



Tapping & Threading Catalogue

ISSUE

8

Company Profile

ITC is a specialist tooling supplier. Our objective is to supply our customers with the best possible products, at the same time making them more efficient by introducing productivity and method improvements. To achieve this we continue to invest in our team of capable and enthusiastic engineers and technical sales people, backed up by an in-house team which we believe is second to none. From solid carbide and PCD tooling, through to indexable milling, turning and boring, plus top quality tool holders, ITC has an unbeatable product range.

Better by design, better by ITC

ITC's state-of-the-art production facility includes CNC grinding machines from world leading manufacturers including Walter, Deckel, Rollomatic and Anca. We have invested in a centralised oil filtration system to ensure that grinding takes place under optimum conditions with clean oil, and our inspection department includes computerised laser measuring equipment, to maintain the high standards for which ITC is renowned.













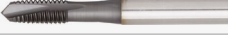


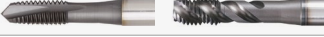



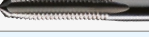








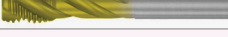




We manufacture and source the best available products from around the world, and hold well over 300,000 Solid Carbide tools, tool bodies, inserts and tool holders on the shelf ready for same day despatch. ITC also offers modification and regrind services, meaning we can adapt existing tools to your requirements, and return used tools to an 'as new' condition. Our continued investment in cutting edge CNC grinding equipment gives us the capacity to rapidly manufacture custom made tools to your precise specifications.

ITC: an easy company to do business with

We believe that good customer service is vital, and all of our staff are highly trained to provide expert support, whether you know exactly what you need, or need guidance from start to finish.

Manufacturing companies rely on ITC to provide an unbeatable combination of first class service, rapid response, huge stocks, and access to a diverse and ever growing product line.



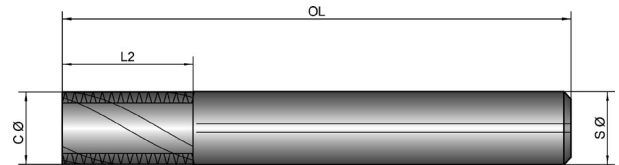
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Metric Carbide Threadmills

Description

- Helical flutes
- With through coolant hole (unless stated)
- TiAlN coated



P	M	K	N	S	H
•	•	•	•	•	•

Metric

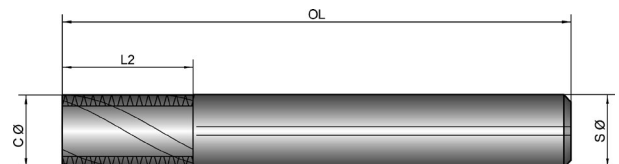
CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NUMBER OF FLUTES
TTM0100*	M3 x 0.5	2.2	6	58	6	3
TTM0101*	M4 x 0.7	2.9	6	58	9	3
TTM0102*	M5 x 0.8	3.9	6	58	11	3
TTM0103	M6 x 1	4.8	6	63	13	3
TTM0104	M8 x 1.25	6	6	63	17	3
TTM0105	M10 x 1.5	7.5	8	80	21	3
TTM0106	M12 x 1.75	8.6	10	80	26	4
TTM0107	M14 x 2 / M16 x 2	9.9	10	100	34	4
TTM0107R	M16 x 2	11.9	12	100	34	4
TTM0108	M20 x 2.5	13.4	16	100	40	4

* No coolant hole

Metric Carbide Threadmills

Description

- Helical flutes
- With through coolant hole (unless stated)
- TiAlN coated

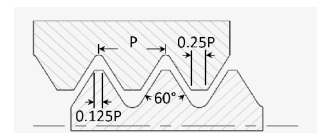


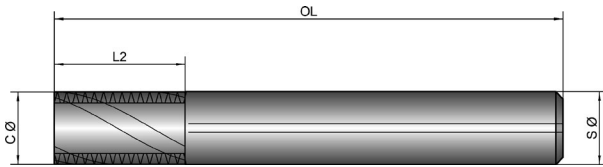
P	M	K	N	S	H
•	•	•	•	•	•

Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NUMBER OF FLUTES
TTM0119	M6 / M8 x 0.75	4.5	6	63	12	3
TTM0121	M8 x 1 / M10 x 1	5.9	6	63	16	3
TTM0123	M10 x 1.25 / M12 x 1.25	7.4	8	80	21	3
TTM0126	M16 x 1.5 / M20 x 1.5	11.9	12	100	32	4
TTM0127	M20 x 2 / M24 x 2	15.9	16	100	46	4

For Speeds & Feeds please see page 11





UNC Carbide Threadmills

Description

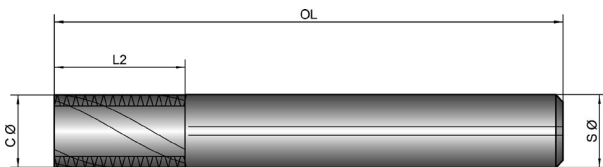
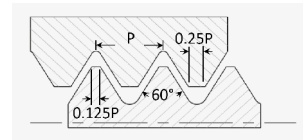
- Helical flutes
- With through coolant hole
- TiAlN coated

P	M	K	N	S	H
•	•	•	•	•	•



Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NUMBER OF FLUTES
TTM0205	1/4-20 UNC	4.7	6	63	13	3
TTM0208	5/16-18 UNC	5.3	6	63	16	3
TTM0209	3/8-16 UNC	5.9	6	63	20	3
TTM0210	7/16-14 UNC	7.9	8	80	24	3
TTM0211	1/2-13 UNC	8.9	10	80	26	3
TTM0212	9/16-12 UNC	9.9	10	80	28	3



UNF Carbide Threadmills

Description

- Helical flutes
- With through coolant hole (unless stated)
- TiAlN coated

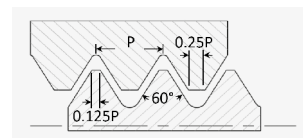
P	M	K	N	S	H
•	•	•	•	•	•



Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NUMBER OF FLUTES
TTM0201*	10-32 UNF	3	6	58	10	3
TTM0202*	1/4-28 UNF	4.5	6	58	13	3
TTM0203	5/16-24 UNF	5.9	6	63	16	3
TTM0204	3/8-24 UNF	5.9	6	63	20	3
TTM0206	7/16-20 UNF	7.9	8	80	24	3
TTM0207	1/2-20 UNF	9.9	10	80	26	4

* No coolant hole



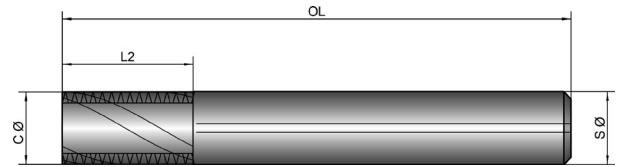
For Speeds & Feeds please see page 11



BSP/C Carbide Threadmills

Description

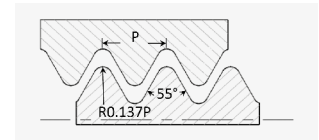
- Helical flutes
- With through coolant hole
- TiAlN coated



P	M	K	N	S	H
•	•	•	•	•	•

Metric

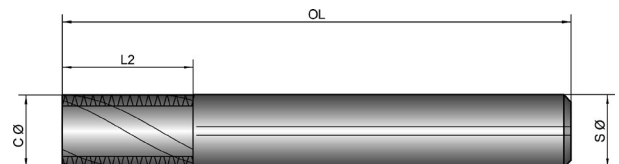
CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NUMBER OF FLUTES
TTM0301	1/8 - 28 BSP	7.6	8	80	16	3
TTM0302	1/4, 3/8 - 19 BSP	7.9	8	80	18	3
TTM0303	1/2, 7/8 - 14 BSP	11.9	12	100	26	4
TTM0304	1" - 11 BSP	15.9	16	100	42	4



NPT Carbide Threadmills

Description

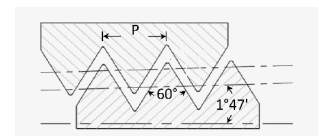
- Helical flutes
- With through coolant hole
- TiAlN coated



P	M	K	N	S	H
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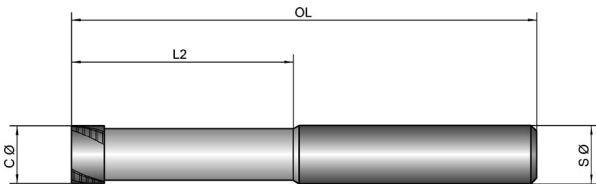
Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NUMBER OF FLUTES
TTM0400	1/16, 1/8-27 NPT	5.9	6	63	9.4	3
TTM0401	1/8-27 NPT	7.6	8	80	9.4	3
TTM0402	1/4, 3/8-18 NPT	9.9	10	80	14.1	4
TTM0403	1/2, 3/4-14 NPT	15.9	16	100	20	4
TTM0404	1", 2"-11.5 NPT	15.9	16	100	26.5	4



For Speeds & Feeds please see page 11





Mini Carbide Threadmills

Description

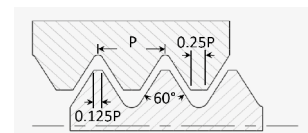
- 3 Flute
- Helical flutes
- 3 Cutting teeth
- TiAlN coated

P	M	K	N	S	H
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Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2
TTMM03*	M2 x 0.4	1.55	6	58	6.2
TTMM04*	M2.5 x 0.45	1.95	6	58	7.7
TTMM05	M3 x 0.5	2.4	6	58	9.2
TTMM06	M4 x 0.7	3.15	6	58	12.3
TTMM07	M5 x 0.8	4.05	6	58	15.4
TTMM08	M6 x 1	4.8	6	58	18.5
TTMM012	4-40 UNC	2.1	6	58	9
TTMM013	6-32 UNC	2.55	6	58	10.5
TTMM014	8-32 UNC	3.2	6	58	13
TTMM025	10-24 UNC	3.58	6	58	15.5
TTMM026	1/4-20 UNC	4.88	6	58	18.5
TTMM015	10-32 UNF	3.2	6	58	15.5
TTMM016	1/4-28 UNF	5.25	6	58	18.5
TTMM017	5/16-24 UNF	6.6	8	64	25
TTMM018	3/8-24 UNF	6.6	8	64	25

