

Inquiry about Zero Chip Taps

Date	
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End User	
Dealer	

Size		Full Length		Limit	
Existing Tap	Maker		Model/Specification		
Requested tap material	Carbide	HSS	Requested surface treatment		

Machine type		Coolant type	Water base	Oil base	MQL
Method	Vertical	Horizontal	Coolant pressure		
Holder name	Maker		Model/Specification		
Collet Diameter	Φ	Adjust Bolt	Have	No	Any special attentions about the machine
Cap	Have	No	*Type of coolant spouts from the gap is NG		
Sealing	Have	No	*If "Have", please take it off		

Material of work pieces/name		Hardness		Chamfer	P
Hole type	Blind hole	Through hole	blind/through hole		
	Blind hole	Through hole			
The deepest hole depth	mm	mm			
The deepest effective hole depth	mm	mm			
Problem hope to solve	Chip remain Tap broken OH blocked Welding resistance Tool life UP Tapping speed UP Low cost				

TANOI MFG.CO.LTD.		Staff	
Tap Selection	1	2	

TANOI TANOI MFG.CO.,LTD.
Overseas Dept.
 telephone. +81-480-90-4003 facimile. +81-480-92-4441
 E-mail: overseas@tanoi-mfg.co.jp
 http://www.tanoi-mfg.co.jp

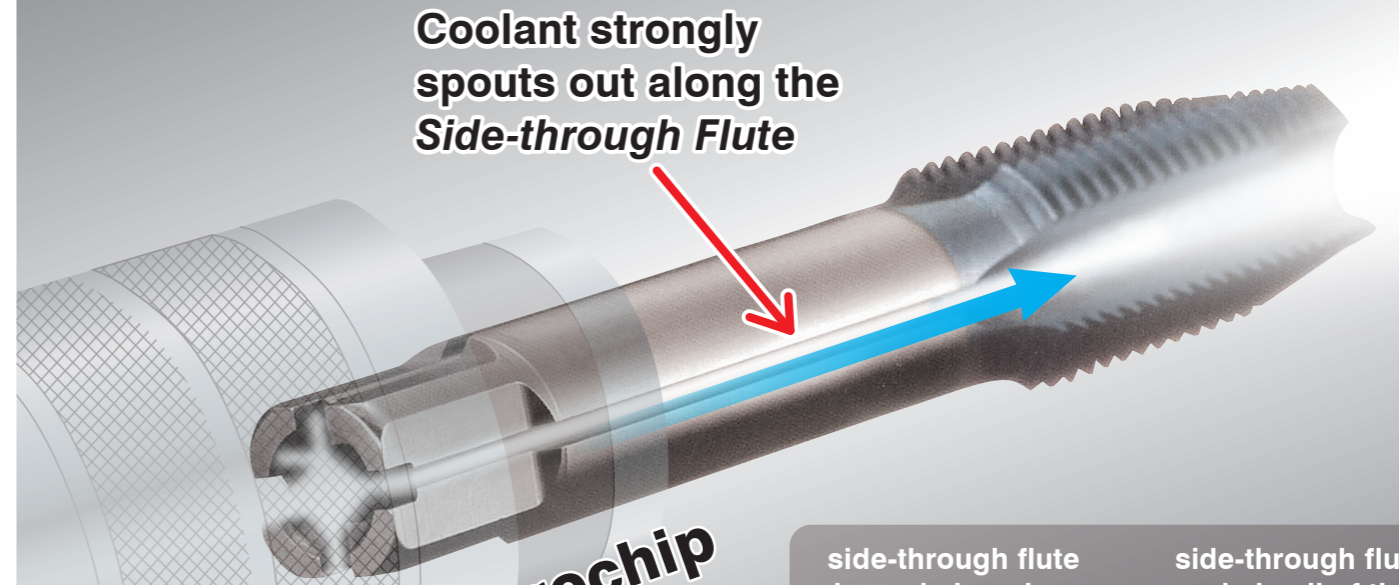
ZC SERIES



Zerochip Tap

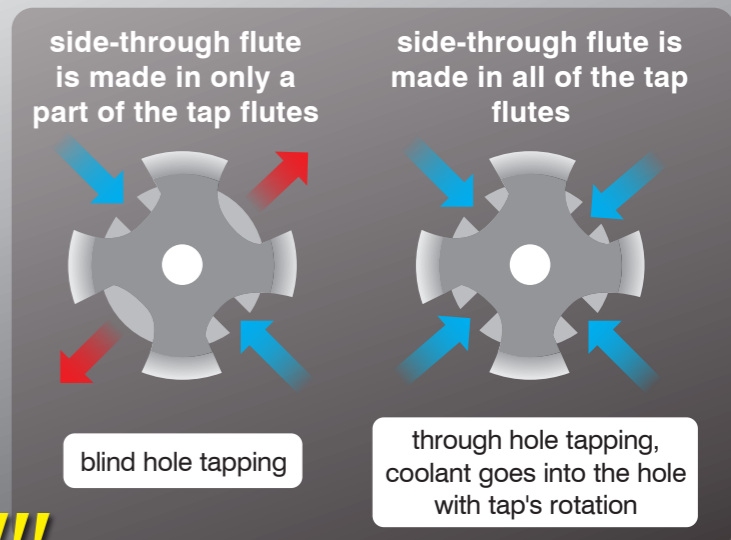
New Internal Coolant System which contributes to COST DOWN

Be awarded
 The 6th Manufacturing Japan grand prize.....
Minister of Economy special prize
 (manufacturing · production process section)
 The 10th Tokyo Venture Technology grand prize.....
Encouraging prize



Coolant strongly spouts out along the **Side-through Flute**

Expanded Zerochip Tap Series Lineup as Standard Items

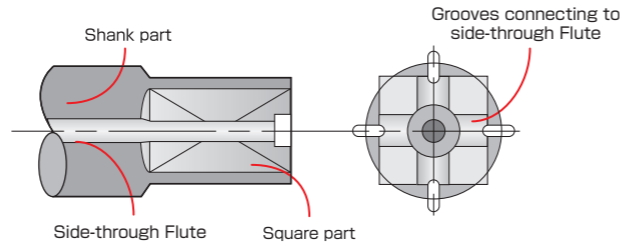
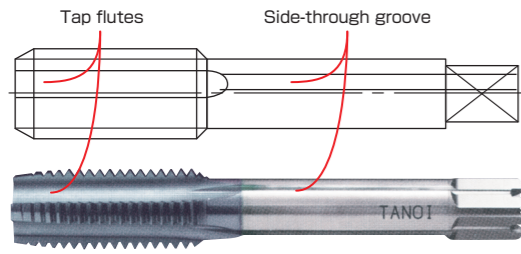


Chips Remain after tapping is "ZERO"!!!

