN		8	40	20.0	6.3
40E 6 UN	40I 6 UN		6	40	20.0	6.3
	40I 4.5 UN		4.5	40	20.0	6.3
	40I 4 UN		4	40	20.0	6.3

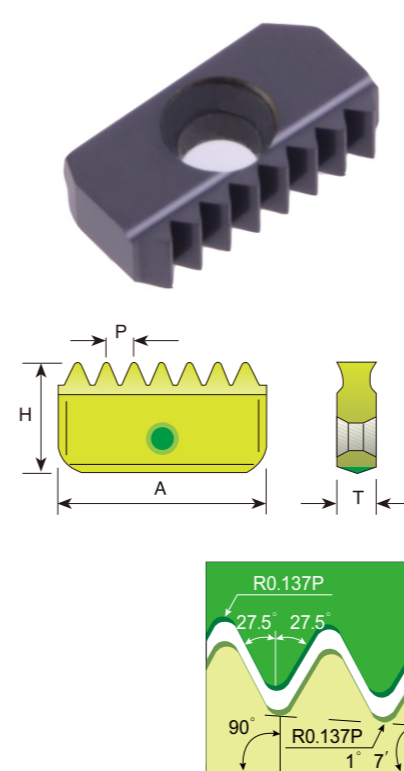


W 55°WHIT WORTH (BSW,BSF,BSP,BSB)



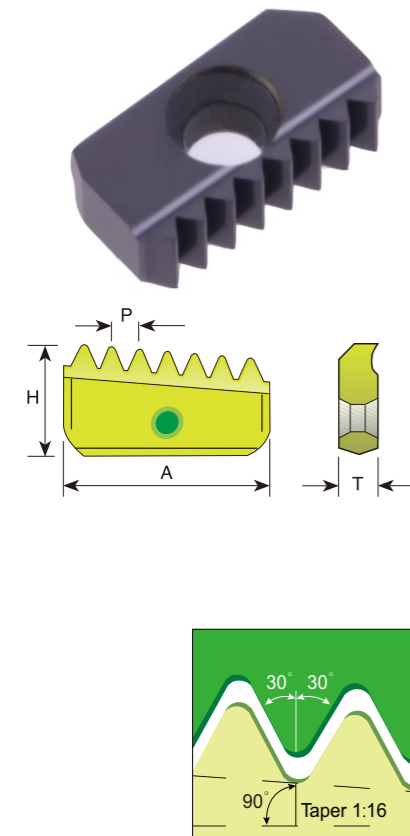
Same Inserts for Externl & Internal	TPI	A	H	T
12EI 19 W	19	12	6.3	2.9
14EI 24 W	24	14	7.5	3.1
14EI 20 W	20	14	7.5	3.1
14EI 19 W	19	14	7.5	3.1
14EI 16 W	16	14	7.5	3.1
14EI 14 W	14	14	7.5	3.1
21EI 20 W	20	21	12.0	4.7
21EI 19 W	19	21	12.0	4.7
21EI 16 W	16	21	12.0	4.7
21EI 14 W	14	21	12.0	4.7
21EI 11 W	11	21	12.0	4.7
30EI 16 W	16	30	16.0	5.5
30EI 14 W	14	30	16.0	5.5
30EI 11 W	11	30	16.0	5.5
40EI 11 W	11	40	20	6.3
40EI 08 W	8	40	20	6.3

BSPT 55°BRITISH STANDARD PIPE

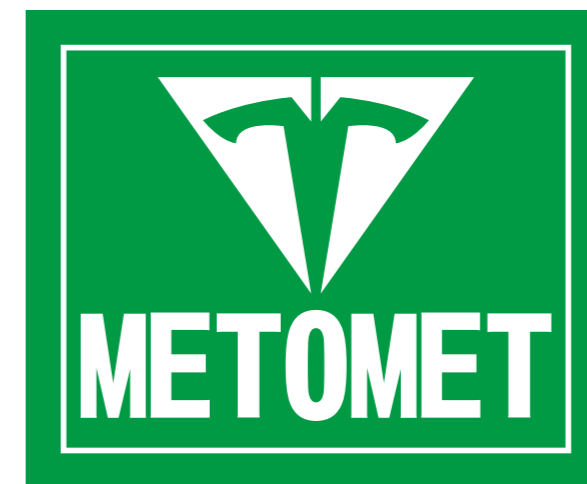


Same Inserts for Externl & Internal	TPI	A	H	T
12EI 19 BPST	19	12	6.3	2.9
14EI 19 BSPT	19	14	7.5	3.1
14EI 14 BSPT	14	14	7.5	3.1
21EI 14 BSPT	14	21	12.0	4.7
21EI 11 BSPT	11	21	12.0	4.7
30EI 11 BSPT	11	30	16.5	5.5
40EI 11 BSPT	11	40	20.0	6.3