* These have 2 cutting teeth

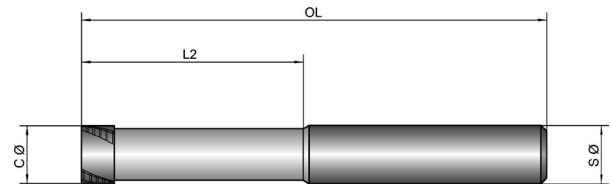




Mini Carbide Threadmills

Description

- 3 Flute
- Helical flutes
- 3 Cutting teeth
- TiAlN coated



P	M	K	N	S	H
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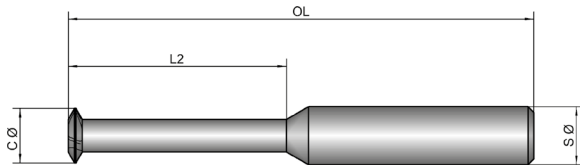
Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2
TTMM029	MJ3 x 0.5	2.4	6	64	9.20
TTMM030	MJ4 x 0.7	3.15	6	64	12.30
TTMM031	MJ5 x 0.8	4.05	6	64	15.40
TTMM032	MJ6 x 1	4.8	6	64	18.50
TTMM033	MJ8 x 1.25	6.5	8	64	24.60
TTMM036	MJ10 x 1.5	7.9	8	64	30.5
TTMM040	6-32 UNJC	2.70	6	57	11.00
TTMM041	8-32 UNJC	2.70	6	57	11.00
TTMM042	10-32 UNJF	2.70	6	57	11.00
TTMM043	1/4-28 UNJF	5.40	6	57	19.50
TTMM044	5/16-24 UNJF	6.70	8	63	24.10
TTMM045	3/8-24 UNJF	6.70	8	63	24.10



The MJ and UNJF Thread profiles both have a controlled root radius and conform to ANSI/ASME B1.21M-1997 and MIL-S-8879. Originally they were designed for use within the Aerospace industry, but have now been adopted for any highly stressed application requiring high temperature or high fatigue strength.

For Speeds & Feeds please see page 11



Single Point Carbide Threadmills

Description

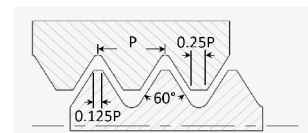
- Threadmills with one row of teeth
- for difficult to reach applications

P	M	K	N	S	H
•	•	•	•	•	•

Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NØ
TMSP010	M1.6 x 0.35	1.16	4	51	2.41	4
TMSP020	M2 x 0.4	1.55	6	58	6.20	4
TMSP025	M2.5 x 0.45	1.95	6	58	7.70	4
TMSP030	M3 x 0.5	2.40	6	58	9.20	4
TMSP040	M4 x 0.7	3.15	6	58	12.30	4
TMSP050	M5 x 0.8	4.05	6	58	15.40	4
TMSP060	M6 x 1	4.80	6	58	18.50	4
TMSP080	M8 x 1.25	6.00	6	58	24.00	5
TMSP100	M10 x 1.5	7.50	8	64	30.00	5

This type of tool is also called a Thread Whirler.
For Speeds & Feeds please see page 11

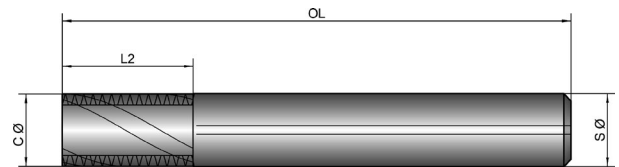




Diamond Coated Threadmills

Description

- Material: solid carbide
- Helical flutes
- Diamond coated



COMPOSITE MATERIALS – CARBON FIBRE

Metric

CATALOGUE NUMBER	SIZE	C	SØ	OL	L2	NUMBER OF FLUTES
TTMD040	M4 x 0.7	3.15	6	55	10.85	3
TTMD050	M5 x 0.8	4	6	55	13.15	3
TTMD060	M6 x 1	4.8	6	55	16.5	3
TTMD080	M8 x 1.25	6	6	55	21.8	3
TTMD100	M10 x 1.5	8	8	60	26.2	3
TTMD120	M12 x 1.75	9.9	10	75	30.6	4

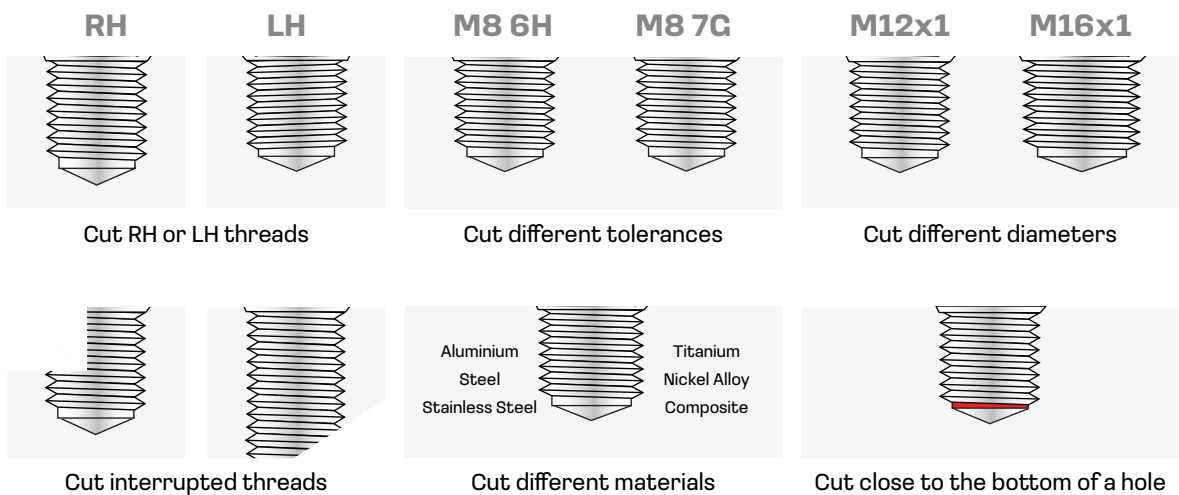


For Speeds & Feeds please see page 11

MATERIAL GROUP	CUTTING SPEED (Vc m/min)	FEED RATE (mm/Tooth)
Carbon Steels	80	0.06
Alloy Steels up to 850 N/mm2	60	0.04
High Tensile Alloy Steels above 850 N/mm2	40	0.02
Free machining Stainless Steel	50	0.04
Austenitic Stainless Steel	30	0.02
Ferritic and Martensitic Stainless Steels	50	0.03
Cast Iron	80	0.08
SG Iron	80	0.06
Aluminium unalloyed	150	0.1
Aluminium Cast low silicon	100	0.1
Aluminium Cast high silicon	100	0.075
Copper	120	0.08
Brass	120	0.08
Soft Plastics	150	0.1
Glass reinforced Plastics	60	0.06
Nickel Alloys up to 850 N/mm2	30	0.03
Nickel Alloys above 850 N/mm2	20	0.005
Titanium Alloy	30	0.02
Hardened Steels	30	0.01
Composites / Graphite / Carbon Fibre	60	0.05

These Speeds & Feeds are a starting point and can be adjusted accordingly.

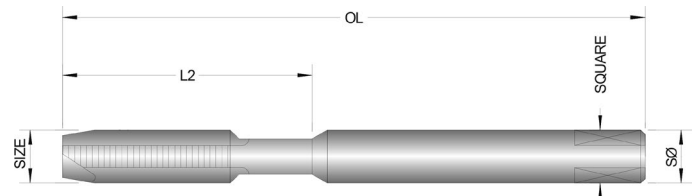
Typical Threadmilling Applications



Varitap Spiral Point

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 371
- WP49EC: steam oxide treated
- WU41EC: TiN coated



P	M	K	N	S	H
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Metric – Spiral Point

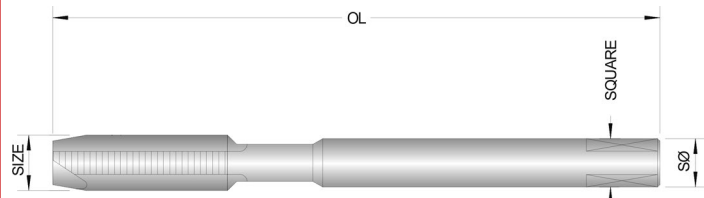
CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	WP49EC	WU41EC	DRILL DIA.
VTSP06505	M2 x 0.40	2.8	2.1	45	13	•	•	1.6mm
VTSP06508	M2.5 x 0.45	2.8	2.1	50	15	•	•	2.1mm
VTSP06510	M3 x 0.5	3.5	2.7	56	18	•	•	2.5mm
VTSP06512	M3.5 x 0.6	4	3	56	20	•	•	2.9mm
VTSP06513	M4 x 0.7	4.5	3.4	63	21	•	•	3.3mm
VTSP06515	M5 x 0.8	6	4.9	70	25	•	•	4.2mm
VTSP06517	M6 x 1	6	4.9	80	30	•	•	5mm
VTSP06519	M7 x 1	7	5.5	80	30	•	•	6mm
VTSP06521	M8 x 1.25	8	6.2	90	35	•	•	6.8mm
VTSP06523	M10 x 1.5	10	8	100	39	•	•	8.5mm



Varitap Spiral Point

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 376
- WP49EC: steam oxide treated
- WU41EC: TiN coated



P	M	K	N	S	H
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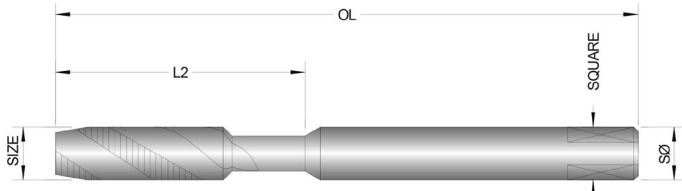
Metric – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	WU41EC	DRILL DIA.
VTSP06531	M12 x 1.75	9	7	110	•	•	10.2mm
VTSP06533	M14 x 2	11	9	110	•	•	12mm
VTSP06535	M16 x 2	12	9	110	•	•	14mm
VTSP06537	M18 x 2.5	14	11	125	•	•	15.5mm
VTSP06538	M20 x 2.5	16	12	140	•	•	17.5mm
VTSP06540	M24 x 3	18	14.5	160	•	•	21mm

6C oversize taps are also available in the Varitap range.
DIN 376 – Drill size is greater than the shank diameter.