Available for Mist Processing and be Friendly to the Environment

NEW INTERNAL COOLANT SYSTEM

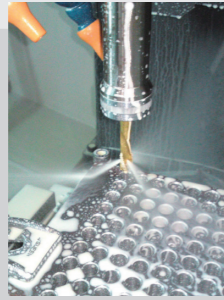
A new construction which makes side-through flute in the SHANK



Problems usually happened using the conventional internal coolant system

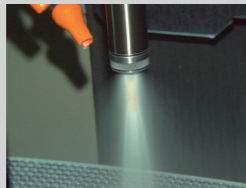
Side Oil Hole

- *At the beginning of processing, tapping is almost with a dry condition
- *OH diameter is small, thus, there is not enough coolant spout from OH
- *Chips ejection is not good
- *For a blind hole, it will block the chips ejection
- *To make so many OH in a tap, the cost is very high
- *Taps regrinding times is limited



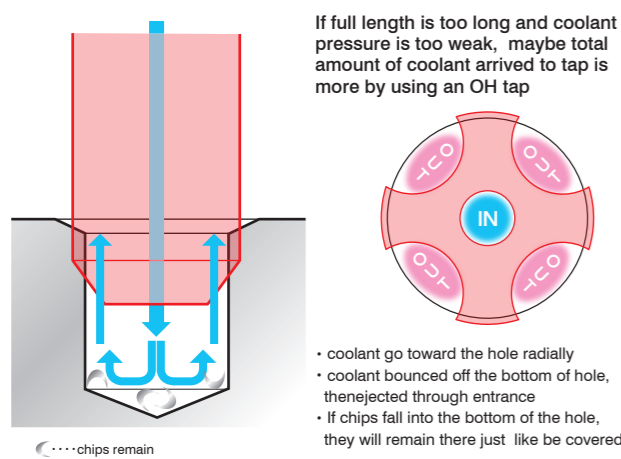
Collet Through(coolant spout from the gap)

- *Not available for blind hole tapping
- *A lot of coolant diffuse and only a few coolant will go into the drill hole
- *For a long shank tap, coolant effect will become lower
- *For taps size smaller than M7, drill hole diameter will be smaller than taps shank diameter, so the coolant is not effective



For blind hole tapping, there will be chips remain
 For through hole tapping, coolant effect is very low(even by using a side OH specification)
 For Aluminum processing, the OH will be blocked easily by the small chips
 For side OH, regrinding times is limited
 Tool cost is very high

Blind hole coolant movement (Center OH)



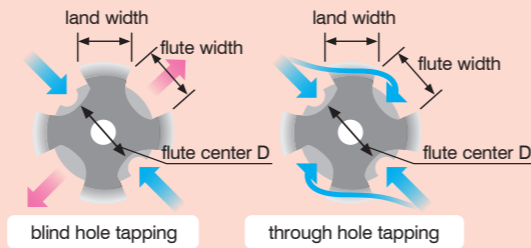
By using ZC-HT

- *Chips is strongly ejected from the beginning
- *For FC/ADC blind hole, very effective to chips ejection
- *Plenty of coolant spout out
- *Low cost by just adding the flute into a shank part
- *Easy to regrind, increased the regrinding times



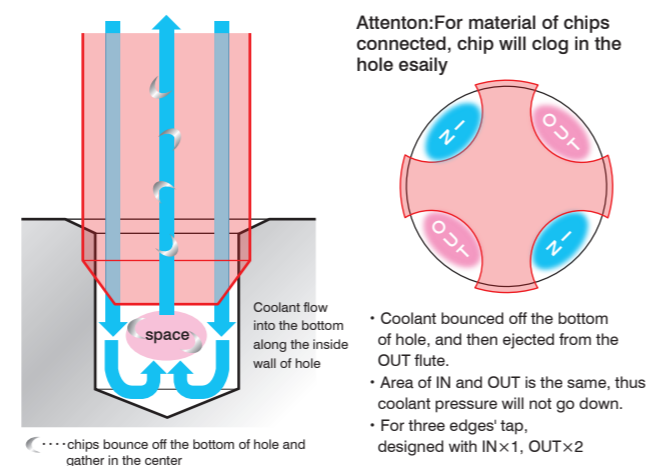
ZC-HT(used for both blind hole and through hole)

Chips will not remain easily after a blind hole tapping
 Even for a through hole tapping, coolant is effective



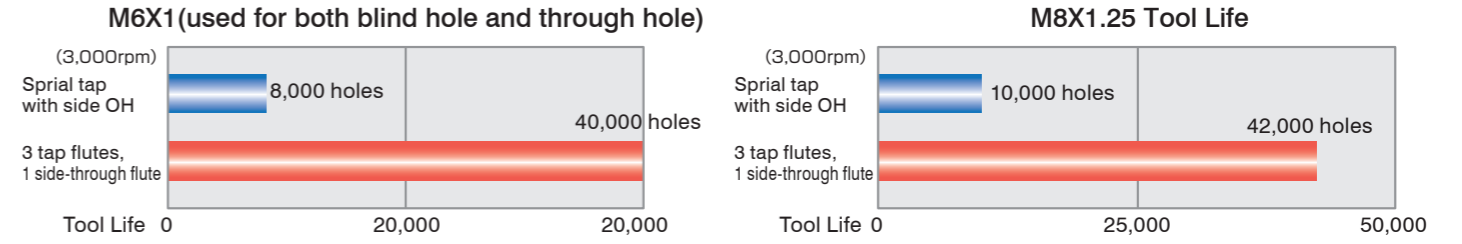
Chip not remain easily after a blind hole tapping
 Even for through hole tapping, high performance could be achieved
 Cooling · Lubrication · Chips Ejection
 performance is very high, tapping speed could be set with a higher level
 Easy to regrind, regrinding times is increased
 Tool cost is low

Blind hole coolant movement (ZC-HT)



