

## High-Performance Solution for Multipurpose Tapping • **VariTap™**

VariTap is the new high-performance multipurpose tapping solution from WIDIA™. The VariTap has an optimised geometry and is capable of working with a wide variety of ductile materials — including carbon and alloy steels, stainless steels, ductile iron, and cast aluminium. This new tool reduces inventory costs without losing the benefit of high-quality, consistent tool life in threading and tapping.

# VariTap

- Ideal for customers who have a variety of materials to machine.
- Manufactured from high-vanadium HSS-E to provide long and consistent life.
- Geometry designed to allow tapping of a wide variety of ductile materials: carbon and alloy steels, stainless steels, ductile iron, and cast aluminium.
- Unique spiral point geometry provides low tapping torque while pushing chips ahead of the tap in through holes.

With a wide range of inch and metric standard sizes, pitch diameter limits, classes of fit, chamfer styles, and coatings, the new VariTap™ offers the most expansive portfolio of multipurpose taps available in the market.



- Spiral flute geometry optimised to provide efficient chip ejection in blind holes.
- Can be used on both synchronous and non-synchronous tapping machines.
- Proprietary PVD coatings deposited in a state-of-the-art in-house coating center yield reliable performance.

## Multipurpose Tap for Steel, Stainless Steel, Cast Aluminium, and Ductile Iron

**Unique spiral point design**  
Cutting edge angles and positive rake face straight flute optimised for tapping multiple materials.

**Multiple tap dimension options**  
ANSI, DIN, JIS, and DIN/ANSI.

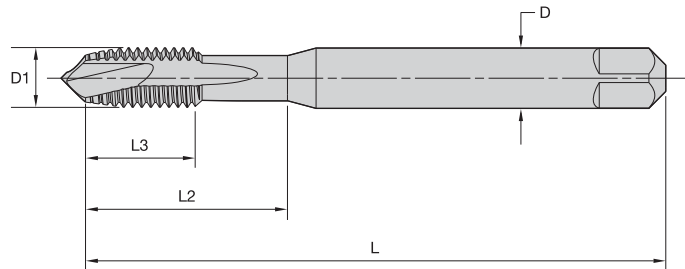
**Precision ground shanks**  
Low runout.

**High-vanadium HSS-E**  
Improved wear characteristics and longer tool life.

**PVD coatings and surface treatments**  
For use with various workpiece materials:

<b>WP42EG</b> TiCN	<b>WP41EG</b> TiN	<b>WP49EG</b> Oxide	<b>WU40EG</b> Bright
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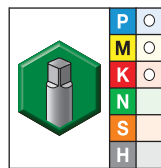
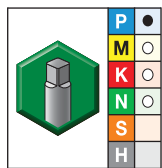
- WU41EG TiN
- WP49EG oxide



- first choice
- alternate choice

Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

### ■ VT-SPO • Form B Plug Chamfer • Machine Screw and Fractional • DIN 371 and 376



		metric dimensions					number of flutes	dimension standard	class of fit
WU41EG	WP49EG	D1 size	L	L3	L2	D			
VTSP06005	VTSP06005	4 - 40	56	8	18	3,5	2	DIN 371	2B
VTSP06007	VTSP06007	5 - 40	56	9	20	4,0	2	DIN 371	2B
VTSP06008	VTSP06008	6 - 32	56	9	20	4,0	2	DIN 371	2B
VTSP06010	VTSP06010	6 - 40	56	9	20	4,0	2	DIN 371	2B
VTSP06011	VTSP06011	8 - 32	63	11	21	4,5	2	DIN 371	2B
VTSP06013	VTSP06013	10 - 24	70	12	25	6,0	2	DIN 371	2B
VTSP06014	VTSP06014	10 - 32	70	12	25	6,0	2	DIN 371	2B
VTSP06016	VTSP06016	1/4 - 20	80	15	30	7,0	3	DIN 371	2B
VTSP06017	VTSP06017	1/4 - 28	80	15	30	7,0	3	DIN 371	2B
VTSP06019	VTSP06019	5/16 - 18	90	15	35	8,0	3	DIN 371	2B
VTSP06020	VTSP06020	5/16 - 24	90	15	35	8,0	3	DIN 371	2B
VTSP06022	VTSP06022	3/8 - 16	100	19	39	10,0	3	DIN 371	2B
VTSP06023	VTSP06023	3/8 - 24	100	19	39	10,0	3	DIN 371	2B
VTSP06025	VTSP06025	7/16 - 14	100	18	41	8,0	3	DIN 376	2B
VTSP06026	VTSP06026	7/16 - 20	100	18	41	8,0	3	DIN 376	2B
VTSP06028	VTSP06028	1/2 - 13	110	23	47	9,0	3	DIN 376	2B
VTSP06029	VTSP06029	1/2 - 20	110	23	47	9,0	3	DIN 376	2B
VTSP06031	VTSP06031	9/16 - 12	110	25	53	11,0	3	DIN 376	2B
VTSP06032	VTSP06032	9/16 - 18	110	25	53	11,0	3	DIN 376	2B
VTSP06033	VTSP06033	5/8 - 11	110	24	51	12,0	3	DIN 376	2B
VTSP06034	VTSP06034	5/8 - 18	110	24	51	12,0	3	DIN 376	2B
VTSP06035	VTSP06035	3/4 - 10	140	30	64	16,0	3	DIN 376	2B
VTSP06036	VTSP06036	3/4 - 16	140	30	64	16,0	3	DIN 376	2B
VTSP06037	VTSP06037	7/8 - 9	140	34	71	18,0	3	DIN 376	2B
VTSP06038	VTSP06038	7/8 - 14	140	34	71	18,0	3	DIN 376	2B
VTSP06039	VTSP06039	1 - 8	160	38	81	18,0	3	DIN 376	2B
VTSP06040	VTSP06040	1 - 12	160	38	81	18,0	3	DIN 376	2B