For Speeds & Feeds please see page 40





Varitap Spiral Flute

Description

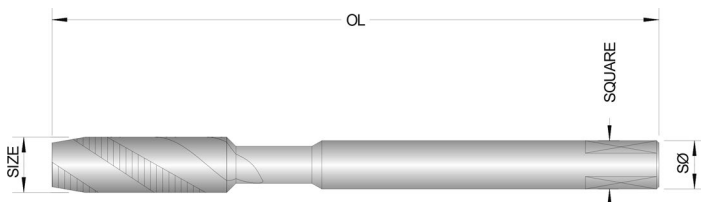
- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 371
- WP49EC: steam oxide treated
- WU41EC: TiN coated

P	M	K	N	S	H
•	•	•	•		



Metric – Sprial Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	WP49EC	WU41EC	DRILL DIA.
VTSFT-TC6506	M2 x 0.4	2.8	2.1	45	13	•	•	1.6mm
VTSFT6509	M2.5 x 0.45	2.8	2.1	50	15	•	•	2.1mm
VTSFT-TC6508	M3 x 0.5	3.5	2.7	56	18	•	•	2.5mm
VTSFT6513	M3.5 x 0.6	4	3	56	20	•	•	2.9mm
VTSFT-TC6510	M4 x 0.7	4.5	3.4	63	21	•	•	3.3mm
VTSFT-TC6511	M5 x 0.8	6	4.9	70	25	•	•	4.2mm
VTSFT-TC6514	M6 x 1	6	4.9	80	30	•	•	5mm
VTSFT6520	M7 x 1	7	5.5	80	30	•	•	6mm
VTSFT-TC6518	M8 x 1.25	8	6.2	90	35	•	•	6.8mm
VTSFT-TC6550	M10 x 1.5	10	8	100	39	•	•	8.5mm



Varitap Spiral Flute

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 376
- WP49EC: steam oxide treated
- WU41EC: TiN coated

P	M	K	N	S	H
•	•	•	•		



Metric – Sprial Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	WU41EC	DRILL DIA.
VTSFT-TC6528	M12 x 1.75	9	7	110	•	•	10.2mm
VTSFT-TC6532	M14 x 2	11	9	110	•	•	12mm
VTSFT-TC6564	M16 x 2	12	9	110	•	•	14mm
VTSFT-TC6539	M18 x 2.5	14	11	125	•	•	15.5mm
VTSFT-TC6543	M20 x 2.5	16	12	140	•	•	17.5mm
VTSFT-TC6549	M24 x 3	18	14.5	160	•	•	21mm

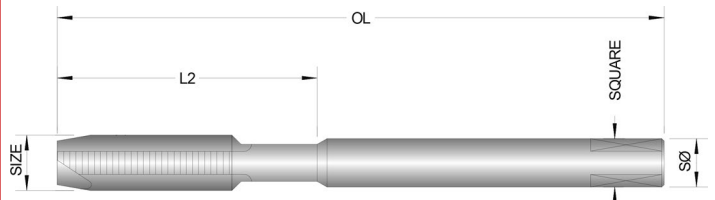
DIN 376 – Drill size is greater than the shank diameter.

For Speeds & Feeds please see page 40

Extra Length Taps

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 371
- TiN coated



P	M	K	N	S	H
•	•	•	•		

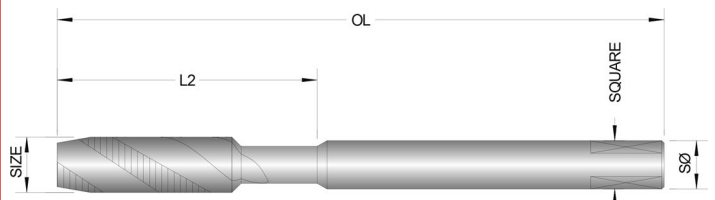
Metric – Long Series – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
024890	M3 x 0.5	3.5	2.7	100	18	2.5mm
024891	M4 x 0.7	4.5	3.4	125	21	3.3mm
024892	M5 x 0.8	6	4.9	140	25	4.2mm
024893	M6 x 1	6	4.9	160	30	5mm
024894	M8 x 1.25	8	6.2	180	35	6.8mm
024895	M10 x 1.5	10	8	200	39	8.5mm

Extra Length Taps

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 371

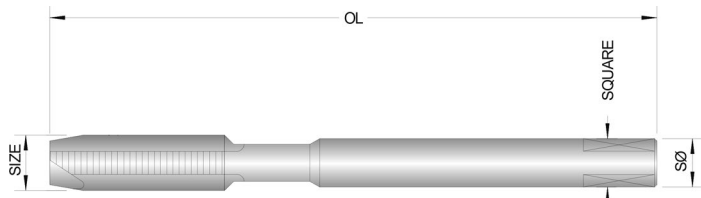


P	M	K	N	S	H
•	•	•	•		

Metric – Long Series – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
033431	M3 x 0.5	3.5	2.7	100	18	2.5mm
038702	M4 x 0.7	4.5	3.4	125	21	3.3mm
710204	M5 x 0.8	6	4.9	140	25	4.2mm
031413	M6 x 1	6	4.9	160	30	5mm
038703	M8 x 1.25	8	6.2	180	35	6.8mm
038701	M10 x 1.5	10	8	200	39	8.5mm

Larger sizes are available up to M36.
For Speeds & Feeds please see page 40



Varitap Spiral Point

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 376
- WP49EC: steam oxide treated

P	M	K	N	S	H
•	•	•	•		

Metric Fine – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	DRILL DIA.
VTSP06546	M4 x 0.5	2.8	2.1	63	•	3.5mm
VTSP06547	M5 x 0.5	3.5	2.7	70	•	4.5mm
VTSP06548	M6 x 0.5	4.5	3.4	80	•	5.5mm
VTSP06549	M6 x 0.75	4.5	3.4	80	•	5.3mm
VTSP06551	M8 x 0.75	6	4.9	80	•	7.3mm
VTSP06552	M8 x 1	6	4.9	80	•	7mm
VTSP06553	M10 x 0.75	7	5.5	90	•	9.2mm
VTSP06554	M10 x 1	7	5.5	90	•	9mm
VTSP06555	M10 x 1.25	7	5.5	90	•	8.8mm
VTSP06556	M11 x 1	8	6.2	90	•	11mm
VTSP06557	M12 x 1	9	7	100	•	10.8mm
VTSP06558	M12 x 1.25	9	7	100	•	10.5mm
VTSP06559	M12 x 1.5	9	7	100	•	13mm
VTSP06560	M14 x 1	11	9	100	•	12.8mm
VTSP06561	M14 x 1.25	11	9	100	•	12.5mm
VTSP06562	M14 x 1.5	11	9	100	•	15mm
VTSP06563	M16 x 1	12	9	100	•	14.5mm
VTSP06564	M16 x 1.5	12	9	100	•	17mm
VTSP06565	M18 x 1	14	11	110	•	16.5mm
VTSP06566	M18 x 1.5	14	11	110	•	19mm
VTSP06569	M20 x 1.5	16	14	125	•	18.5mm

Can't find the pitch you want? Call the office for a quote.

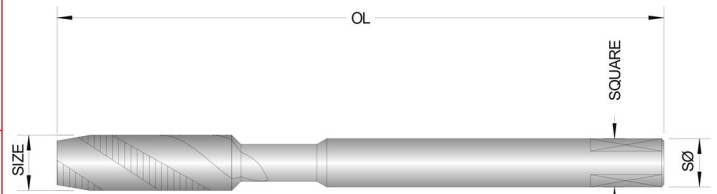
For Speeds & Feeds please see page 40



Varitap Spiral Flute

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 376
- WP49EC: steam oxide treated



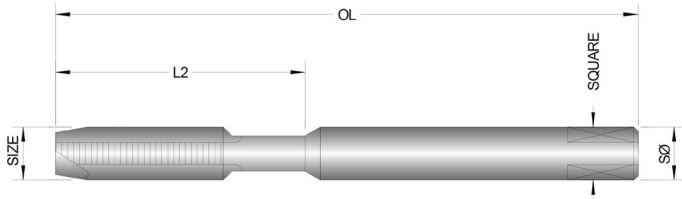
P	M	K	N	S	H
•	•	•	•		

Metric Fine – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	DRILL DIA.
VTSFT6546	M4 x 0.5	2.8	2.1	63	•	3.5mm
VTSFT6547	M5 x 0.5	3.5	2.7	70	•	4.5mm
VTSFT6548	M6 x 0.5	4.5	3.4	80	•	5.5mm
VTSFT6549	M6 x 0.75	4.5	3.4	80	•	5.3mm
VTSFT6550	M8 x 0.75	6	4.9	80	•	7.3mm
VTSFT6551	M8 x 1	6	4.9	80	•	7mm
VTSFT6552	M10 x 0.75	7	5.5	90	•	9.2mm
VTSFT6553	M10 x 1	7	5.5	90	•	9mm
VTSFT6554	M10 x 1.25	7	5.5	90	•	8.8mm
VTSFT6555	M12 x 1	9	7	100	•	11mm
VTSFT6556	M12 x 1.25	9	7	100	•	10.8mm
VTSFT6557	M12 x 1.5	9	7	100	•	10.5mm
VTSFT6558	M14 x 1	11	9	100	•	13mm
VTSFT6559	M14 x 1.25	11	9	100	•	12.8mm
VTSFT6560	M14 x 1.5	11	9	100	•	12.5mm
VTSFT6561	M16 x 1	12	9	100	•	15mm
VTSFT6562	M16 x 1.5	12	9	100	•	14.5mm
VTSFT6563	M18 x 1	14	11	110	•	17mm
VTSFT6564	M18 x 1.5	14	11	110	•	16.5mm
VTSFT6566	M20 x 1	16	14	125	•	19mm
VTSFT6567	M20 x 1.5	16	14	125	•	18.5mm
VTSFT6568	M20 x 2	16	14	125	•	18mm



Thinking of Threadmilling, turn back to page 04.
For Speeds & Feeds please see page 40