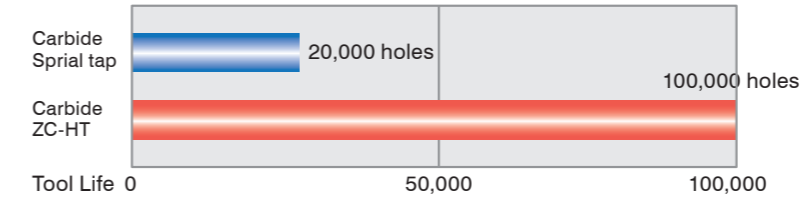
Successful cases which already used by customers

ADC case parts



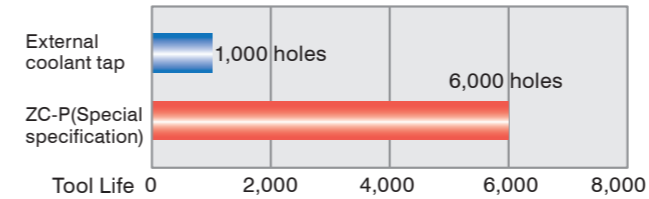
ADC brake parts

M10X1.5 (used for both blind hole and through hole)



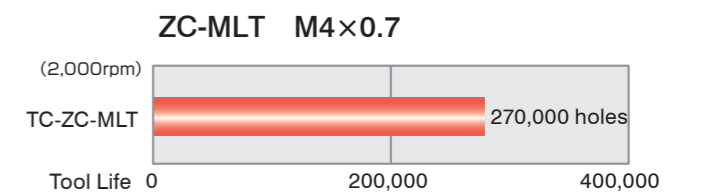
ADC case parts

PF1/8 External coolant → Internal coolant thread surface became beautiful



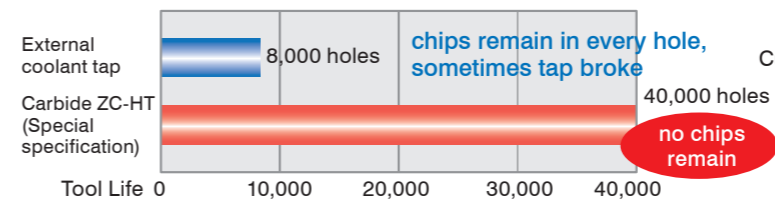
ADC case parts

Direct tapping into a molded hole



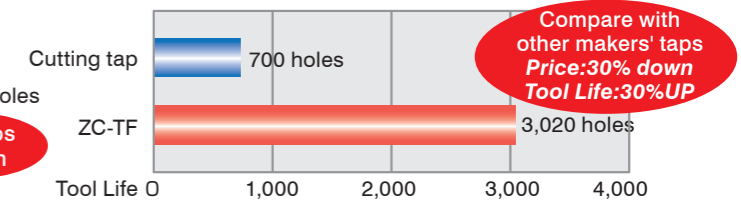
FCD differential case parts

M5×0.8 thread surface became beautiful



S48C steering parts

M16X1.5 (effective thread length 45mm)

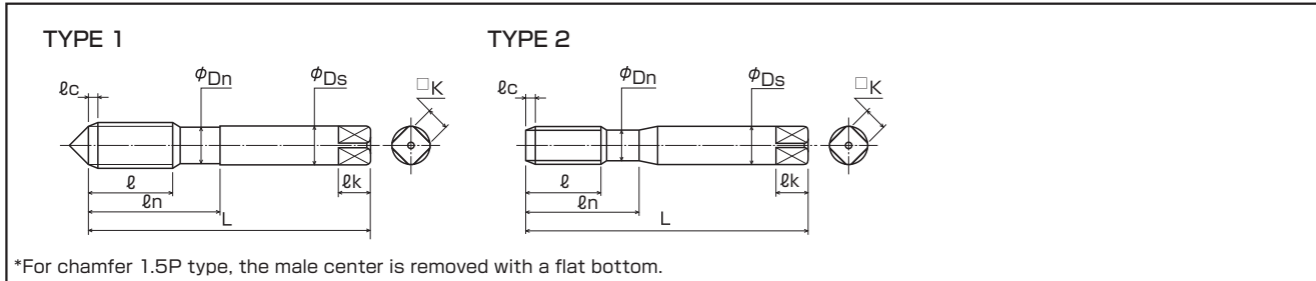
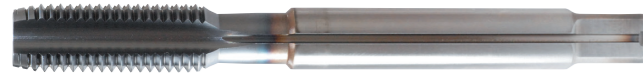


[Caution about the holder]

- You can use a normal collet holder
- For the following specifications, please kindly contact TANOI sales staff
 - *Model to hold the tap with a rubber or resin
 - *Spring collet of those number of divisions is too many (more than 8 divisions)
 - *Model discharged from the gap and the end face of the collet
 - *Model to hold the tap in the steel ball (such as tapper)
 - *Shrink fit holders
 - *For mist processing



Tapping video



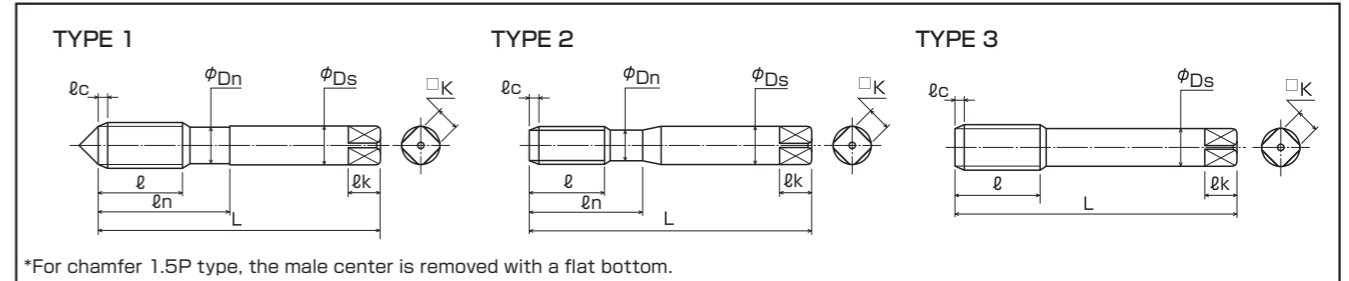
*For chamfer 1.5P type, the male center is removed with a flat bottom.