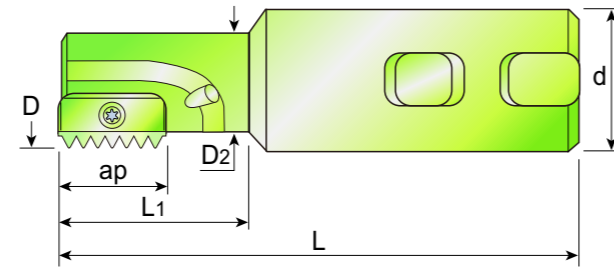
NPT / NPTF 60°NATIONAL PIPE



Same Inserts for Externl & Internal	TPI	A	H	T
12EI 18 NPT	18	12	6.3	2.9
14EI 18 NPT	18	14	7.5	3.1
14EI 14 NPT	14	14	7.5	3.1
21EI 14 NPT	14	21	12.0	4.7
21EI 11.5 NPT	11.5	21	12.0	4.7
30EI 11.5 NPT	11.5	30	16.0	5.5
30EI 8 NPT	8	30	16.0	5.5
40EI 11.5 NPT	11.5	40	20.0	6.3
40EI 8 NPT	8	40	20.0	6.3
12EI 18 NPTF	18	12	6.3	2.9
14EI 18 NPTF	18	14	7.5	3.1
14EI 14 NPTF	14	14	7.5	3.1
21EI 14 NPTF	14	21	12.0	4.7
21EI 11.5 NPTF	11.5	21	12.0	4.7
30EI 11.5 NPTF	11.5	30	16.0	5.5
30EI 8 NPTF	8	30	16.0	5.5
40EI 11.5 NPTF	11.5	40	20.0	6.3
40EI 8 NPTF	8	40	20.0	6.3



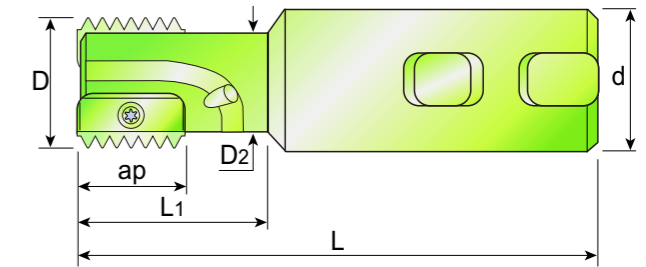
**Indexable Threading Endmills**



Designation	Dimension (mm)						Applicable Insert	Spare parts	
	D	d	D2	L	L1	ap		Screw	Wrench
SR 0009-H12	9.5	20	7.50	85	14	12	12E/I	SR12	T8
0010-H12 <sup>(1)</sup>	9.5	20	7.60	85	16	12			
0012-F14	12.0	20	8.90	75	20	14			
0014-H14	14.5	20	11.20	85	25	14	14E/I	SR14	T8
0017-H14	17.0	20	13.40	85	30	14			
0018-H21 <sup>(2)</sup>	18.0	20	14.40	85	30	21			
0021-H21	21.0	20	16.50	94	40	21	21E/I	SR21	T-15
0025-K21 <sup>(3)</sup>	25.0	20	-	125	-	21	30E/I	SR30	T-20
0029-J30	29.0	25	23.00	110	50	30			
0031-M30 <sup>(3)</sup>	31.0	25	-	150	-	30			
0038-M30 <sup>(3)</sup>	38.0	32	-	150	-	30			
0031-Q30	31.0	25	-	150	-	30			
0048-M40	48.0	40	35.00	153	78	40	40E/I	SR40	T-20
0038-Q40	38.0	32	-	180	-	40			
0048-R40 <sup>(3)</sup>	48.0	40	-	210	-	40			

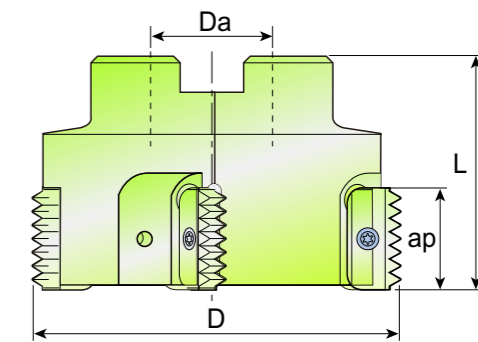
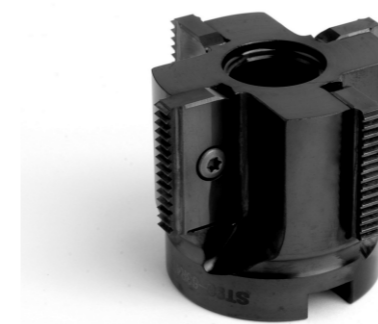
- (1) For conical thread inserts: 12-18 NPT, 12-18 NPTF, 12-19 BSPT
- (2) Not suitable for use with the following insert: 21 I 3.5 ISO, 21I 8 UN, 21-11 BSPT, 21-11.5 NPT, 21-11.5 NPTF
- (3) For long reach

**Indexable Twin Inserts Threading Endmills**



Designation	Dimension (mm)						Applicable Insert	Z	Spare parts	
	D	d	D2	L	L1	ap			Screw	Wrench
SR 0020-H14-2	20.0	20	16.00	93	41	14	14E/I	2	SR14	T-8
0030-J21-2	30.0	25	24.00	108	52	21	21E/I	2	SR21	T-15
0040-L30-2	40.0	32	30.00	130	70	30	30E/I	2	SR30	T-20
0050-M40-2	50.0	40	38.00	153	78	40	40E/I	2	SR40	

**Multi Inserts Threading Mill Cutters**



Designation	Dimension (mm)				Applicable Insert	Z	Spare parts	
	D	d	L	ap			Screw	Wrench
SR 0063C21-5-22	63.0	22	50.00	21	21E/I	5	SR21	T-15
0063C30-4-22	63.0	22	50.00	30	30E/I	4	SR30	T-20
0080D30-4-27	80.0	27	55.00	30				
0100D40-4-32	100.0	32	60.00	40				
0080D40-4-27	80.0	27	65.00	40	40E/I	4	SR40	T-20
0100E40-4-32	100.0	32	70.00	40				