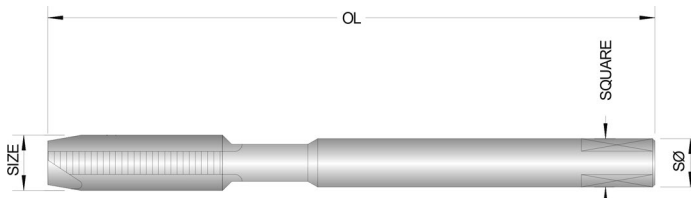
Varitap Spiral Point

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 371/376
- WP49EC: steam oxide treated
- WU41EC: TiN coated

P	M	K	N	S	H
•	•	•	•		

UNC – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	WP49EC	WU41EC	DRILL DIA.
VTSP06005	4-40 UNC	3.5	2.7	56	18	•	•	2.3mm
VTSP06008	6-32 UNC	4	3	56	20	•	•	2.8mm
VTSP06011	8-32 UNC	4.5	3.4	63	21	•	•	3.5mm
VTSP06013	10-24 UNC	6	4.9	70	25	•	•	3.9mm
VTSP06016	1/4-20 UNC	7	5.5	80	30	•	•	5.1mm
VTSP06019	5/16-18 UNC	8	6.2	90	35	•	•	6.6mm
VTSP06022	3/8-16 UNC	10	8	100	39	•	•	8mm
VTSP06025	7/16-14 UNC	8	6.2	100	41	•	•	9.4mm
VTSP06028	1/2-13 UNC	9	7	110	47	•	•	10.8mm



Varitap Spiral Point

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 371/376
- WP49EC: steam oxide treated

P	M	K	N	S	H
•	•	•	•		

UNC – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	DRILL DIA.
VTSP06031	9/16-12 UNC	11	9	110	•	12.2mm
VTSP06033	5/8-11 UNC	12	9	110	•	13.5mm
VTSP06035	3/4-10 UNC	16	12	140	•	16.5mm
VTSP06037	7/8-9 UNC	18	14.5	140	•	19.5mm
VTSP06039	1"-8 UNC	18	14.5	160	•	22.5mm

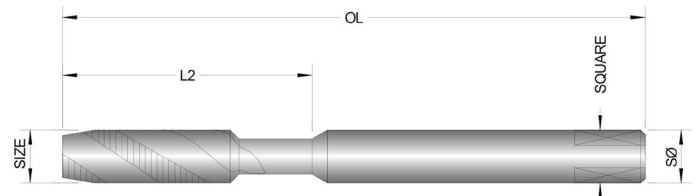
For Speeds & Feeds please see page 40



Varitap Spiral Flute

Description

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 371/376
- WP49EC: steam oxide treated
- WU41EC: TiN coated



P	M	K	N	S	H
•	•	•	•		



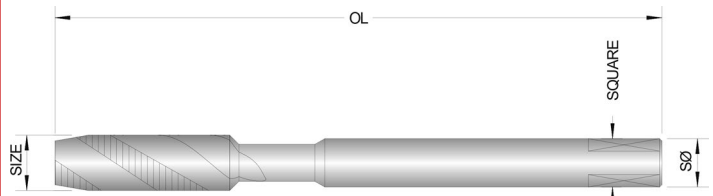
UNC – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	WP49EC	WU41EC	DRILL DIA.
VTSFT6005	4-40 UNC	3.5	2.7	56	18	•	•	2.3mm
VTSFT6008	6-32 UNC	4	3	56	20	•	•	2.8mm
VTSFT6011	8-32 UNC	4.5	3.4	63	21	•	•	3.5mm
VTSFT6013	10-24 UNC	6	4.9	70	25	•	•	3.9mm
VTSFT6016	1/4-20 UNC	7	5.5	80	30	•	•	5.1mm
VTSFT6019	5/16-18 UNC	8	6.2	90	35	•	•	6.6mm
VTSFT6022	3/8-16 UNC	10	8	100	39	•	•	8mm
VTSFT6025	7/16-14 UNC	8	6.2	100	41	•	•	9.4mm
VTSFT6028	1/2-13 UNC	9	7	110	47	•	•	10.8mm

Varitap Spiral Flute

Description

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 371/376
- WP49EC: steam oxide treated



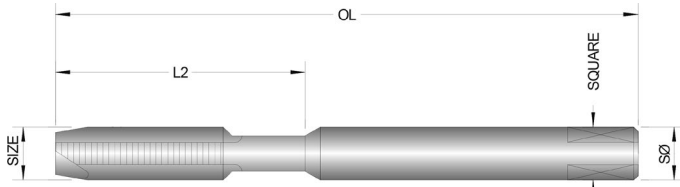
P	M	K	N	S	H
•	•	•	•		



UNC – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	DRILL DIA.
VTSFT6033	5/8-11 UNC	12	9	110	•	12.2mm
VTSFT6035	3/4-10 UNC	16	12	140	•	13.5mm
VTSFT6037	7/8-9 UNC	18	14.5	140	•	16.5mm
VTSFT6039	1"-8 UNC	18	14.5	160	•	19.5mm
VTSP06039	1"-8 UNC	18	14.5	160	•	22.5mm

For Speeds & Feeds please see page 40



Varitap Spiral Point

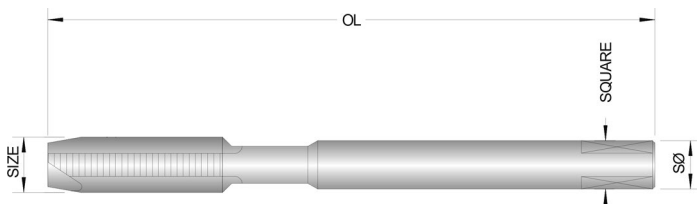
Description

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 371/376
- WP49EC: steam oxide treated
- WU41EC: TiN coated

P	M	K	N	S	H
•	•	•	•		

UNF – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	WP49EC	WU41EC	DRILL DIA.
VTSP06010	6-40 UNF	4	3	56	20	•	•	3mm
VTSP06014	10-32 UNF	6	4.9	70	25	•	•	4.1mm
VTSP06017	1/4-28 UNF	7	5.5	80	30	•	•	5.5mm
VTSP06020	5/16-24 UNF	8	6.2	90	35	•	•	6.9mm
VTSP06023	3/8-24 UNF	10	8	100	39	•	•	8.5mm
VTSP06019	5/16-18 UNF	8	6.2	90	35	•	•	6.6mm
VTSP06022	3/8-16 UNF	10	8	100	39	•	•	8mm
VTSP06025	7/16-14 UNF	8	6.2	100	41	•	•	9.4mm
VTSP06028	1/2-13 UNF	9	7	110	47	•	•	10.8mm



Varitap Spiral Point

Description

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 371/376
- WP49EC: steam oxide treated
- WU41EC: TiN coated

P	M	K	N	S	H
•	•	•	•		

UNF – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	DRILL DIA.
VTSP06026	7/16-20 UNF	8	6.2	100	•	9.9mm
VTSP06029	1/2-20 UNF	9	7	110	•	11.5mm
VTSP06032	9/16-18 UNF	11	9	110	•	12.9mm
VTSP06034	5/8-18 UNF	12	9	110	•	14.5mm
VTSP06036	3/4-16 UNF	16	12	140	•	17.5mm
VTSP06038	7/8-14 UNF	18	14.5	140	•	20.5mm
VTSP06040	1"-12 UNF	18	14.5	160	•	23.4mm

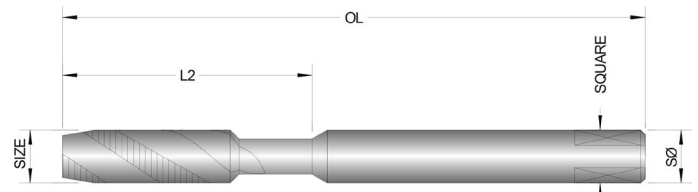
For Speeds & Feeds please see page 40



Varitap Spiral Flute

Description

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 371
- WP49EC: steam oxide treated
- WU41EC: TiN coated



P	M	K	N	S	H
•	•	•	•		



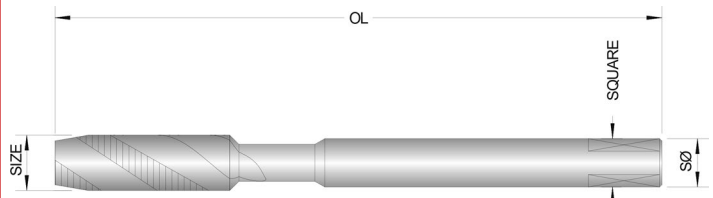
UNF – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	WP49EC	WU41EC	DRILL DIA.
VTSFT6010	6-40 UNF	4	3	56	20	•	•	3mm
VTSFT6014	10-32 UNF	6	4.9	70	25	•	•	4.1mm
VTSFT6017	1/4-28 UNF	7	5.5	80	30	•	•	5.5mm
VTSFT6020	5/16-24 UNF	8	6.2	90	35	•	•	6.9mm
VTSFT6023	3/8-24 UNF	10	8	100	39	•	•	8.5mm

Varitap Spiral Flute

Description

- Material: HSSE
- Tolerance: 2B
- Dimensions to DIN 376
- WP49EC: steam oxide treated



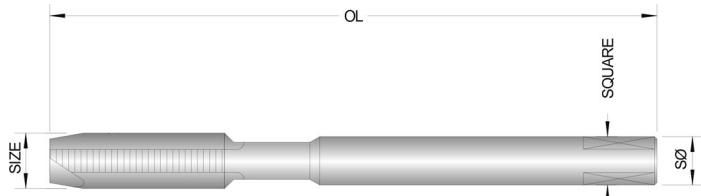
P	M	K	N	S	H
•	•	•	•		



UNF – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	WU41EC	DRILL DIA.
VTSFT6026	7/16-20 UNF	8	6.2	100	•	•	9.9mm
VTSFT6029	1/2-20 UNF	9	7	110	•	•	11.5mm
VTSFT6032	9/16-18 UNF	11	9	110	•	•	12.9mm
VTSFT6034	5/8-18 UNF	12	9	110	•	•	14.5mm
VTSFT6036	3/4-16 UNF	16	12	140	•	•	17.5mm
VTSFT6038	7/8-14 UNF	18	14.5	140	•	•	20.5mm
VTSFT6040	1"-12 UNF	18	14.5	160	•	•	23.4mm