●メートルねじ用 Metric

単位 (Unit) : mm

アイテム No. Item No.	呼び Nominal size	食付 ℓ_c	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D_s	ℓ_n	D_n	K	ℓ_k			
41162	M3 x 0.5	1.5P	GT5	1	100	11	4	18	2.4	3.2	6	3	1	有
41163	M3 x 0.5	3P	GT5	1	100	11	4	18	2.4	3.2	6	3	3	有
□	M3 x 0.5	1.5P	GT5	1	70	11	4	18	2.4	3.2	6	3	1	有
□	M3 x 0.5	3P	GT5	1	70	11	4	18	2.4	3.2	6	3	3	有
41164	M4 x 0.7	1.5P	GT6	1	100	13	5	20	3.1	4	7	3	1	有
41165	M4 x 0.7	3P	GT6	1	100	13	5	20	3.1	4	7	3	3	有
□	M4 x 0.7	1.5P	GT6	1	70	13	5	20	3.1	4	7	3	1	有
□	M4 x 0.7	3P	GT6	1	70	13	5	20	3.1	4	7	3	3	有
41166	M5 x 0.8	1.5P	GT6	2	100	16	5.5	25	4	4.5	7	3	1	有
41167	M5 x 0.8	3P	GT6	2	100	16	5.5	25	4	4.5	7	3	3	有
41168	M6 x 1	1.5P	GT6	2	100	19	6	30	4.8	4.5	7	3	1	有
41169	M6 x 1	3P	GT6	2	100	19	6	30	4.8	4.5	7	3	3	有
41170	M8 x 1.25	1.5P	GT6	2	100	22	8	40	6.2	6	9	3	1	有
41171	M8 x 1.25	3P	GT6	2	100	22	8	40	6.2	6	9	3	3	有
41172	M10 x 1.5	1.5P	GT7	2	100	24	8	39	7.8	6	9	4	2	有
41173	M10 x 1.5	3P	GT7	2	100	24	8	39	7.8	6	9	4	4	有
41174	M10 x 1.25	1.5P	GT6	2	100	24	8	39	7.8	6	9	4	2	有
41175	M10 x 1.25	3P	GT6	2	100	24	8	39	7.8	6	9	4	4	有
41176	M12 x 1.75	1.5P	GT7	2	100	29	10	43	9.8	8	11	4	2	有
41177	M12 x 1.75	3P	GT7	2	100	29	10	43	9.8	8	11	4	4	有
41178	M12 x 1.5	1.5P	GT7	2	100	29	10	43	9.8	8	11	4	2	有
41179	M12 x 1.5	3P	GT7	2	100	29	10	43	9.8	8	11	4	4	有
41180	M12 x 1.25	1.5P	GT7	2	100	29	10	43	9.8	8	11	4	2	有
41181	M12 x 1.25	3P	GT7	2	100	29	10	43	9.8	8	11	4	4	有
□	M14 x 2	1.5P	GT7	2	100	30	10.5	49	10.3	8	11	4	2	有
□	M14 x 2	3P	GT7	2	100	30	10.5	49	10.3	8	11	4	4	有
□	M14 x 1.5	1.5P	GT7	2	100	30	10.5	49	10.3	8	11	4	2	有
□	M14 x 1.5	3P	GT7	2	100	30	10.5	49	10.3	8	11	4	4	有
□	M16 x 2	1.5P	GT7	2	100	32	12.5	52	12.3	10	13	4	2	有
□	M16 x 2	3P	GT7	2	100	32	12.5	52	12.3	10	13	4	4	有
□	M16 x 1.5	1.5P	GT7	2	100	32	12.5	52	12.3	10	13	4	2	有
□	M16 x 1.5	3P	GT7	2	100	32	12.5	52	12.3	10	13	4	4	有
□	M18 x 2.5	1.5P	GT7	2	120	37	14	56	13.8	11	14	4	2	有
□	M18 x 2.5	3P	GT7	2	120	37	14	56	13.8	11	14	4	4	有
□	M18 x 1.5	1.5P	GT7	2	120	37	14	56	13.8	11	14	4	2	有
□	M18 x 1.5	3P	GT7	2	120	37	14	56	13.8	11	14	4	4	有
□	M20 x 2.5	1.5P	GT8	2	120	37	15	57	14.8	12	15	4	2	有
□	M20 x 2.5	3P	GT8	2	120	37	15	57	14.8	12	15	4	4	有
□	M20 x 1.5	1.5P	GT7	2	120	37	15	57	14.8	12	15	4	2	有
□	M20 x 1.5	3P	GT7	2	120	37	15	57	14.8	12	15	4	4	有
□	M24 x 3	1.5P	GT8	2	120	45	19	67	18.8	15	18	4	2	有
□	M24 x 3	3P	GT8	2	120	45	19	67	18.8	15	18	4	4	有
□	M24 x 1.5	1.5P	GT7	2	120	45	19	67	18.8	15	18	4	2	有
□	M24 x 1.5	3P	GT7	2	120	45	19	67	18.8	15	18	4	4	有

- This symbol indicates that the products stocked by specific distributors. For details, please contact us.
- Blade shape has been set for the ADC/FC/FCD. If you wish to use in steel and stainless steel, please contact us.



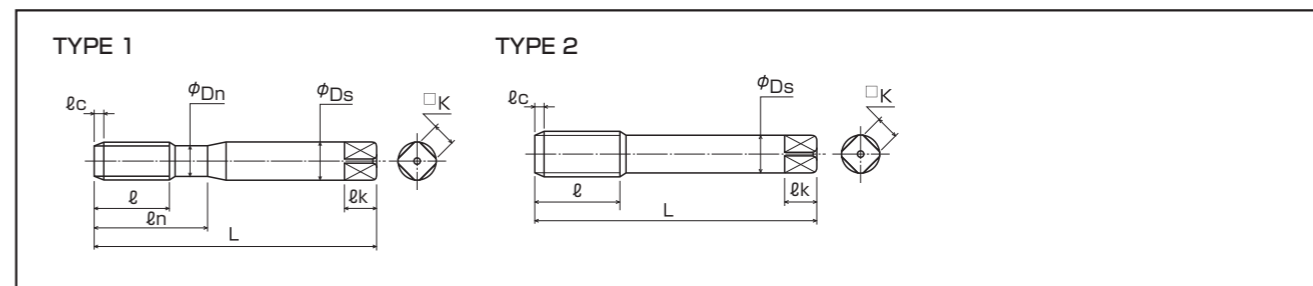
*For chamfer 1.5P type, the male center is removed with a flat bottom.