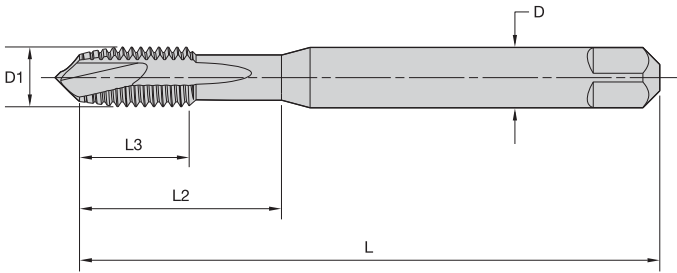
# High-Performance Taps

VariTap™ Spiral Point HSS-E Taps • Through Holes



High-Performance Taps

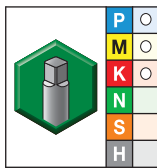
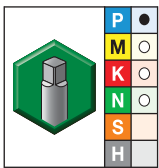
- WU41EG TIN
- WP49EG oxide



- first choice
- alternate choice

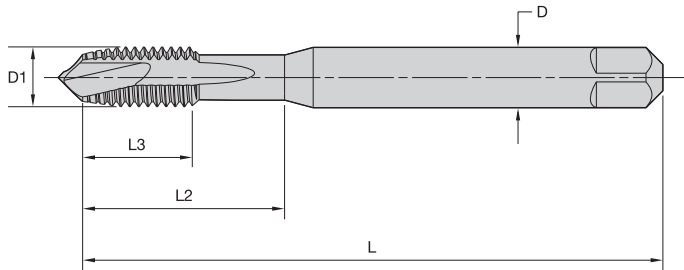
Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

## ■ VT-SPO • Form B Plug Chamfer • UNJC/UNJF • Inch DIN 371 and 376



		metric dimensions					number of flutes	dimension standard	class of fit
WU41EG	WP49EG	D1 size	L	L3	L2	D			
VTSP06006	VTSP06006	4 - 40	56	8	18	3,5	2	DIN 371	3B
VTSP06009	VTSP06009	6 - 32	56	9	20	4,0			
VTSP06012	VTSP06012	8 - 32	63	11	21	4,5	2	DIN 371	3B
VTSP06015	VTSP06015	10 - 32	70	12	25	6,0			
VTSP06018	VTSP06018	1/4 - 28	80	15	30	7,0	3	DIN 371	3B
VTSP06021	VTSP06021	5/16 - 24	90	15	35	8,0			
VTSP06024	VTSP06024	3/8 - 24	100	19	39	10,0	3	DIN 371	3B
VTSP06027	VTSP06027	7/16 - 20	100	18	41	8,0			
VTSP06030	VTSP06030	1/2 - 20	110	23	47	9,0	3	DIN 376	3B

- WP42EG TiCN
- WU41EG TiN
- WP49EG oxide
- WU40EG bright



- first choice
- alternate choice

Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

■ VT-SPO • Form B Plug Chamfer • Metric DIN 371, 374, and 376

Material Selection Matrix				metric dimensions					number of flutes	dimension standard	class of fit
WP42EG	WU41EG	WP49EG	WU40EG	D1 size	L	L3	L2	D			
—	—	VTSP06506	—	M2 X 0,4	45	7	13	2,8	2	DIN 371	6G
VTSP06505	VTSP06505	VTSP06505	VTSP06505	M2 X 0,4	45	7	13	2,8	2	DIN 371	6H
—	—	VTSP06507	—	M2,2 X 0,45	45	7	13	2,8	2	DIN 371	6H
—	—	VTSP06509	—	M2,5 X 0,45	50	7	15	2,8	2	DIN 371	6G
—	VTSP06508	VTSP06508	VTSP06508	M2,5 X 0,45	50	7	15	2,8	2	DIN 371	6H
—	—	VTSP06545	VTSP06545	M3 X 0,35	56	8	—	2,2	2	DIN 374	6H
—	—	VTSP06511	—	M3 X 0,5	56	8	18	3,5	2	DIN 371	6G
VTSP06510	VTSP06510	VTSP06510	VTSP06510	M3 X 0,5	56	8	18	3,5	2	DIN 371	6H
—	VTSP06525	VTSP06525	VTSP06525	M3 X 0,5	56	8	—	2,2	2	DIN 376	6H
—	VTSP06512	VTSP06512	VTSP06512	M3,5 X 0,6	56	9	20	4,0	2	DIN 371	6H
—	—	VTSP06546	VTSP06546	M4 X 0,5	63	10	21	2,8	2	DIN 374	6H
—	—	VTSP06514	—	M4 X 0,7	63	11	21	4,5	2	DIN 371	6G
VTSP06513	VTSP06513	VTSP06513	VTSP06513	M4 X 0,7	63	11	21	4,5	2	DIN 371	6H
—	VTSP06526	VTSP06526	VTSP06526	M4 X 0,7	63	10	21	2,8	2	DIN 376	6H
—	—	VTSP06547	VTSP06547	M5 X 0,5	70	12	25	3,5	2	DIN 374	6H
—	—	VTSP06516	—	M5 X 0,8	70	12	25	6,0	2	DIN 371	6G
VTSP06515	VTSP06515	VTSP06515	VTSP06515	M5 X 0,8	70	12	25	6,0	2	DIN 371	6H
—	VTSP06527	VTSP06527	VTSP06527	M5 X 0,8	70	12	25	3,5	2	DIN 376	6H
—	—	VTSP06548	VTSP06548	M6 X 0,5	80	12	30	4,5	3	DIN 374	6H
—	—	VTSP06549	VTSP06549	M6 X 0,75	80	12	30	4,5	3	DIN 374	6H
—	—	VTSP06518	—	M6 X 1	80	12	30	6,0	3	DIN 371	6G
VTSP06517	VTSP06517	VTSP06517	VTSP06517	M6 X 1	80	12	30	6,0	3	DIN 371	6H
—	VTSP06528	VTSP06528	VTSP06528	M6 X 1	80	12	30	4,5	3	DIN 376	6H
—	—	VTSP06550	VTSP06550	M7 X 0,75	80	12	30	5,5	3	DIN 374	6H
—	—	VTSP06520	—	M7 X 1	80	12	30	7,0	3	DIN 371	6G
VTSP06519	VTSP06519	VTSP06519	VTSP06519	M7 X 1	80	12	30	7,0	3	DIN 371	6H
—	—	VTSP06551	VTSP06551	M8 X 0,75	80	12	30	6,0	3	DIN 374	6H
—	—	VTSP06552	VTSP06552	M8 X 1	90	15	35	6,0	3	DIN 374	6H
—	—	VTSP06522	—	M8 X 1,25	90	15	35	8,0	3	DIN 371	6G
VTSP06521	VTSP06521	VTSP06521	VTSP06521	M8 X 1,25	90	15	35	8,0	3	DIN 371	6H
—	VTSP06529	VTSP06529	VTSP06529	M8 X 1,25	90	15	35	6,0	3	DIN 376	6H
—	—	VTSP06553	VTSP06553	M10 X 0,75	90	15	35	7,0	3	DIN 374	6H