For Speeds & Feeds please see page 40



Varitap Spiral Point

Description

- Material: HSSE
- Dimensions to DIN 5156
- DIN EN ISO 228 British standard pipe thread
- WP49EC: steam oxide treated

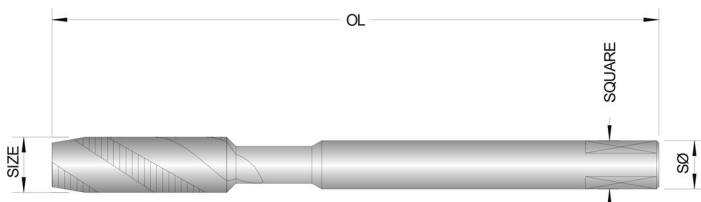
P	M	K	N	S	H
•	•	•	•		



BSP – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	WU41EC	DRILL DIA.
VTSP08605	1/8 - 28 BSP	7	5.5	90	•	•	8.8mm
VTSP08606	1/4 - 19 BSP	11	9	100	•	•	11.8mm
VTSP08607	3/8 - 19 BSP	12	9	100	•	•	15.3mm
VTSP08608	1/2 - 14 BSP	16	12	125	•	•	19mm

BSP is also known as a C thread.
Drill size is greater than the shank diameter.
For Speeds & Feeds please see page 40



Varitap Spiral Flute

Description

- Material: HSSE
- Dimensions to DIN 5156
- DIN EN ISO 228 British standard pipe thread
- WP49EC: steam oxide treated

P	M	K	N	S	H
•	•	•	•		



BSP – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	WP49EC	WU41EC	DRILL DIA.
VTSFT8605	1/8 - 28 BSP	7	5.5	90	•	•	8.8mm
VTSFT8606	1/4 - 19 BSP	11	9	100	•	•	11.8mm
VTSFT8607	3/8 - 19 BSP	12	9	100	•	•	15.3mm
VTSFT8608	1/2 - 14 BSP	16	12	125	•	•	19mm

BSP is also known as a C thread.
Drill size is greater than the shank diameter.
For Speeds & Feeds please see page 40

Vario Pipe Taps

Description

- Material: HSSE-PM
- Dimensions to DIN 5156
- Usage: general purpose, aluminiums, free machining steels, stainless steels, copper, brass



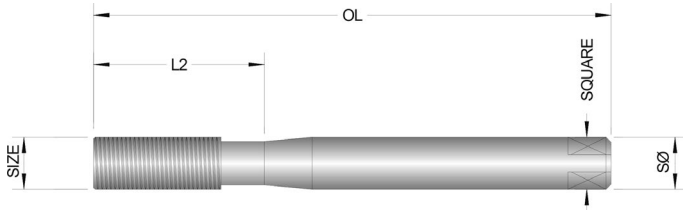
P	M	K	N	S	H
•	•	•	•		

BSPT (RC) / NPT / NPTF – Pipe Taps

CATALOGUE NUMBER		CØ	SØ	SQUARE	OL	DRILL DIA.
110044	BSPT (RC)	RC 1/8-28	7	5.5	90	8.3mm
110043	BSPT (RC)	RC 1/4-19	11	9	100	11mm
110047	BSPT (RC)	RC 3/8-19	12	9	100	14.5mm
110042	BSPT (RC)	RC 1/2-14	15	11	107	18.1mm
104417	NPT	1/16-27 NPT	6	4.9	80	6.2mm
104420	NPT	1/8-27 NPT	7	5.5	90	8.4mm
104419	NPT	1/4-18 NPT	11	9	100	11.1mm
104424	NPT	3/8-18 NPT	12	9	110	14.3mm
104418	NPT	1/2-14 NPT	16	12	125	17.9mm
104433	NPTF	1/8-27 NPTF	7	5.5	90	8.4mm
104432	NPTF	1/4-18 NPTF	11	9	100	11mm
104436	NPTF	3/8-18 NPTF	12	9	110	14.5mm
104431	NPTF	1/2-14 NPTF	16	12	125	17.5mm



All BSPT (RC), NPT and NPTF are 1:16 taper.
For Speeds & Feeds please see page 40



Duramax Thread Former

Description

- Material: HSSE
- Tolerance: 6H
- Dimensions to DIN 371
- For use with most materials, especially aluminium and copper
- TiN coated

P	M	K	N	S	H
•	•	•	•		

Thread Former Taps without Oil Grooves

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
019226	M1 x 0.25	2.5	2.1	40	5.5	0.88mm
009995	M1.6 x 0.35	2.5	2.1	40	8	1.45mm
106428	M2 x 0.4	2.8	2.1	45	9	1.8mm
106429	M2.5 x 0.45	2.8	2.1	50	9	2.3mm
106430	M3 x 0.5	3.5	2.7	56	18	2.8mm
106432	M4 x 0.7	4.5	3.4	63	21	3.7mm
106434	M5 x 0.8	6	4.9	70	25	4.7mm
106435	M6 x 1	6	4.9	80	30	5.55mm
106437	M8 x 1.25	8	6.2	90	35	7.4mm
106247	M10 x 1.5	10	8	100	39	9.3mm

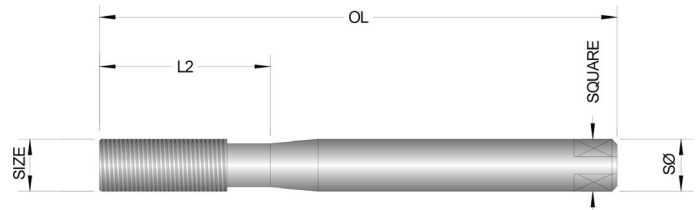
Accurate and good quality core holes are essential for successful thread forming.
For Speeds & Feeds please see page 40



Duramax Thread Former

Description

- Material: HSSE-PM
- Tolerance: 6H
- Dimensions to DIN 371
- For general purpose use, especially steel and stainless steel
- TiN coated



P	M	K	N	S	H
•	•	•	•		

Metric / UNC / UNF – Thread Former Taps with Oil Grooves

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
106542	M2 x 0.4	2.8	2.1	45	9	1.82mm
106543	M2.5 x 0.45	2.8	2.1	50	14	2.3mm
106545	M3 x 0.5	3.5	2.7	56	18	2.8mm
106547	M4 x 0.7	4.5	3.4	63	21	3.7mm
106550	M5 x 0.8	6	4.9	70	25	4.7mm
106552	M6 x 1	6	4.9	80	30	5.55mm
106555	M8 x 1.25	8	6.2	90	35	7.4mm
106541	M10 x 1.5	10	8	100	39	9.3mm
106437	M8 x 1.25	8	6.2	90	35	7.4mm
106247	M10 x 1.5	10	8	100	39	9.3mm

106620	10 - 24 UNC	6	4.9	70	25	4.35mm
106617	1/4 - 20 UNC	7	5.5	80	30	5.8mm
106619	5/16 - 18 UNC	8	6.2	90	35	7.3mm
106618	3/8 - 16 UNC	10	8	100	39	8.8mm

106654	10-32 UNF	6	4.9	70	25	4.5mm
106650	1/4 - 28 UNF	7	5.5	80	30	6mm
106653	5/16 - 24 UNF	8	6.2	90	35	7.5mm
106652	3/8 - 24 UNF	10	8	90	39	9.1mm

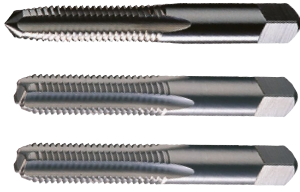


All metals can be formed providing the material has a 10% minimum elongation.

For Speeds & Feeds please see page 40



Hand Taps and Hand Tap Sets



Description

- Material: HSS
- Tolerance: 6H (metric)
- Tolerance: 2B (UNC/UNF)
- For manual use in all materials

P	M	K	N	S	H
•	•	•	•		

2nd Tap only

Plug Tap only

Tap Set

Ø	CATALOGUE NUMBER	CATALOGUE NUMBER	CATALOGUE NUMBER
M3	14742	14743	14744
M4	14758	14759	14760
M5	14774	14775	14777
M6	14782	14783	14784
M8	14798	14799	14800
M10	14814	14815	14816
M12	14830	14831	14832

4-40 UNC	15185	15186	15187
6-32 UNC	15238	15239	15234
8-32 UNC	15284	15285	15278
10-24 UNC	15328	15329	15323
1/4 UNC	14023	14024	14025
5/16 UNC	14093	14094	14095
3/8 UNC	14158	14159	14160
7/16 UNC	14222	14223	14224
1/2 UNC	14282	14283	14284

10-32 UNF	15361	15362	15355
1/4 UNF	14056	14057	14058
5/16 UNF	14123	14124	14125
3/8 UNF	14191	14192	14193
7/16 UNF	14247	14248	14249
1/2 UNF	14309	14310	14311



Taper tap has 6-8 pitch lead, 2nd tap has 4-5 pitch lead, plug tap has 1-2 pitch lead.
For Speeds & Feeds please see page 40

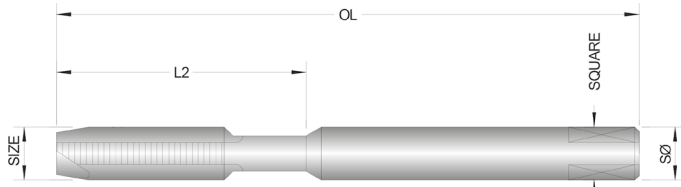


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Variant 1 VA

Spiral Point

Description

- Material: HSSE-PM
- Tolerance: 6H
- Dimensions to DIN 371/376
- Hardlube coated

P	M	K	N	S	H
•	•	•	•	•	

Metric – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
006800	M1.6 x 0.35	2.5	2.1	40	8	1.3mm
027258	M2 x 0.4	2.8	2.1	45	9	1.6mm
323059	M2.5 x 0.45	2.8	2.1	50	14	2.1mm
022977	M3 x 0.5	3.5	2.7	56	18	2.5mm
020720	M4 x 0.7	4.5	3.4	63	21	3.3mm
022978	M5 x 0.8	6	4.9	70	25	4.2mm
022979	M6 x 1	6	4.9	80	30	5mm
022980	M8 x 1.25	8	6.2	90	35	6.8mm
022981	M10 x 1.5	10	8	100	39	8.5mm
023819	M12 x 1.75	9	7	110	-	10.2mm
024313	M16 x 2	12	9	110	-	14mm
024649	M20 x 2.5	16	12	140	-	17.5mm

HSSE-PM (powder metal) material taps provide a higher process reliability and increases tool life by a third. The special production process ensures a finer and uniform distribution of carbides in the material, and allows for a longer sharpness of the tool. Edge chipping is also reduced to a minimum.