●メートルねじ用 Metric

単位 (Unit) : mm

アイテム No. Item No.	呼び Nominal size	食付 ℓ_c	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D_s	ℓ_n	D_n	K	ℓ_k			
81600	M3 x 0.5	1.5P	GT5	1	100	11	4	18	2.4	3.2	6	3	1	有
81601	M3 x 0.5	3P	GT5	1	100	11	4	18	2.4	3.2	6	3	3	有
□	M3 x 0.5	1.5P	GT5	1	70	11	4	18	2.4	3.2	6	3	1	有
□	M3 x 0.5	3P	GT5	1	70	11	4	18	2.4	3.2	6	3	3	有
81602	M4 x 0.7	1.5P	GT6	1	100	13	5	20	3.1	4	7	3	1	有
81603	M4 x 0.7	3P	GT6	1	100	13	5	20	3.1	4	7	3	3	有
□	M4 x 0.7	1.5P	GT6	1	70	13	5	20	3.1	4	7	3	1	有
□	M4 x 0.7	3P	GT6	1	70	13	5	20	3.1	4	7	3	3	有
81604	M5 x 0.8	1.5P	GT6	2	100	16	5.5	25	4	4.5	7	3	1	有
81605	M5 x 0.8	3P	GT6	2	100	16	5.5	25	4	4.5	7	3	3	有
81606	M6 x 1	1.5P	GT6	2	100	19	6	30	4.8	4.5	7	3	1	有
81607	M6 x 1	3P	GT6	2	100	19	6	30	4.8	4.5	7	3	3	有
81608	M8 x 1.25	1.5P	GT6	2	100	22	8	40	6.2	6	9	3	1	有
81609	M8 x 1.25	3P	GT6	2	100	22	8	40	6.2	6	9	3	3	有
81610	M10 x 1.5	1.5P	GT7	3	100	24	8	—	—	6	9	4	2	有
81611	M10 x 1.5	3P	GT7	3	100	24	8	—	—	6	9	4	4	有
81612	M10 x 1.25	1.5P	GT6	3	100	24	8	—	—	6	9	4	2	有
81613	M10 x 1.25	3P	GT6	3	100	24	8	—	—	6	9	4	4	有
81614	M12 x 1.75	1.5P	GT7	2	100	29	10	43	9.8	8	11	4	2	有
81615	M12 x 1.75	3P	GT7	2	100	29	10	43	9.8	8	11	4	4	有
81616	M12 x 1.5	1.5P	GT7	2	100	29	10	43	9.8	8	11	4	2	有
81617	M12 x 1.5	3P	GT7	2	100	29	10	43	9.8	8	11	4	4	有
81618	M12 x 1.25	1.5P	GT7	2	100	29	10	43	9.8	8	11	4	2	有
81619	M12 x 1.25	3P	GT7	2	100	29	10	43	9.8	8	11	4	4	有

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<input type="checkbox"/>	M3 × 0.5	1.5P	GT5	1	70	11	4	18	2.4	3.2	6	3	1	有
<input type="checkbox"/>	M3 × 0.5	3P	GT5	1	70	11	4	18	2.4	3.2	6	3	3	有
<input type="checkbox"/>	M4 × 0.7	1.5P	GT6	1	70	13	5	20	3.1	4	7	3	1	有
<input type="checkbox"/>	M4 × 0.7	3P	GT6	1	70	13	5	20	3.1	4	7	3	3	有
<input type="checkbox"/>	M5 × 0.8	1.5P	GT6	1	100	16	5.5	25	4	4.5	7	3	1	有
<input type="checkbox"/>	M5 × 0.8	3P	GT6	1	100	16	5.5	25	4	4.5	7	3	3	有
<input type="checkbox"/>	M6 × 1	1.5P	GT6	1	100	19	6	30	4.8	4.5	7	3	1	有
<input type="checkbox"/>	M6 × 1	3P	GT6	1	100	19	6	30	4.8	4.5	7	3	3	有
<input type="checkbox"/>	M8 × 1.25	1.5P	GT6	1	100	22	8	40	6.2	6	9	3	1	有
<input type="checkbox"/>	M8 × 1.25	3P	GT6	1	100	22	8	40	6.2	6	9	3	3	有
<input type="checkbox"/>	M10 × 1.5	1.5P	GT7	1	100	24	8	39	7.8	6	9	4	2	有
<input type="checkbox"/>	M10 × 1.5	3P	GT7	1	100	24	8	39	7.8	6	9	4	4	有
<input type="checkbox"/>	M10 × 1.25	1.5P	GT6	1	100	24	8	39	7.8	6	9	4	2	有
<input type="checkbox"/>	M10 × 1.25	3P	GT6	1	100	24	8	39	7.8	6	9	4	4	有
<input type="checkbox"/>	M12 × 1.75	1.5P	GT7	1	100	29	10	43	9.8	8	11	4	2	有
<input type="checkbox"/>	M12 × 1.75	3P	GT7	1	100	29	10	43	9.8	8	11	4	4	有
<input type="checkbox"/>	M12 × 1.5	1.5P	GT7	1	100	29	10	43	9.8	8	11	4	2	有
<input type="checkbox"/>	M12 × 1.5	3P	GT7	1	100	29	10	43	9.8	8	11	4	4	有
<input type="checkbox"/>	M12 × 1.25	1.5P	GT7	1	100	29	10	43	9.8	8	11	4	2	有
<input type="checkbox"/>	M12 × 1.25	3P	GT7	1	100	29	10	43	9.8	8	11	4	4	有

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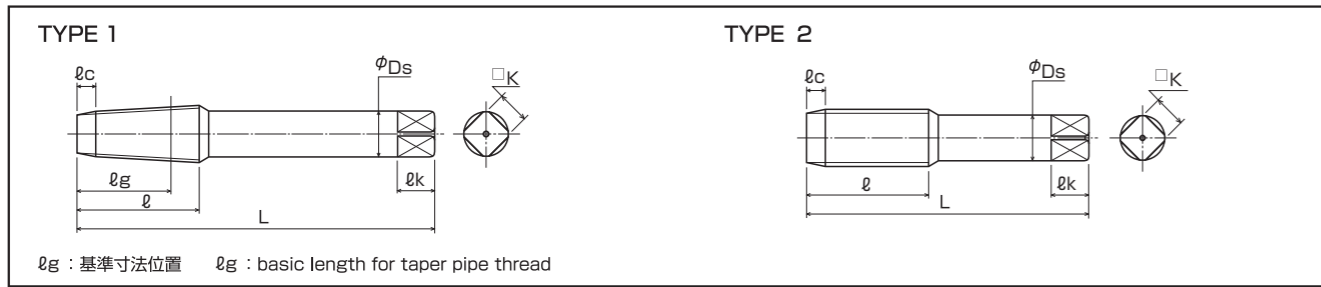
単位(Unit): mm