(continued)

# High-Performance Taps

VariTap™ Spiral Point HSS-E Taps • Through Holes

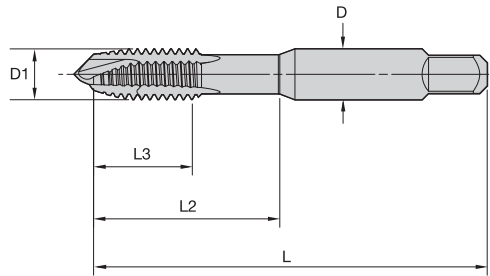


(VT-SPO • Form B Plug Chamfer • Metric DIN 371, 374, and 376 continued)

High-Performance Taps

								metric dimensions				number of flutes	dimension standard	class of fit
WP42EG	WU41EG	WP49EG	WU40EG	D1 size	L	L3	L2	D						
—	—	VTSP06554	VTSP06554	M10 X 1	90	15	35	7,0	3	DIN 374	6H			
—	—	VTSP06555	VTSP06555	M10 X 1,25	100	18	39	7,0	3	DIN 374	6H			
—	—	VTSP06524	—	M10 X 1,5	100	18	39	10,0	3	DIN 371	6G			
VTSP06523	VTSP06523	VTSP06523	VTSP06523	M10 X 1,5	100	18	39	10,0	3	DIN 371	6H			
—	VTSP06530	VTSP06530	VTSP06530	M10 X 1,5	100	18	39	7,0	3	DIN 376	6H			
—	—	VTSP06556	VTSP06556	M11 X 1	90	15	36	8,0	3	DIN 374	6H			
—	—	VTSP06557	VTSP06557	M12 X 1	100	21	39	9,0	3	DIN 374	6H			
—	—	VTSP06558	VTSP06558	M12 X 1,25	100	21	39	9,0	3	DIN 374	6H			
—	—	VTSP06559	VTSP06559	M12 X 1,5	100	21	39	9,0	3	DIN 374	6H			
—	—	VTSP06532	—	M12 X 1,75	110	21	44	9,0	3	DIN 376	6G			
VTSP06531	VTSP06531	VTSP06531	VTSP06531	M12 X 1,75	110	21	44	9,0	3	DIN 376	6H			
—	—	VTSP06560	VTSP06560	M14 X 1	100	21	47	11,0	3	DIN 374	6H			
—	—	VTSP06561	VTSP06561	M14 X 1,25	100	21	47	11,0	3	DIN 374	6H			
—	—	VTSP06562	VTSP06562	M14 X 1,5	100	21	47	11,0	3	DIN 374	6H			
—	—	VTSP06534	—	M14 X 2	110	24	52	11,0	3	DIN 376	6G			
VTSP06533	VTSP06533	VTSP06533	VTSP06533	M14 X 2	110	24	52	11,0	3	DIN 376	6H			
—	—	VTSP06563	VTSP06563	M16 X 1	100	21	46	12,0	3	DIN 374	6H			
—	—	VTSP06564	VTSP06564	M16 X 1,5	100	21	46	12,0	3	DIN 374	6H			
—	—	VTSP06536	—	M16 X 2	110	24	51	12,0	3	DIN 376	6G			
VTSP06535	VTSP06535	VTSP06535	VTSP06535	M16 X 2	110	24	51	12,0	3	DIN 376	6H			
—	—	VTSP06565	VTSP06565	M18 X 1	110	21	50	14,0	3	DIN 374	6H			
—	—	VTSP06566	VTSP06566	M18 X 1,5	110	21	50	14,0	3	DIN 374	6H			
—	—	VTSP06567	VTSP06567	M18 X 2	125	30	58	14,0	3	DIN 374	6H			
VTSP06537	VTSP06537	VTSP06537	VTSP06537	M18 X 2,5	125	30	58	14,0	3	DIN 376	6H			
—	—	VTSP06568	VTSP06568	M20 X 1	125	24	56	16,0	3	DIN 374	6H			
—	—	VTSP06569	VTSP06569	M20 X 1,5	125	24	56	16,0	3	DIN 374	6H			
—	—	VTSP06570	VTSP06570	M20 X 2	140	30	64	16,0	3	DIN 374	6H			
VTSP06538	VTSP06538	VTSP06538	VTSP06538	M20 X 2,5	140	30	64	16,0	3	DIN 376	6H			
—	—	VTSP06571	VTSP06571	M22 X 1,5	125	24	62	18,0	3	DIN 374	6H			
—	—	—	VTSP06572	M22 X 2	140	30	70	18,0	3	DIN 374	6H			
VTSP06539	VTSP06539	VTSP06539	VTSP06539	M22 X 2,5	140	30	70	18,0	3	DIN 376	6H			
—	—	VTSP06573	VTSP06573	M24 X 1,5	140	28	67	18,0	3	DIN 374	6H			
—	—	—	VTSP06574	M24 X 2	140	30	67	18,0	3	DIN 374	6H			
VTSP06540	VTSP06540	VTSP06540	VTSP06540	M24 X 3	160	36	77	18,0	3	DIN 376	6H			
—	VTSP06541	VTSP06541	VTSP06541	M27 X 3	160	36	82	20,0	4	DIN 376	6H			
—	—	—	VTSP06575	M30 X 2	150	28	80	22,0	4	DIN 374	6H			
—	VTSP06542	VTSP06542	VTSP06542	M30 X 3,5	180	42	91	22,0	4	DIN 376	6H			
—	—	VTSP06543	—	M33 X 3,5	180	42	100	25,0	4	DIN 376	6H			
—	—	VTSP06544	—	M36 X 4	200	48	110	28,0	4	DIN 376	6H			