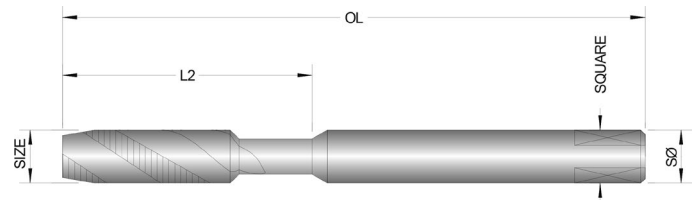
For Speeds & Feeds please see page 40



Dominant 1 Va Spiral Flute

Description

- Material: HSSE-PM
- Tolerance: 6H
- Dimensions to DIN 371/376
- Hardlube coated



P	M	K	N	S	H
•	•	•	•	•	

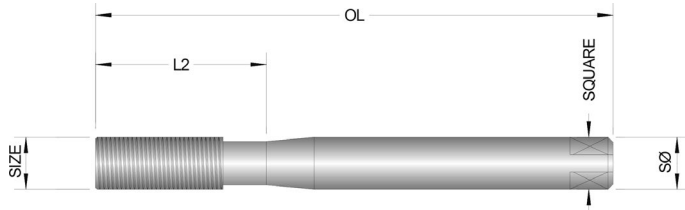
Metric – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
043738	M2 x 0.4	2.8	2.1	45	9	1.6mm
112416	M2.5 x 0.45	2.8	2.1	50	14	2.1mm
013746	M3 x 0.5	3.5	2.7	56	18	2.5mm
013756	M4 x 0.7	4.5	3.4	63	21	3.3mm
013758	M5 x 0.8	6	4.9	70	25	4.2mm
013764	M6 x 1	6	4.9	80	30	5mm
013765	M8 x 1.25	8	6.2	90	35	6.8mm
013766	M10 x 1.5	10	8	100	39	8.5mm
013782	M12 x 1.75	9	7	110	-	10.2mm
013788	M16 x 2	12	9	110	-	14mm
019068	M20 x 2.5	16	12	140	-	17.5mm



Hardlube coating: Titanium-Aluminium-Nitride + WC/C Carbide Carbon coating.
Micro Hardness of 3000 Vickers, provides low friction, with a low adhesion tendency.

For Speeds & Feeds please see page 40



Duramax 1 H Thread Former

Description

- Material: HSSE-PM
- Dimensions to DIN 371/376
- Tolerance: 6HX
- BT coated

P	M	K	N	S	H
•	•	•	•	•	

Metric – Thread Former with Oil Grooves

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
060384	M2 x 0.4	2.8	2.1	45	9	1.8mm
058015	M2.5 x 0.45	2.8	2.1	50	9	2.3mm
052508	M3 x 0.5	3.5	2.7	56	18	2.8mm
050403	M4 x 0.7	4.5	3.4	63	21	3.7mm
054125	M5 x 0.8	6	4.9	70	25	4.7mm
050145	M6 x 1	6	4.9	80	30	5.5mm
051431	M8 x 1.25	8	6.2	90	35	7.4mm
054822	M10 x 1.5	10	8	100	39	9.3mm
053680	M12 x 1.75	9	7	110	-	11.2mm
054869	M16 x 2	12	9	110	-	15.1mm

BT Coating: Aluminium Chrome Nitride coating with 3300H surface hardness provides excellent wear resistance.

For Speeds & Feeds please see page 40

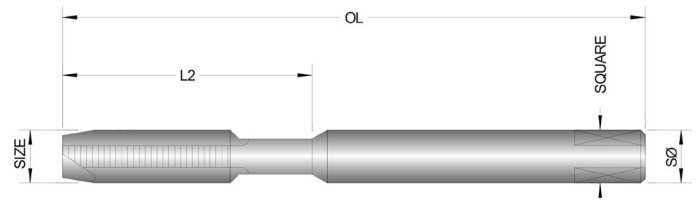


Variant 1 VA

Spiral Point

Description

- Material: HSSE-PM
- Tolerance: 2B
- Dimensions to DIN 371/376
- Hardlube coated



P	M	K	N	S	H
•	•	•	•	•	

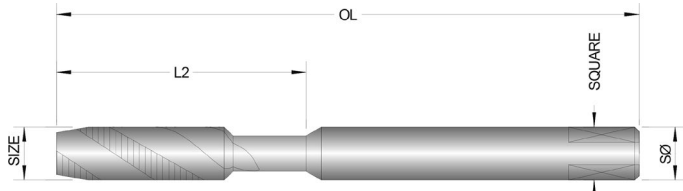
UNC – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
035006	4-40 UNC	3.5	2.7	56	18	2.3mm
032247	6-32 UNC	4	3	56	20	2.9mm
040512	8-32 UNC	4.5	3.4	63	21	3.5mm
045660	10-24 UNC	6	4.9	70	25	3.9mm
042477	1/4-20 UNC	7	5.5	80	30	5.1mm
042478	5/16-18 UNC	8	6.2	90	35	6.6mm
045663	3/8-16 UNC	10	8	100	39	8mm
048943	7/16-14 UNC	8	6.2	100	-	9.4mm
042480	1/2-13 UNC	9	7	110	-	10.8mm



Hardlube coating: Titanium-Aluminium-Nitride + WC/C Carbide Carbon coating.
Micro Hardness of 3000 Vickers, provides low friction, with a low adhesion tendency.

For Speeds & Feeds please see page 40



Dominant 1 VA Spiral Flute

Description

- Material: HSSE-PM
- Dimensions to DIN 371/376
- Tolerance: 2B
- Hardlube coated

P	M	K	N	S	H
•	•	•	•	•	

UNC – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
055596	4-40 UNC	3.5	2.7	56	18	2.3mm
044704	6-32 UNC	4	3	56	20	2.9mm
044964	8-32 UNC	4.5	3.4	63	21	3.5mm
028946	10-24 UNC	6	4.9	70	25	3.9mm
021509	1/4-20 UNC	7	5.5	80	30	5.1mm
021513	5/16-18 UNC	8	6.2	90	35	6.6mm
021514	3/8-16 UNC	10	8	100	39	8mm
021515	7/16-14 UNC	8	6.2	100	-	9.4mm
021516	1/2-13 UNC	9	7	110	-	10.8mm

HSSE-PM (powder metal) material taps provide a higher process reliability and increases tool life by a third. The special production process ensures a finer and uniform distribution of carbides in the material, and allows for a longer sharpness of the tool. Edge chipping is also reduced to a minimum.

For Speeds & Feeds please see page 40

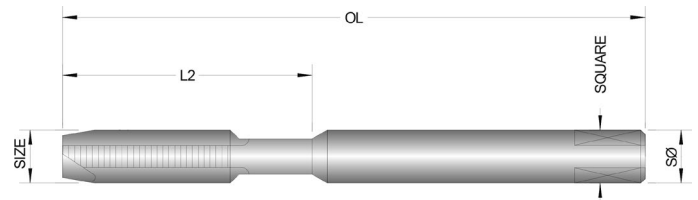


Variant 1 VA

Spiral Point

Description

- Material: HSSE-PM
- Tolerance: 2B
- Dimensions to DIN 371/376
- Hardlube coated



P	M	K	N	S	H
•	•	•	•	•	

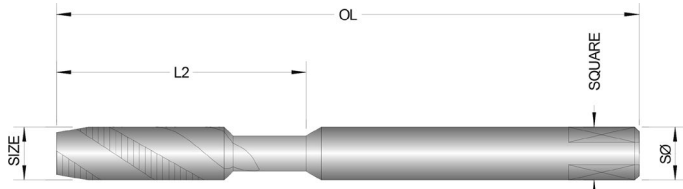
UNF – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
045675	10-32 UNF	6	4.9	70	25	4.1mm
042481	1/4-28 UNF	7	5.5	80	30	5.5mm
042483	5/16-24 UNF	8	6.2	90	35	6.9mm
033290	3/8-24 UNF	10	8	90	39	8.5mm
033289	7/16-20 UNF	8	6.2	100	-	9.9mm
042484	1/2-20 UNF	9	7	100	-	11.5mm



Hardlube coating: Titanium-Aluminium-Nitride + WC/C Carbide Carbon coating.
Micro Hardness of 3000 Vickers, provides low friction, with a low adhesion tendency.

For Speeds & Feeds please see page 40



Dominant 1 VA Spiral Flute

Description

- Material: HSSE-PM
- Dimensions to DIN 371/376
- Tolerance: 2B
- Hardlube coated

P	M	K	N	S	H
•	•	•	•	•	

UNF – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
028948	10-32 UNF	6	4.9	70	25	4.1mm
021547	1/4-20 UNF	7	5.5	80	30	5.5mm
021548	5/16-24 UNF	8	6.2	90	30	6.9mm
027334	3/8-24 UNF	10	8	90	39	8.5mm
031214	7/16-20 UNF	8	6.2	100	-	9.9mm
029009	1/2-20 UNF	9	7	100	-	11.5mm

If using a collet chuck to hold the tap, use a tap collet with a square to ensure a positive drive.