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					L	ℓ	Ds	ℓ_n	Dn	K	ℓ_k			
<input type="checkbox"/>	M3 × 0.5	1.5P	GT5	1	70	11	4	18	2.4	3.2	6	3	1	有
<input type="checkbox"/>	M3 × 0.5	3P	GT5	1	70	11	4	18	2.4	3.2	6	3	3	有
<input type="checkbox"/>	M4 × 0.7	1.5P	GT6	1	70	13	5	20	3.1	4	7	3	1	有
<input type="checkbox"/>	M4 × 0.7	3P	GT6	1	70	13	5	20	3.1	4	7	3	3	有
<input type="checkbox"/>	M5 × 0.8	1.5P	GT6	1	100	16	5.5	25	4	4.5	7	3	1	有
<input type="checkbox"/>	M5 × 0.8	3P	GT6	1	100	16	5.5	25	4	4.5	7	3	3	有
<input type="checkbox"/>	M6 × 1	1.5P	GT6	1	100	19	6	30	4.8	4.5	7	3	1	有
<input type="checkbox"/>	M6 × 1	3P	GT6	1	100	19	6	30	4.8	4.5	7	3	3	有
<input type="checkbox"/>	M8 × 1.25	1.5P	GT6	1	100	22	8	40	6.2	6	9	3	1	有
<input type="checkbox"/>	M8 × 1.25	3P	GT6	1	100	22	8	40	6.2	6	9	3	3	有
<input type="checkbox"/>	M10 × 1.5	1.5P	GT7	2	100	24	8	-	-	6	9	4	2	有
<input type="checkbox"/>	M10 × 1.5	3P	GT7	2	100	24	8	-	-	6	9	4	4	有
<input type="checkbox"/>	M10 × 1.25	1.5P	GT6	2	100	24	8	-	-	6	9	4	2	有
<input type="checkbox"/>	M10 × 1.25	3P	GT6	2	100	24	8	-	-	6	9	4	4	有
<input type="checkbox"/>	M12 × 1.75	1.5P	GT7	1	100	29	10	43	8.3	8	11	4	2	有
<input type="checkbox"/>	M12 × 1.75	3P	GT7	1	100	29	10	43	8.3	8	11	4	4	有
<input type="checkbox"/>	M12 × 1.5	1.5P	GT7	1	100	29	10	43	8.3	8	11	4	2	有
<input type="checkbox"/>	M12 × 1.5	3P	GT7	1	100	29	10	43	8.3	8	11	4	4	有
<input type="checkbox"/>	M12 × 1.25	1.5P	GT7	1	100	29	10	43	8.3	8	11	4	2	有
<input type="checkbox"/>	M12 × 1.25	3P	GT7	1	100	29	10	43	8.3	8	11	4	4	有

• This symbol indicates that the products stocked by specific distributors. For details, please contact us.



Tapping video



●管用ねじ用 Parallel / Taper Pipe Thread

単位 (Unit) : mm

アイテム No. Item No.	呼び Nominal size	食付 ℓ_c	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D_s	ℓ_g	D_n	K	ℓ_k			
18028	PT1/8-28	2.5P	JIS II	1	100	19	8	13		6	9	4	4	有
18029	PT1/4-19	2.5P	JIS II	1	100	28	11	21		9	12	4	4	有
18030	PT3/8-19	2.5P	JIS II	1	100	28	14	21		11	14	4	4	有
□	PT1/2-14	2.5P	JIS II	1	100	35	18	25		14	17	4	4	有
18031	PS1/8-28	1.5P	JIS II	2	100	19	8			6	9	4	2	有
18032	PS1/8-28	3P	JIS II	2	100	19	8			6	9	4	4	有
18033	PS1/4-19	1.5P	JIS II	2	100	28	11			9	12	4	2	有
18034	PS1/4-19	3P	JIS II	2	100	28	11			9	12	4	4	有
18035	PS3/8-19	1.5P	JIS II	2	100	28	14			11	14	4	2	有
18036	PS3/8-19	3P	JIS II	2	100	28	14			11	14	4	4	有
□	PS1/2-14	1.5P	JIS II	2	100	35	18			14	17	4	2	有
□	PS1/2-14	3P	JIS II	2	100	35	18			14	17	4	4	有

- This symbol indicates that the products stocked by specific distributors. For details, please contact us.
- Blade shape has been set for the ADC/FC/FCD.
If you wish to use in steel and stainless steel, please contact us.

Coming Soon!!



Tapping video

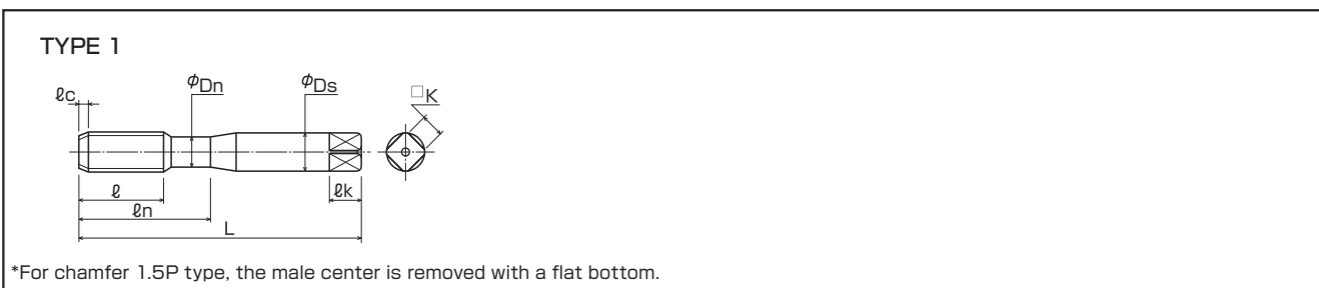


●メートルねじ用 Metric

単位 (Unit) : mm

アイテム No. Item No.	呼び Nominal size	食付 ℓ_c	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D_s	ℓ_n	D_n	K	ℓ_k			
□	M6 × 1	5P	GT6	1	100	10	6	30	4.8	4.5	7	3	3	有
□	M8 × 1.25	5P	GT7	1	100	15	8	40	6.2	6	9	3	3	有
□	M10 × 1.5	5P	GT7	1	100	18	8	39	7.8	6	9	3	3	有
□	M10 × 1.25	5P	GT7	1	100	18	8	39	7.8	6	9	3	3	有
□	M12 × 1.75	5P	GT8	1	100	21	10	43	8.3	8	11	3	3	有
□	M12 × 1.5	5P	GT8	1	100	21	10	43	8.3	8	11	3	3	有
□	M12 × 1.25	5P	GT8	1	100	21	10	43	8.3	8	11	3	3	有

- This symbol indicates that the products stocked by specific distributors. For details, please contact us.
- Blade shape has been set for middle high carbon steel.
If you wish to use in mild steel and stainless steel, please contact us.