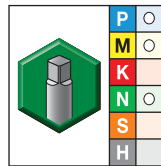
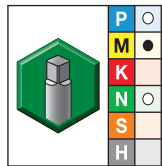
- WU41EG TIN
- WU40EG bright



Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

- first choice
- alternate choice

■ VT-SPO • Form B Plug Chamfer • Metric • JIS



		D1 size	metric dimensions		L2	D	number of flutes	dimension standard	tap class
WU41EG	WU40EG		L	L3					
VTSP07505	VTSP07505	M3 X 0,5	46	11	19	4,0	2	JIS	ISO 2
VTSP07506	VTSP07506	M4 X 0,7	52	13	21	5,0	2	JIS	ISO 2
VTSP07507	VTSP07507	M5 X 0,8	60	16	24	5,5	2	JIS	ISO 2
VTSP07508	VTSP07508	M6 X 1	62	19	29	6,0	3	JIS	ISO 2
VTSP07509	VTSP07509	M8 X 1,25	70	22	37	6,2	3	JIS	ISO 2
VTSP07510	VTSP07510	M10 X 1,5	75	24	41	7,0	3	JIS	ISO 2
—	VTSP07511	M12 X 1,25	82	29	48	8,5	3	JIS	ISO 2
—	VTSP07512	M12 X 1,75	82	29	48	8,5	3	JIS	ISO 2
—	VTSP07513	M12 X 1,5	82	29	48	8,5	3	JIS	ISO 2
—	VTSP07514	M14 X 2	88	30	48	10,5	3	JIS	ISO 2
—	VTSP07515	M14 X 1,5	88	30	48	10,5	3	JIS	ISO 2
—	VTSP07516	M16 X 2	95	32	52	12,5	3	JIS	ISO 2
—	VTSP07517	M16 X 1,5	95	32	52	12,5	3	JIS	ISO 2
—	VTSP07518	M18 X 2,5	100	37	55	14,0	3	JIS	ISO 2
—	VTSP07519	M20 X 2,5	105	37	60	15,0	3	JIS	ISO 2



## Multipurpose Tap for Steel, Stainless Steel, Cast Aluminium, and Ductile Iron

**Advanced spiral flute design**  
Smooth ejection of chips to reduce or eliminate bird-nesting.

**Multiple tap dimension options**  
ANSI, DIN, JIS and DIN/ANSI.

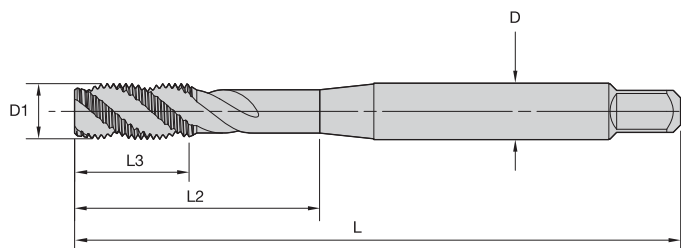
**Precision ground shanks**  
Low runout.

**High-vanadium HSS-E**  
Improved wear resistance and longer life.

**PVD coatings and surface treatments**  
For use with various workpiece materials:

<b>WP42EG</b> TiCN	<b>WP41EG</b> TiN	<b>WP49EG</b> Oxide	<b>WU40EG</b> Bright
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- WU41EG TiN
- WP49EG oxide

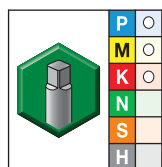
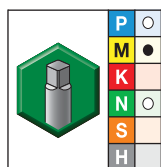


- first choice
- alternate choice

Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

High-Performance Taps

■ VT-SFT • Form C Semi-Bottoming Chamfer • Machine Screw and Fractional • DIN 371 and 376



		metric dimensions					number of flutes	dimension standard	class of fit
WU41EG	WP49EG	D1 size	L	L3	L2	D			
VTSFT6005	VTSFT6005	4 - 40	56	8	18	3,5	2	DIN 371	2B
VTSFT6007	VTSFT6007	5 - 40	56	9	20	4,0	2	DIN 371	2B
VTSFT6008	VTSFT6008	6 - 32	56	9	20	4,0	2	DIN 371	2B
VTSFT6010	VTSFT6010	6 - 40	56	9	20	4,0	2	DIN 371	2B
VTSFT6011	VTSFT6011	8 - 32	63	11	21	4,5	3	DIN 371	2B
VTSFT6013	VTSFT6013	10 - 24	70	12	25	6,0	3	DIN 371	2B
VTSFT6014	VTSFT6014	10 - 32	70	12	25	6,0	3	DIN 371	2B
VTSFT6016	VTSFT6016	1/4 - 20	80	15	30	7,0	3	DIN 371	2B
VTSFT6017	VTSFT6017	1/4 - 28	80	15	30	7,0	3	DIN 371	2B
VTSFT6019	VTSFT6019	5/16 - 18	90	15	35	8,0	3	DIN 371	2B
VTSFT6020	VTSFT6020	5/16 - 24	90	15	35	8,0	3	DIN 371	2B
VTSFT6022	VTSFT6022	3/8 - 16	100	19	39	10,0	3	DIN 371	2B
VTSFT6023	VTSFT6023	3/8 - 24	100	19	39	10,0	3	DIN 371	2B
VTSFT6025	VTSFT6025	7/16 - 14	100	18	41	8,0	3	DIN 371	2B
VTSFT6026	VTSFT6026	7/16 - 20	100	18	41	8,0	3	DIN 376	2B
VTSFT6028	VTSFT6028	1/2 - 13	110	23	40	9,0	3	DIN 376	2B
VTSFT6029	VTSFT6029	1/2 - 20	110	23	40	9,0	3	DIN 376	2B
VTSFT6031	VTSFT6031	9/16 - 12	110	25	32	11,0	3	DIN 376	2B
VTSFT6032	VTSFT6032	9/16 - 18	110	25	32	11,0	3	DIN 376	2B

