

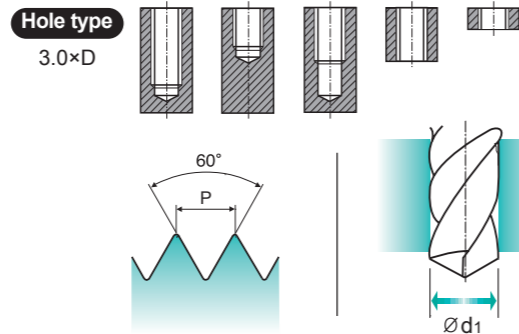
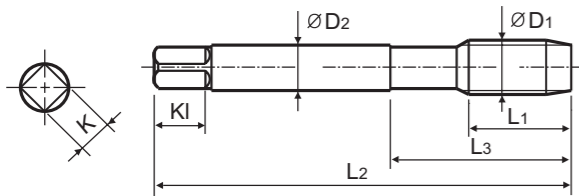
M TIN-COATED HSS-PM COLD FORMING TAPS **NEW**
ISO Metric Coarse Threads DIN13

TTS39 SERIES



- ▶ Coated HSS-PM (Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- ▶ Up to 3 times faster in tapping compared to conventional taps
- ▶ For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- ▶ High precision threads

Short Chamfer



Material groups: **GV** HSS PM DIN 371/376 6HX 60° E TiN p.33

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Number of Oil Groove	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M3	× 0.5	TTS39206	5	56	18	3.5	2.7	6	5	2.8
M4	× 0.7	TTS39246	7	63	21	4	3.4	6	5	3.7
M5	× 0.8	TTS39286	8	70	25	6	4.9	8	5	4.65
M6	× 1	TTS39316	10	80	30	6	4.9	8	5	5.55
M8	× 1.25	TTS39366	13	90	35	8	6.2	9	6	7.4
M10	× 1.5	TTS39426	15	100	39	10	8	11	6	9.3
M12	× 1.75	TTS39506	18	110	44	9	7	10	6	11.2
M14	× 2	TTS39546	20	110	44	11	9	12	8	13.0
M16	× 2	TTS39606	20	110	44	12	9	12	8	15.0
M18	× 2.5	TTS39656	25	125	50	14	11	14	8	16.8
M20	× 2.5	TTS39706	25	140	54	16	12	15	8	18.8

- ▶ DIN 371 (M3-M10) and DIN 376 (M12-M20)
- ▶ Coating (TiAlN) is available on your request

◎ : Excellent ○ : Good

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

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

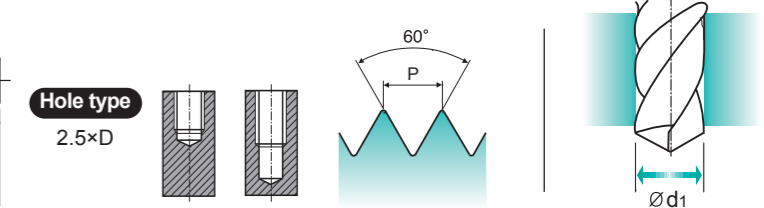
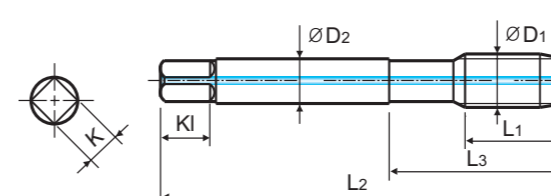
M TIN-COATED HSS-PM SPIRAL FLUTE TAPS **NEW**
ISO Metric Coarse Threads DIN13

TTS41-IC SERIES



- ▶ Coated HSS-PM (Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- ▶ Up to 3 times faster in tapping compared to conventional taps
- ▶ For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- ▶ High precision threads

with Internal Coolant



Material groups: **GS** HSS PM DIN 371/376 6HX 60° C R45° TiN p.33

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M6	× 1.0	TTS41316IC	10	80	30	6	4.9	8	3	5.0
M8	× 1.25	TTS41366IC	13	90	35	8	6.2	9	3	6.8
M10	× 1.25	TTS41426IC	15	100	39	10	8	11	3	8.5
M12	× 1.75	TTS41506IC	18	110	44	9	7	10	3	10.2
M14	× 2.0	TTS41546IC	20	110	52	11	9	12	3	12.0
M16	× 2.0	TTS41606IC	20	110	52	12	9	12	3	14.0
M18	× 2.5	TTS41656IC	25	125	66	14	11	14	4	15.5
M20	× 2.5	TTS41706IC	25	140	72	16	12	15	4	17.5

- ▶ DIN 371 (M6-M10) and DIN 376 (M12-M20)
- ▶ Coating (TiAlN) is available on your request
- ▶ For Specific Nut To Accommodate Sealing Disk (See Page 31-32)

◎ : Excellent ○ : Good

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

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