●メートルねじ用 Metric

単位(Unit): mm

アイテム No. Item No.	呼び Nominal size	食付 l _c	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D _s	ℓ _n	D _n	K	ℓ _k			
18008	M3 × 0.5	1.5P	5	1	100	10	4	18	2.4	3.2	6	4	2	有
□	M3 × 0.5	1.5P	6	1	100	10	4	18	2.4	3.2	6	4	2	有
□	M3 × 0.5	1.5P	7	1	100	10	4	18	2.4	3.2	6	4	2	有
18009	M3 × 0.5	P	5	1	100	10	4	18	2.4	3.2	6	4	2	有
□	M3 × 0.5	P	6	1	100	10	4	18	2.4	3.2	6	4	2	有
□	M3 × 0.5	P	7	1	100	10	4	18	2.4	3.2	6	4	2	有
18010	M4 × 0.7	1.5P	6	1	100	10	5	20	3.1	4	7	4	2	有
□	M4 × 0.7	1.5P	7	1	100	10	5	20	3.1	4	7	4	2	有
□	M4 × 0.7	1.5P	8	1	100	10	5	20	3.1	4	7	4	2	有
18011	M4 × 0.7	P	6	1	100	10	5	20	3.1	4	7	4	2	有
□	M4 × 0.7	P	7	1	100	10	5	20	3.1	4	7	4	2	有
□	M4 × 0.7	P	8	1	100	10	5	20	3.1	4	7	4	2	有
18012	M5 × 0.8	1.5P	6	1	100	10	5.5	25	4	4.5	7	4	2	有
□	M5 × 0.8	1.5P	7	1	100	10	5.5	25	4	4.5	7	4	2	有
□	M5 × 0.8	1.5P	8	1	100	10	5.5	25	4	4.5	7	4	2	有
18013	M5 × 0.8	P	6	1	100	10	5.5	25	4	4.5	7	4	2	有
□	M5 × 0.8	P	7	1	100	10	5.5	25	4	4.5	7	4	2	有
□	M5 × 0.8	P	8	1	100	10	5.5	25	4	4.5	7	4	2	有
18014	M6 × 1	1.5P	7	1	100	10	6	30	4.6	4.5	7	4	2	有
□	M6 × 1	1.5P	8	1	100	10	6	30	4.6	4.5	7	4	2	有
□	M6 × 1	1.5P	9	1	100	10	6	30	4.6	4.5	7	4	2	有
18015	M6 × 1	P	7	1	100	10	6	30	4.6	4.5	7	4	2	有
□	M6 × 1	P	8	1	100	10	6	30	4.6	4.5	7	4	2	有
□	M6 × 1	P	9	1	100	10	6	30	4.6	4.5	7	4	2	有
18016	M8 × 1.25	1.5P	7	1	100	18	8	40	6	6	9	6	3	有
□	M8 × 1.25	1.5P	8	1	100	18	8	40	6	6	9	6	3	有
□	M8 × 1.25	1.5P	9	1	100	18	8	40	6	6	9	6	3	有
18017	M8 × 1.25	P	7	1	100	18	8	40	6	6	9	6	3	有
□	M8 × 1.25	P	8	1	100	18	8	40	6	6	9	6	3	有
□	M8 × 1.25	P	9	1	100	18	8	40	6	6	9	6	3	有
18018	M10 × 1.5	1.5P	7	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.5	1.5P	8	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.5	1.5P	9	1	100	19	8	39	7.8	6	9	8	4	有
18019	M10 × 1.5	P	7	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.5	P	8	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.5	P	9	1	100	19	8	39	7.8	6	9	8	4	有
18020	M10 × 1.25	1.5P	7	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.25	1.5P	8	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.25	1.5P	9	1	100	19	8	39	7.8	6	9	8	4	有
18021	M10 × 1.25	P	7	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.25	P	8	1	100	19	8	39	7.8	6	9	8	4	有
□	M10 × 1.25	P	9	1	100	19	8	39	7.8	6	9	8	4	有

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●メートルねじ用 Metric

単位(Unit): mm

アイテム No. Item No.	呼び Nominal size	食付 l _c	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D _s	ℓ _n	D _n	K	ℓ _k			
□	M12 × 1.75	1.5P	8	1	100	19	10	43	9.8	8	11	8	4	有
18022	M12 × 1.75	1.5P	10	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.75	1.5P	12	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.75	P	8	1	100	19	10	43	9.8	8	11	8	4	有
18023	M12 × 1.75	P	10	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.75	P	12	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.5	1.5P	8	1	100	19	10	43	9.8	8	11	8	4	有
18024	M12 × 1.5	1.5P	10	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.5	1.5P	12	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.5	P	8	1	100	19	10	43	9.8	8	11	8	4	有
18025	M12 × 1.5	P	10	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.5	P	12	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.25	1.5P	8	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.25	1.5P	10	1	100	19	10	43	9.8	8	11	8	4	有
18026	M12 × 1.25	1.5P	12	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.25	P	8	1	100	19	10	43	9.8	8	11	8	4	有
□	M12 × 1.25	P	10	1	100	19	10	43	9.8	8	11	8	4	有
18027	M12 × 1.25	P	12	1	100	19	10	43	9.8	8	11	8	4	有