(continued)

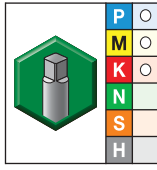
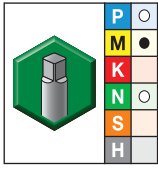
# High-Performance Taps

VariTap™ Spiral Flute HSS-E Taps • Blind Holes



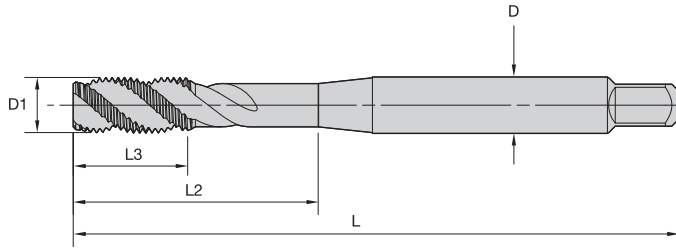
(VT-SFT • Form C Semi-Bottoming Chamfer • Machine Screw and Fractional • DIN 371 and 376 continued)

High-Performance Taps



		metric dimensions					number of flutes	dimension standard	class of fit
WU41EG	WP49EG	D1 size	L	L3	L2	D			
VTSFT6033	VTSFT6033	5/8 - 11	110	24	35	12,0	3	DIN 376	2B
VTSFT6034	VTSFT6034	5/8 - 18	110	24	35	12,0	3	DIN 376	2B
VTSFT6035	VTSFT6035	3/4 - 10	140	30	46	16,0	4	DIN 376	2B
VTSFT6036	VTSFT6036	3/4 - 16	140	30	46	16,0	4	DIN 376	2B
VTSFT6037	VTSFT6037	7/8 - 9	140	34	35	18,0	4	DIN 376	2B
VTSFT6038	VTSFT6038	7/8 - 14	140	34	35	18,0	4	DIN 376	2B
VTSFT6039	VTSFT6039	1 - 8	160	38	41	18,0	4	DIN 376	2B
VTSFT6040	VTSFT6040	1 - 12	160	38	41	18,0	4	DIN 376	2B

• WP49EG oxide

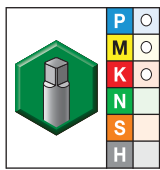


- first choice
- alternate choice

Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

High-Performance Taps

■ VT-SFT • Form C Semi-Bottoming Chamfer • UNJC/UNJF • Inch DIN 371 and 376



WP49EG	D1 size	metric dimensions				D	number of flutes	dimension standard	class of fit
		L	L3	L2	D				
VTSFT6006	4 - 40	56	8	18	3,5	2	DIN 371	3B	
VTSFT6009	6 - 32	56	9	20	4,0	2	DIN 371	3B	
VTSFT6012	8 - 32	63	11	21	4,5	3	DIN 371	3B	
VTSFT6015	10 - 32	70	12	25	6,0	3	DIN 371	3B	
VTSFT6018	1/4 - 28	80	15	30	7,0	3	DIN 371	3B	
VTSFT6021	5/16 - 24	90	15	35	8,0	3	DIN 371	3B	
VTSFT6024	3/8 - 24	100	19	39	10,0	3	DIN 371	3B	
VTSFT6027	7/16 - 20	100	18	41	8,0	3	DIN 376	3B	
VTSFT6030	1/2 - 20	110	23	40	9,0	3	DIN 376	3B	