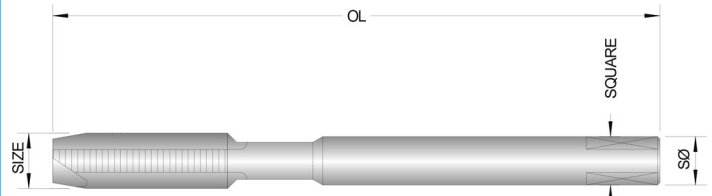
For Speeds & Feeds please see page 40



Variant 2 Spiral Point

Description

- Material: HSSE-PM
- Dimensions to DIN 5156
- TiN coated



P	M	K	N	S	H
•	•	•	•	•	

BSP – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	DRILL DIA.
005191	G 1/8-28 BSP	7	5.5	90	8.8mm
005190	G 1/4-19 BSP	11	9	100	11.8mm
005193	G 3/8-19 BSP	12	9	100	15.3mm
005192	G 1/2-14 BSP	16	12	125	19mm

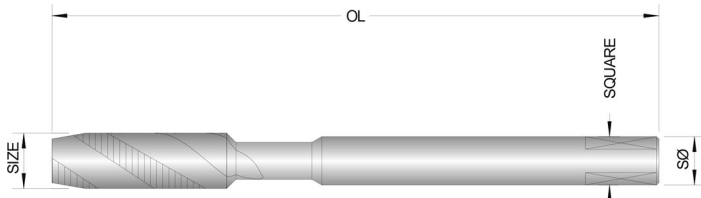


For Speeds & Feeds please see page 40

Dominant 2 Spiral Flute

Description

- Material: HSSE-PM
- Dimensions to DIN 5156
- TiN coated



P	M	K	N	S	H
•	•	•	•	•	

BSP – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	DRILL DIA.
024856	C 1/8-28 BSP	7	5.5	90	8.8mm
024857	C 1/4-19 BSP	11	9	100	11.8mm
024858	C 3/8-19 BSP	12	9	100	15.3mm
024859	C 1/2-14 BSP	16	12	125	19mm

For diameters greater than ½ BSP, see page 08 for Threadmills.

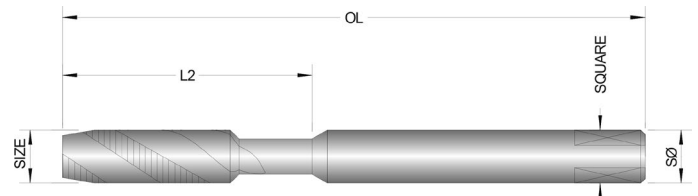
For Speeds & Feeds please see page 40



Avant NI 13 for Nickel Alloys

Description

- Material: HSSE-PM
- Dimensions to DIN 371
- For difficult to machine nickel alloys
- TiCN coated



P	M	K	N	S	H
•	•	•	•	•	

MJ / UNJC / UNJF – for Nickel Alloys

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	TICN	DRILL DIA.
046259	MJ3 x 0.5 - 4H	3.5	2.7	56	11	•	2.6mm
049025	MJ4 x 0.7 - 4H	4.5	3.4	63	13	•	3.4mm
049027	MJ5 x 0.8 - 4H	6	4.9	70	16	•	4.3mm
049028	MJ6 x 1 - 4H	6	4.9	80	19	•	5.1mm
035391	MJ8 x 1.25 - 4H	8	6.2	90	35	•	6.9mm
035392	MJ10 x 1.5 - 4H	10	8	100	39	•	8.7mm
049041	4-40 UNJC-3B	3.5	2.7	56	11	•	2.3mm
049042	6-32 UNJC-3B	4	3	56	12	•	2.8mm
049043	8-32 UNJC-3B	4.5	3.4	63	13	•	3.5mm
049044	10-24 UNJC-3B	6	4.9	70	16	•	3.9mm
049045	1/4-20 UNJC-3B	7	5.5	80	30	•	5.2mm
049119	10-32 UNJF-3B	6	4.9	70	16	•	4.2mm
030282	1/4-28 UNJF-3B	7	5.5	80	20	•	5.6mm

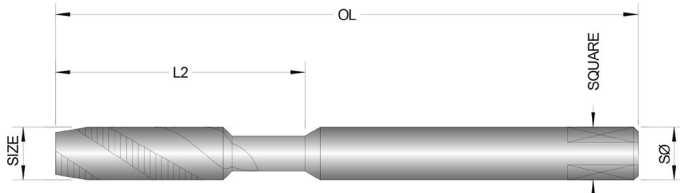


Avant Ni13 Taps can be used for both through and blind holes.
For Speeds & Feeds please see page 40

Avant Ti H13 for Titanium Alloys

Description

- Material: HSSE-PM
- Dimensions to DIN 371
- For aerospace and motor racing use
- TiCN coated



P	M	K	N	S	H
•	•	•	•	•	

MJ / UNJC / UNJF – for Titanium Alloys

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	TICN	DRILL DIA.
111040	MJ3 x 0.5 - 4H	3.5	2.7	56	11	•	2.6mm
111041	MJ4 x 0.7 - 4H	4.5	3.4	63	13	•	3.4mm
111042	MJ5 x 0.8 - 4H	6	4.9	70	16	•	4.3mm
111043	MJ6 x 1 - 4H	6	4.9	80	19	•	5.1mm
111044	MJ8 x 1.25 - 4H	8	6.2	90	35	•	6.9mm
111051	MJ10 x 1.5 - 4H	10	8	100	39	•	8.7mm
•							
108765	4-40 UNJC-3B	3.5	2.7	56	11	•	2.3mm
108766	6-32 UNJC-3B	4	3	56	12	•	2.8mm
109308	8-32 UNJC-3B	4.5	3.4	63	13	•	3.5mm
108764	10-24 UNJC-3B	6	4.9	70	16	•	3.9mm
109309	1/4-20 UNJC-3B	7	5.5	80	30	•	5.2mm
•							
109231	10-32 UNJF-3B	6	4.9	70	16	•	4.2mm
109209	1/4-28 UNJF-3B	7	5.5	80	20	•	5.6mm
109211	5/16-24 UNJF-3B	8	6.2	90	35	•	7mm
109232	3/8-24 UNJF-3B	10	8	90	39	•	8.6mm

Spiral Point Taps are also available, please contact the sales office.

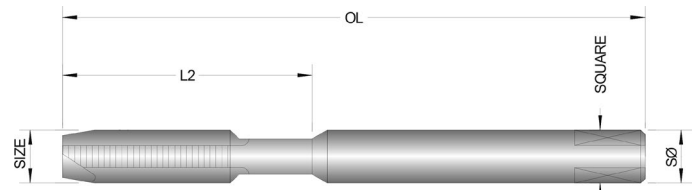
For Speeds & Feeds please see page 40



Wire Insert Spiral Point

Description

- Material: HSSE-PM
- Tolerance: 6HX
- Dimensions to DIN 371/376



P	M	K	N	S	H
•	•	•	•	•	•



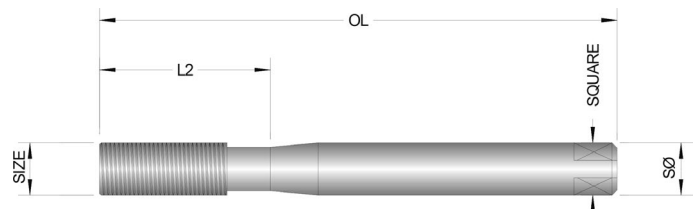
EG Metric – Wire Insert – Spiral Point

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
TSP1302	EG M2.5	3.5	2.7	56	18	2.7mm
TSP1303	EG M3	4.5	3.4	63	21	3.2mm
TSP1304	EG M4	6	4.9	70	25	4.2mm
TSP1305	EG M5	6	4.9	80	30	5.3mm
TSP1306	EG M6	8	6.2	90	35	6.3mm
TSP1307	EG M8	10	8	100	39	8.4mm
TSP1308	EG M10	9	7	100	-	10.5mm
TSP1309	EG M12	11	9	110	-	12.5mm

Wire Insert Thread Former

Description

- Material: HSS
- Tolerance: 6HX
- Special Dimensions



P	M	K	N	S	H
•	•	•	•	•	•

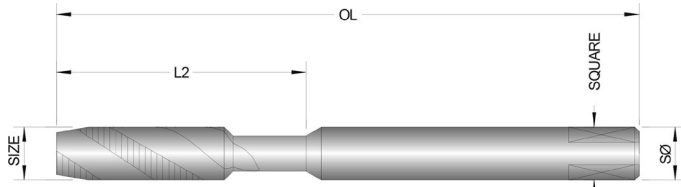


EG Metric – Wire Insert – Thread Former

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	DRILL DIA.
TTF8750	EG M2	3.6	2.8	46	11.2	2.3mm
TTF8751	EG M2.5	3.6	2.8	49.2	16	2.8mm
TTF8752	EG M3	3.6	2.8	50.8	17.5	3.4mm
TTF8753	EG M4	5	3.9	60.5	24	4.6mm
TTF8754	EG M5	6.5	4.85	63.5	25.4	5.6mm
TTF8755	EG M6	8.1	6	69	32.5	6.8mm
TTF8756	EG M8	9.7	7.25	74.7	31.75	9mm
TTF8757	EG M10	9.3	7	86	24	11.3mm

For Speeds & Feeds please see page 40

Wire Insert Spiral Flute



Description

- Material: HSSE-PM
- Dimensions to DIN371 / DIN376
- TiAlN + WCC/C coated
- Form E lead

P	M	K	N	S	H
•	•	•	•	•	•

EG M / UNC / UNF – Wire Insert – Spiral Flute

CATALOGUE NUMBER	CØ	SØ	SQUARE	OL	L2	TIALN + WCC/C	DRILL DIA.
025654	EG M2 x 0.4	2.8	2.1	50	14	•	2.1mm
025655	EG M2.5 x 0.45	3.5	2.7	56	18	•	2.7mm
025658	EG M3 x 0.5	4.5	3.4	63	21	•	3.2mm
025660	EG M4 x 0.7	6	4.9	70	25	•	4.2mm
025661	EG M5 x 0.8	6	4.8	80	30	•	5.3mm
025663	EG M6 x 1	8	6.2	90	35	•	6.3mm
025664	EG M8 x 1.25	10	8	100	39	•	8.4mm
025665	EG M10 x 1.5	9	7	100	-	•	10.5mm
025667	EG M12 x 1.75	11	9	110	-	•	12.5mm
110494	EG M16 x 2	14	11	125	-	•	16.5mm
025679	EG 4-40 UNC	4.5	3.4	63	21	•	3.1mm
025681	EG 6-32 UNC	6	4.9	70	25	•	3.8mm
025682	EG 8-32 UNC	6	4.9	80	30	•	4.4mm
025683	EG 10-24 UNC	7	5.5	80	30	•	5.2mm
025685	EG 1/4-20 UNC	8	6.2	90	35	•	6.7mm
025698	EG 10-32 UNF	6	4.9	80	30	•	5.1mm
025699	EG 1/4-28 UNF	8	6.2	90	35	•	6.6mm
025700	EG 5/16-24 UNF	10	8	90	39	•	8.3mm
025694	EG 3/8-24 UNF	8	6.2	90	-	•	9.8mm
025692	EG 1/2-20 UNF	11	9	100	-	•	13.1mm

Short lead form E taps are ideal for getting down near to the bottom of the hole.