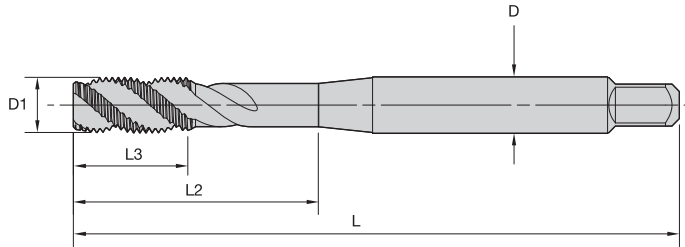
# High-Performance Taps

VariTap™ Spiral Flute HSS-E Taps • Blind Holes



High-Performance Taps

- WP42EG TiCN
- WU41EG TiN
- WP49EG oxide
- WU40EG bright



- first choice
- alternate choice

Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

## ■ VT-SFT • Form C Semi-Bottoming Chamfer • Metric DIN 371, 374, and 376

WP42EG		WU41EG		WP49EG		WU40EG		metric dimensions				number of flutes	dimension standard	class of fit
D1 size	L	L3	L2	D										
—	—	—	—	—	—	M2 X 0,4	45	7	13	2,8	2	DIN 371	6G	
VTSFT6506	VTSFT6506	VTSFT6507	VTSFT6506	VTSFT6506	VTSFT6506	M2 X 0,4	45	7	13	2,8	2	DIN 371	6H	
—	—	VTSFT6508	—	—	—	M2,2 X 0,45	45	7	13	2,8	2	DIN 371	6H	
—	—	VTSFT6510	—	—	—	M2,5 X 0,45	50	7	15	2,8	2	DIN 371	6G	
—	VTSFT6509	VTSFT6509	VTSFT6509	VTSFT6509	VTSFT6509	M2,5 X 0,45	50	7	15	2,8	2	DIN 371	6H	
—	—	VTSFT6545	—	—	—	M3 X 0,35	56	8	—	2,2	2	DIN 374	6H	
—	—	VTSFT6512	—	—	—	M3 X 0,5	56	8	18	3,5	2	DIN 371	6G	
VTSFT6511	VTSFT6511	VTSFT6511	VTSFT6511	VTSFT6511	VTSFT6511	M3 X 0,5	56	8	18	3,5	2	DIN 371	6H	
—	—	VTSFT6525	—	—	—	M3 X 0,5	56	8	—	2,2	2	DIN 376	6H	
—	VTSFT6513	VTSFT6513	VTSFT6513	VTSFT6513	VTSFT6513	M3,5 X 0,6	56	9	20	4,0	2	DIN 371	6H	
—	—	VTSFT6515	—	—	—	M4 X 0,7	63	11	21	4,5	3	DIN 371	6G	
—	—	VTSFT6546	—	VTSFT6546	VTSFT6546	M4 X 0,5	63	10	21	2,8	2	DIN 374	6H	
VTSFT6514	VTSFT6514	VTSFT6514	VTSFT6514	VTSFT6514	VTSFT6514	M4 X 0,7	63	11	21	4,5	3	DIN 371	6H	
—	—	VTSFT6526	—	VTSFT6526	VTSFT6526	M4 X 0,7	63	10	21	2,8	3	DIN 376	6H	
—	—	VTSFT6547	—	VTSFT6547	VTSFT6547	M5 X 0,5	70	12	25	3,5	2	DIN 374	6H	
—	—	VTSFT6517	—	—	—	M5 X 0,8	70	12	25	6,0	3	DIN 371	6G	
VTSFT6516	VTSFT6516	VTSFT6516	VTSFT6516	VTSFT6516	VTSFT6516	M5 X 0,8	70	12	25	6,0	3	DIN 371	6H	
—	—	VTSFT6527	—	VTSFT6527	VTSFT6527	M5 X 0,8	70	12	25	3,5	3	DIN 376	6H	
—	—	VTSFT6548	—	—	—	M6 X 0,5	80	12	30	4,5	2	DIN 374	6H	
—	—	VTSFT6549	—	VTSFT6549	VTSFT6549	M6 X 0,75	80	12	30	4,5	2	DIN 374	6H	
—	—	VTSFT6519	—	—	—	M6 X 1	80	12	30	6,0	3	DIN 371	6G	
VTSFT6518	VTSFT6518	VTSFT6518	VTSFT6518	VTSFT6518	VTSFT6518	M6 X 1	80	12	30	6,0	3	DIN 371	6H	
—	—	VTSFT6528	—	VTSFT6528	VTSFT6528	M6 X 1	80	12	30	4,5	3	DIN 376	6H	
—	—	VTSFT6520	—	VTSFT6520	VTSFT6520	M7 X 1	80	12	30	7,0	3	DIN 371	6H	
—	—	VTSFT6550	—	VTSFT6550	VTSFT6550	M8 X 0,75	80	12	30	6,0	2	DIN 374	6H	
VTSFT6551	—	VTSFT6551	—	VTSFT6551	VTSFT6551	M8 X 1	90	15	35	6,0	2	DIN 374	6H	
—	—	VTSFT6522	—	—	—	M8 X 1,25	90	15	35	8,0	3	DIN 371	6G	
VTSFT6521	VTSFT6521	VTSFT6521	VTSFT6521	VTSFT6521	VTSFT6521	M8 X 1,25	90	15	35	8,0	3	DIN 371	6H	
—	—	VTSFT6529	—	VTSFT6529	VTSFT6529	M8 X 1,25	90	15	35	6,0	3	DIN 376	6H	
—	—	—	—	VTSFT6552	VTSFT6552	M10 X 0,75	90	15	35	7,0	2	DIN 374	6H	
—	—	VTSFT6553	—	VTSFT6553	VTSFT6553	M10 X 1	90	15	35	7,0	2	DIN 374	6H	
VTSFT6554	—	VTSFT6554	—	VTSFT6554	VTSFT6554	M10 X 1,25	100	18	39	7,0	2	DIN 374	6H	

(continued)

(VT-SFT • Form C Semi-Bottoming Chamfer • Metric DIN 371, 374, and 376 continued)



High-Performance Taps

								metric dimensions					number of flutes	dimension standard	class of fit
WP42EG	WU41EG	WP49EG	WU40EG	D1 size	L	L3	L2	D							
—	—	VTSFT6524	—	M10 X 1,5	100	18	39	10,0	3	DIN 371	6G				
VTSFT6523	VTSFT6523	VTSFT6523	VTSFT6523	M10 X 1,5	100	18	39	10,0	3	DIN 371	6H				
—	—	VTSFT6530	VTSFT6530	M10 X 1,5	100	18	39	7,0	3	DIN 376	6H				
—	—	VTSFT6555	VTSFT6555	M12 X 1	100	21	39	9,0	2	DIN 374	6H				
—	—	VTSFT6556	VTSFT6556	M12 X 1,25	100	21	39	9,0	2	DIN 374	6H				
VTSFT6557	—	VTSFT6557	VTSFT6557	M12 X 1,5	100	21	39	9,0	2	DIN 374	6H				
—	—	VTSFT6532	—	M12 X 1,75	110	21	44	9,0	3	DIN 376	6G				
VTSFT6531	VTSFT6531	VTSFT6531	VTSFT6531	M12 X 1,75	110	21	44	9,0	3	DIN 376	6H				
—	—	—	VTSFT6558	M14 X 1	100	21	47	11,0	2	DIN 374	6H				
—	—	—	VTSFT6559	M14 X 1,25	100	21	47	11,0	2	DIN 374	6H				
VTSFT6560	—	VTSFT6560	VTSFT6560	M14 X 1,5	100	21	47	11,0	2	DIN 374	6H				
—	—	VTSFT6534	—	M14 X 2	110	24	52	11,0	3	DIN 376	6G				
VTSFT6533	VTSFT6533	VTSFT6533	VTSFT6533	M14 X 2	110	24	52	11,0	3	DIN 376	6H				
—	—	—	VTSFT6561	M16 X 1	100	21	46	12,0	2	DIN 374	6H				
—	—	VTSFT6562	VTSFT6562	M16 X 1,5	100	21	46	12,0	2	DIN 374	6H				
—	—	VTSFT6536	—	M16 X 2	110	24	51	12,0	3	DIN 376	6G				
—	VTSFT6535	VTSFT6535	VTSFT6535	M16 X 2	110	24	51	12,0	3	DIN 376	6H				
—	—	—	VTSFT6563	M18 X 1	110	21	50	14,0	2	DIN 374	6H				
—	—	VTSFT6564	VTSFT6564	M18 X 1,5	110	21	50	14,0	2	DIN 374	6H				
—	—	—	VTSFT6565	M18 X 2	125	30	58	14,0	2	DIN 374	6H				
—	VTSFT6537	VTSFT6537	VTSFT6537	M18 X 2,5	125	30	58	14,0	4	DIN 376	6H				
—	—	—	VTSFT6566	M20 X 1	125	24	56	16,0	2	DIN 374	6H				
—	—	VTSFT6567	VTSFT6567	M20 X 1,5	125	24	56	16,0	2	DIN 374	6H				
—	—	—	VTSFT6568	M20 X 2	140	30	64	16,0	2	DIN 374	6H				
—	VTSFT6538	VTSFT6538	VTSFT6538	M20 X 2,5	140	30	64	16,0	4	DIN 376	6H				
—	—	VTSFT6569	VTSFT6569	M22 X 1,5	125	24	62	18,0	2	DIN 374	6H				
—	—	—	VTSFT6570	M22 X 2	140	30	70	18,0	2	DIN 374	6H				
—	VTSFT6539	VTSFT6539	VTSFT6539	M22 X 2,5	140	30	70	18,0	4	DIN 376	6H				
—	—	VTSFT6571	VTSFT6571	M24 X 1,5	140	28	67	18,0	2	DIN 374	6H				
—	—	—	VTSFT6572	M24 X 2	140	28	67	18,0	2	DIN 374	6H				
—	VTSFT6540	VTSFT6540	VTSFT6540	M24 X 3	160	36	77	18,0	4	DIN 376	6H				
—	VTSFT6541	VTSFT6541	VTSFT6541	M27 X 3	160	36	82	20,0	4	DIN 376	6H				
—	—	—	VTSFT6573	M30 X 2	150	28	80	22,0	2	DIN 374	6H				
—	VTSFT6542	VTSFT6542	VTSFT6542	M30 X 3,5	180	42	91	22,0	4	DIN 376	6H				
—	—	VTSFT6543	VTSFT6543	M33 X 3,5	180	42	100	25,0	4	DIN 376	6H				
—	—	VTSFT6544	VTSFT6544	M36 X 4	200	48	110	28,0	5	DIN 376	6H				

# High-Performance Taps

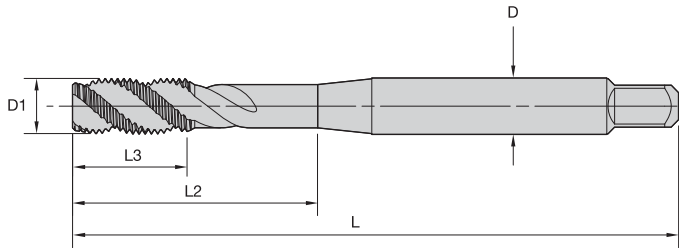
VariTap™ Spiral Flute HSS-E Taps • Blind Holes



- WP42EG TiCN
- WP49EG oxide



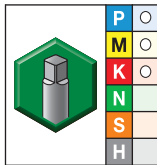
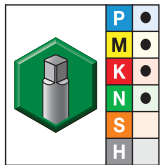
High-Performance Taps



- first choice
- alternate choice

Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

## ■ VT-SFT • Form E Bottoming Chamfer • Metric DIN 371, 374, and 376

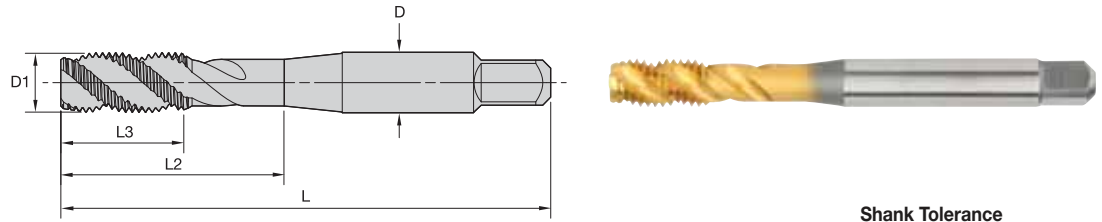


		metric dimensions					number of flutes	dimension standard	class of fit
WP42EG	WP49EG	D1 size	L	L3	L2	D			
VTSFT6574	VTSFT6574	M3 X 0,5	56	8	18	3,5	2	DIN 371	6H
VTSFT6575	VTSFT6575	M4 X 0,7	63	11	21	4,5	3	DIN 371	6H
VTSFT6576	VTSFT6576	M5 X 0,8	70	12	25	6,0	3	DIN 371	6H
VTSFT6577	VTSFT6577	M6 X 1	80	12	30	6,0	3	DIN 371	6H
VTSFT6585	VTSFT6585	M8 X 1	90	15	35	6,0	3	DIN 374	6H
VTSFT6578	VTSFT6578	M8 X 1,25	90	15	35	8,0	3	DIN 371	6H
VTSFT6586	VTSFT6586	M10 X 1,25	100	18	39	7,0	3	DIN 374	6H
VTSFT6579	VTSFT6579	M10 X 1,5	100	18	39	10,0	3	DIN 371	6H
VTSFT6587	VTSFT6587	M12 X 1,5	110	21	44	9,0	3	DIN 374	6H
VTSFT6580	VTSFT6580	M12 X 1,75	110	21	44	9,0	3	DIN 376	6H
VTSFT6588	VTSFT6588	M14 X 1,5	110	24	52	11,0	3	DIN 374	6H
VTSFT6581	VTSFT6581	M14 X 2	110	24	52	11,0	3	DIN 376	6H
—	VTSFT6582	M16 X 2	110	24	51	12,0	3	DIN 376	6H
VTSFT6583	VTSFT6583	M18 X 2,5	125	30	58	14,0	4	DIN 376	6H
VTSFT6584	VTSFT6584	M20 X 2,5	140	30	64	16,0	4	DIN 376	6H