For Speeds & Feeds please see page 40



Technical Data – Tapping

SUGGESTED SPEEDS & FEEDS

MATERIAL	TENSILE STRENGTH APPROX. (n/mm ²)	ELOGATION %	RECOMMENDED SPEED (Vc m/min)	
			UNCOATED	COATED
Aluminium - Free Machining	400	15	10-15	15-25
Aluminium - Cast Iron	450	8	10-15	15-25
Mild Steel - Free Machining	700	25	8-12	15-20
Alloy Steels	1000	25	3-5	6-10
Tool Steels	850	12	4-8	8-12
Stainless Steels	850	25	8-12	12-18
High Tensile Steels	850	8	4-8	8-12
Nickel Alloys	1000	25	3-5	4-8
Titanium Alloys	850	20	3-5	4-8

Above are supplied as a guide only, material properties can vary. See below for conversion chart from m/min to RPM.

TAPPING SPEED CHART

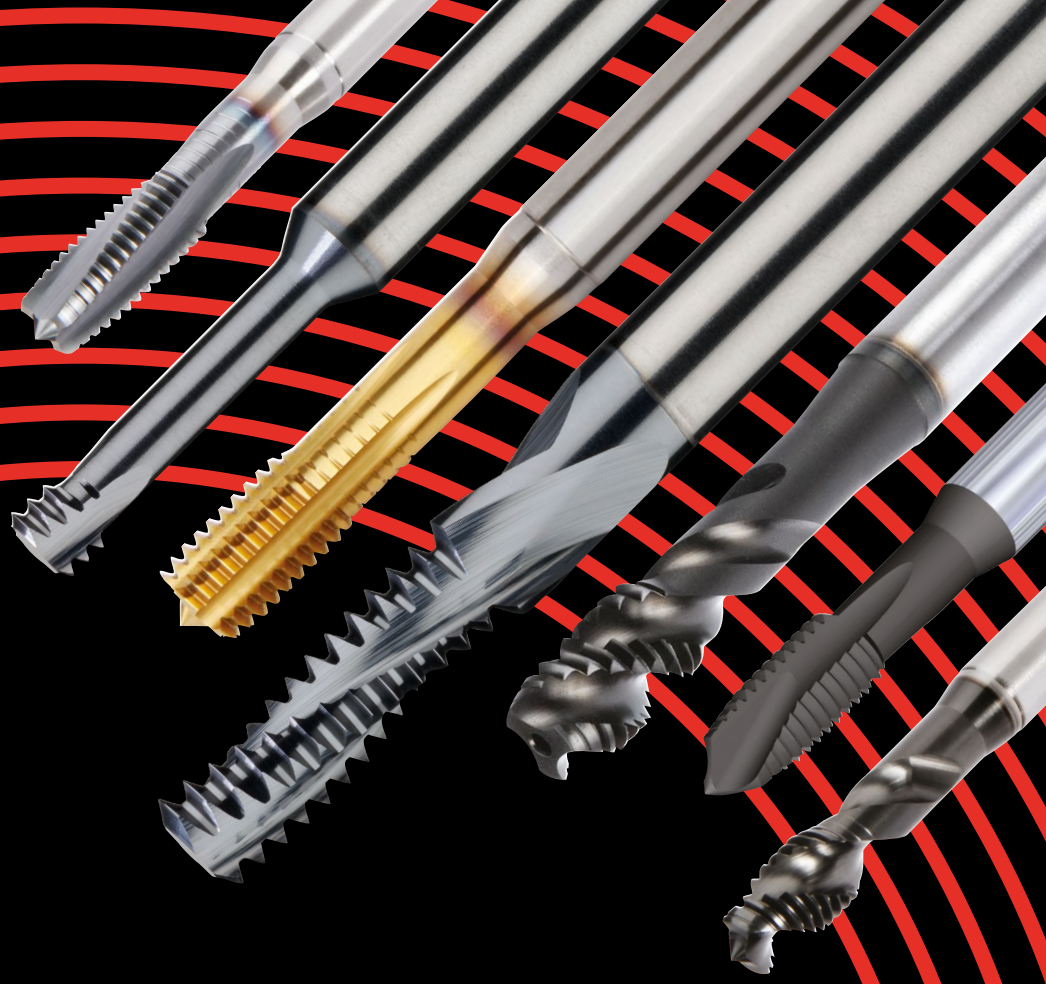
DIA. OF TAP	Vc m/min												
	2	3	4	5	6	8	10	12	15	20	25	30	40
1	637	955	1273	1592	1910	2546	3183	3820	4775	6366	7958	9549	12732
2	318	477	637	796	955	1273	1592	1910	2387	3183	3979	4775	6366
3	212	318	424	531	637	849	1061	1273	1592	2122	2653	3183	4244
4	159	239	318	398	477	637	796	955	1194	1592	1989	2387	3183
5	127	191	255	318	382	509	637	764	955	1273	1592	1910	2546
6	106	159	212	265	318	424	531	637	796	1061	1326	1592	2122
8	80	119	159	199	239	318	398	477	597	796	995	1194	1592
10	64	95	127	159	191	255	318	382	477	637	796	955	1273
12	53	80	106	133	159	212	265	318	398	531	663	796	1061
14	45	68	91	114	136	182	227	273	341	455	568	682	909
16	40	60	80	99	119	159	199	239	298	398	497	597	796
18	35	53	71	88	106	141	177	212	265	354	442	531	707
20	32	48	64	80	95	127	159	191	239	318	398	477	637

P Steel	K Cast Iron	S High-Temp Alloys
M Stainless Steel	N Non-Ferrous	H Hardened Materials

material group	description	content	tensile strength RM (MPa)*	hardness (HB)	hardness (HRC)	material number
P0	Low-Carbon Steels, Long Chipping	C <0,25%	<530	<125	–	–
P1	Low-Carbon Steels, Short Chipping, Free Machining	C <0,25%	<530	<125	–	C15, Ck22, ST37-2, S235JR, 9SMnPb28, GS38
P2	Medium- and High-Carbon Steels	C >0,25%	>530	<220	<25	ST52, S355JR, C35, GS60, Cf53
P3	Alloy Steels and Tool Steels	C >0,25%	600–850	<330	<35	16MnCr5, Ck45, 21CrMoV5-7, 38SMn28
P4	Alloy Steels and Tool Steels	C >0,25%	850–1400	340–450	35–48	100Cr6, 30CrNiMo8, 42CrMo4, C70W2, S6525, X120Mn12
P5	Ferritic, Martensitic, and PH Stainless Steels	–	600–900	<330	<35	100Cr6, 30CrNiMo8, 42CrMo4, C70W2, S6525, X120Mn12
P6	High-Strength Ferritic, Martensitic, and PH Stainless Steels	–	900–1350	350–450	35–48	X102CrMo17, G-X120Cr29
M1	Austenitic Stainless Steel	–	<600	130–200	–	X5CrNi 18 10, X2CrNiMo 17 13 2, G-X2CrNiSi18 9, X15CrNiSi 20 12
M2	High-Strength Austenitic Stainless and Cast Stainless Steels	–	600–800	150–230	<25	X2CrNiMo 13 4, X5NiCr 32 21, X5CrNiNb 18 10, G-X15CrNi 25-20
M3	Duplex Stainless Steel	–	<800	135–275	<30	X8CrNiMo27 5, X2CrNiMoN22 5 3, X20CrNiSi25 4, G-X40CrNiSi27 4
K1	Grey Cast Iron	–	125–500	120–290	<32	GG15, GG25, GG30, GG40, GTW40
K2	Low- and Medium-Strength Ductile Irons (Nodular Irons) and Compacted Graphite Irons (CGI)	–	<600	130–260	<28	GGG40, GTS35
K3	High-Strength Ductile Irons and Austempered Ductile Iron (ADI)	–	>600	180–350	<43	GGG60, GTW55, GTS65
N1	Wrought Aluminium	–	–	–	–	AlMg1, Al99.5, AlCuMg1, AlCuBiPb, AlMgSi1, AlMgSiPb
N2	Low-Silicon Aluminium Alloys and Magnesium Alloys	Si <12,2%	–	–	–	GAISiCu4, GDAISi10Mg
N3	High-Silicon Aluminium Alloys and Magnesium Alloys	Si >12,2%	–	–	–	G-ALSi12, G-AISi17Cu4, G-AISi21CuNiMg
N4	Copper-, Brass-, Zinc-Based on Machinability Index Range of 70–100	–	–	–	–	CuZn40, Ms60, G-CuSn5ZnPb, CuZn37, CuSi3Mn
N5	Nylon, Plastics, Rubbers, Phenolics, Resins, Fibreglass	–	–	–	–	Lexan®, Hostalen®, Polystyrol, Makrolon®
N6	Carbon, Graphite Composites, CFRP	–	–	–	–	CFK, GFK
N7	Metal Matrix Composites (MMC)	–	–	–	–	–
S1	Iron-Based, Heat-Resistant Alloys	–	500–1200	160–260	25–48	X1NiCrMoCu32 28 7, X12NiCrSi36 16, X5NiCrAlTi31 20, X40CoCrNi20 20
S2	Cobalt-Based, Heat-Resistant Alloys	–	1000–1450	250–450	25–48	Haynes® 188, Stellite® 6,21,31
S3	Nickel-Based, Heat-Resistant Alloys	–	600–1700	160–450	<48	INCONEL® 690, INCONEL 625, Hastelloy®, NIMONIC® 75
S4	Titanium and Titanium Alloys	–	900–1600	300–400	33–48	Ti1, TiAl5Sn2, TiAl6V4, TiAl4Mo4Sn2
H1	Hardened Materials	–	–	–	44–48	GX260NiCr42, GX330NiCr42, GX300CrNiSi952, GX300CrMo153, Hardox® 400
H2	Hardened Materials	–	–	–	48–55	–
H3	Hardened Materials	–	–	–	56–60	–
H4	Hardened Materials	–	–	–	>60	–



Notes



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