- WU41EG TIN
- WU40EG bright



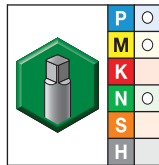
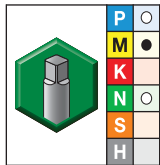
High-Performance Taps



- first choice
- alternate choice

Shank Tolerance	
D mm	tolerance h9
1-3	+0, -0,025
>3-6	+0, -0,030
>6-10	+0, -0,036
>10-18	+0, -0,043
>18-30	+0, -0,052

■ VT-SFT • Form C Semi-Bottoming Chamfer • Metric • JIS



		metric dimensions					number of flutes	dimension standard	tap class
WU41EG	WU40EG	D1 size	L	L3	L2	D			
VTSFT7505	VTSFT7505	M3 X 0,5	46	11	19	4,0	2	JIS	ISO 2
VTSFT7506	VTSFT7506	M4 X 0,7	52	13	21	5,0	3	JIS	ISO 2
VTSFT7507	VTSFT7507	M5 X 0,8	60	16	24	5,5	3	JIS	ISO 2
VTSFT7508	VTSFT7508	M6 X 1	62	19	29	6,0	3	JIS	ISO 2
VTSFT7509	VTSFT7509	M8 X 1,25	70	22	37	6,2	3	JIS	ISO 2
VTSFT7510	VTSFT7510	M10 X 1,5	75	24	41	7,0	3	JIS	ISO 2
—	VTSFT7511	M12 X 1,25	82	29	48	8,5	3	JIS	ISO 2
—	VTSFT7512	M12 X 1,75	82	29	48	8,5	3	JIS	ISO 2
—	VTSFT7513	M12 X 1,5	82	29	48	8,5	3	JIS	ISO 2
—	VTSFT7514	M14 X 2	88	30	48	10,5	3	JIS	ISO 2
—	VTSFT7515	M14 X 1,5	88	30	48	10,5	3	JIS	ISO 2
—	VTSFT7516	M16 X 2	95	32	52	12,5	3	JIS	ISO 2
—	VTSFT7517	M16 X 1,5	95	32	52	12,5	3	JIS	ISO 2
—	VTSFT7518	M18 X 2,5	100	37	55	14,0	4	JIS	ISO 2
—	VTSFT7519	M20 X 2,5	105	37	60	15,0	4	JIS	ISO 2



■ VariTap • HSS-E • Metric

VariTap HSS-E											
		 Through Holes					 Blind Holes				
Material Group	VDI 3323	Range – m/min									
		Tap Style	Grade*	min	Starting Value	max	Tap Style	Grade*	min	Starting Value	max
P	1	VT-SPO	WP42EG, WU41EG	25	34	42	VT-SFT	WP42EG, WU41EG	17	24	35
		VT-SPO	WP49EG, WU40EG	14	18	23	VT-SFT	WP49EG, WU40EG	9	13	18
	2, 3, 4, 5	VT-SPO	WP42EG, WU41EG	18	24	30	VT-SFT	WP42EG, WU41EG	11	15	22
		VT-SPO	WP49EG, WU40EG	10	14	17	VT-SFT	WP49EG, WU40EG	6	9	13
	6, 7, 8, 10	VT-SPO	WP42EG, WU41EG	11	15	19	VT-SFT	WP42EG, WU41EG	9	12	17
		VT-SPO	WP49EG, WU40EG	7	9	11	VT-SFT	WP49EG, WU40EG	5	7	10
9	VT-SPO	WP42EG, WU41EG	11	15	19	VT-SFT	WP42EG, WU41EG	6	9	13	
	VT-SPO	WP49EG, WU40EG	6	8	10	VT-SFT	WP49EG, WU40EG	4	5	8	
M	14.1, 14.3	VT-SPO	WP42EG, WU41EG	16	21	27	VT-SFT	WP42EG, WU41EG	11	15	22
		VT-SPO	WP49EG, WU40EG	9	12	15	VT-SFT	WP49EG, WU40EG	6	9	13
	14.2	VT-SPO	WP42EG, WU41EG	11	15	19	VT-SFT	WP42EG, WU41EG	9	12	17
		VT-SPO	WP49EG, WU40EG	7	9	11	VT-SFT	WP49EG, WU40EG	4	6	9
K	15, 16	—	—	—	—	—	—	—	—	—	
	17, 18, 19	VT-SPO	WP42EG, WU41EG	16	21	27	VT-SFT	WP42EG, WU41EG	11	15	22
		VT-SPO	WP49EG, WU40EG	9	12	15	VT-SFT	WP49EG, WU40EG	6	9	12
N	21, 22	VT-SPO	WP42EG, WU41EG	37	49	61	VT-SFT	WP42EG, WU41EG	26	37	52
		VT-SPO	WU40EG	21	27	34	VT-SFT	WU40EG	14	20	28
	23, 24	VT-SPO	WP42EG, WU41EG	30	40	50	VT-SFT	WP42EG, WU41EG	19	27	39
		VT-SPO	WU40EG	16	21	27	VT-SFT	WU40EG	11	15	22
	26, 27, 28	VT-SPO	WP42EG, WU41EG	37	49	61	VT-SFT	WP42EG, WU41EG	23	34	48
		VT-SPO	WU40EG	21	27	34	VT-SFT	WU40EG	13	18	26

\* Grades: WP42EG = TiCN  
 WU41EG = TiN  
 WP49EG = oxide  
 WU40EG = bright