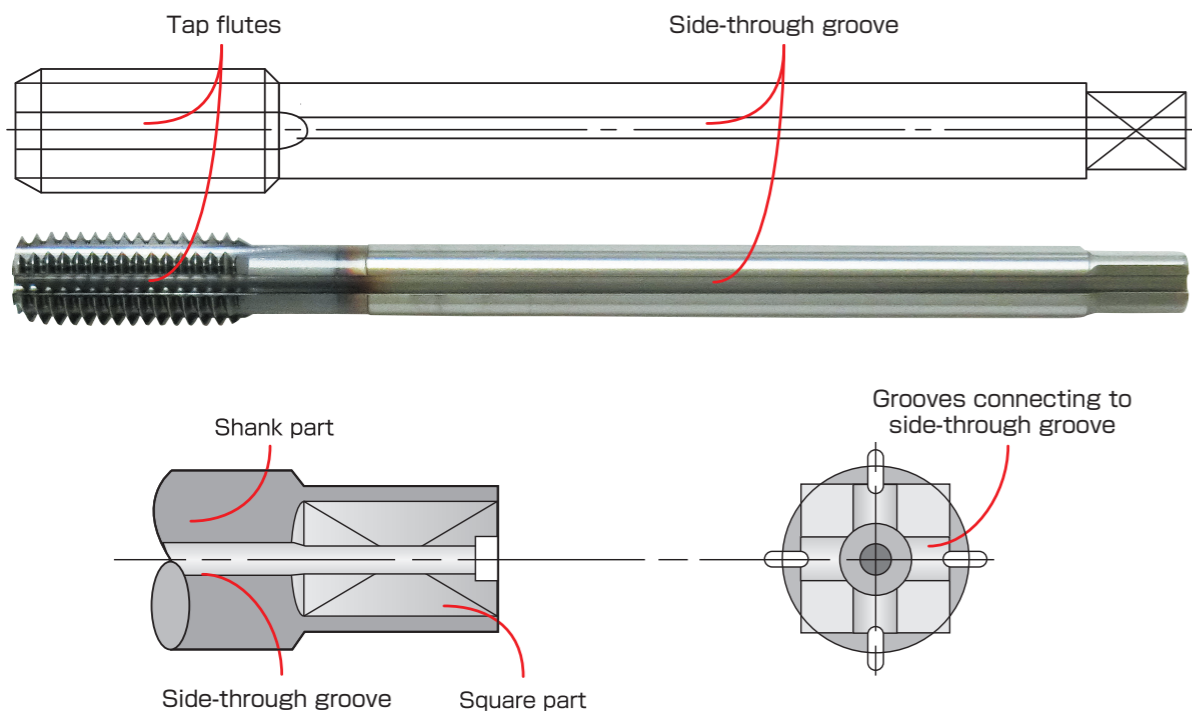
- The recommended tap limit in corresponds to JIS Class 2 internal thread standard.
- □ This symbol indicates that the products stocked by specific distributors. For details, please contact us.



Tapping video

NEW INTERNAL COOLANT SYSTEM

A new construction which makes side-through flute in the SHANK



Problems usually happened using the conventional internal coolant system

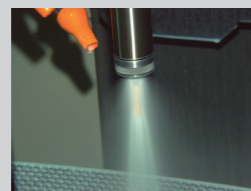
Side Oil Hole

- *At the beginning of processing, tapping is also with a dry condition
- *OH diameter is small, thus, there is not enough coolant spout from OH
- *Chips ejection is not good
- *For a blind hole, it will block the chips ejection
- *To make so many OH in a tap, the cost is very high
- *Taps regrinding times is limited



Collet Through (coolant spout from the gap)

- *Not available for blind hole tapping
- *A lot of coolant diffuse and only a few coolant will go into the drill hole
- *For a long shank tap, coolant effect will become lower
- *For taps size smaller than M7, drill hole diameter will be smaller than taps shank diameter, so the coolant is not effective



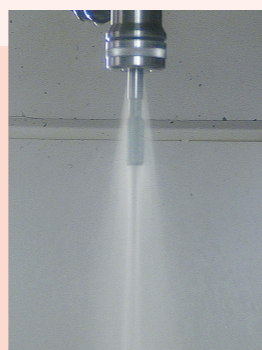
For through hole, coolant effect is very low (even by using side OH specification)

For Aluminum processing, the OH will be blocked easily by the small chips

Tool cost is very high

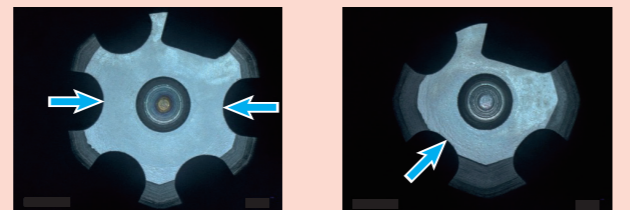
By using ZC-HT

- *Chips is strongly ejected from the beginning
- *Plenty of coolant spout out
- *Low cost by just adding the flute into a shank part



ZC-HT (used for both blind hole and through hole)

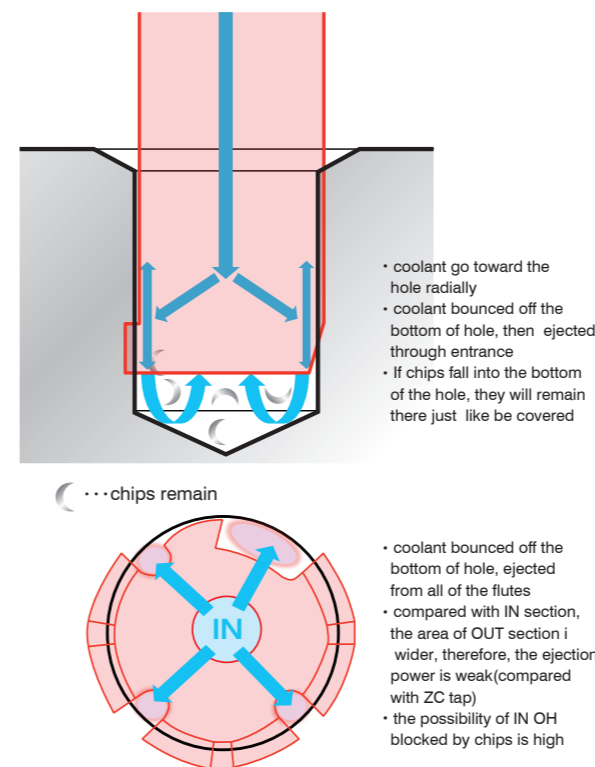
Chips will not remain after a blind hole tapping
Even for a through hole tapping, coolant is effective



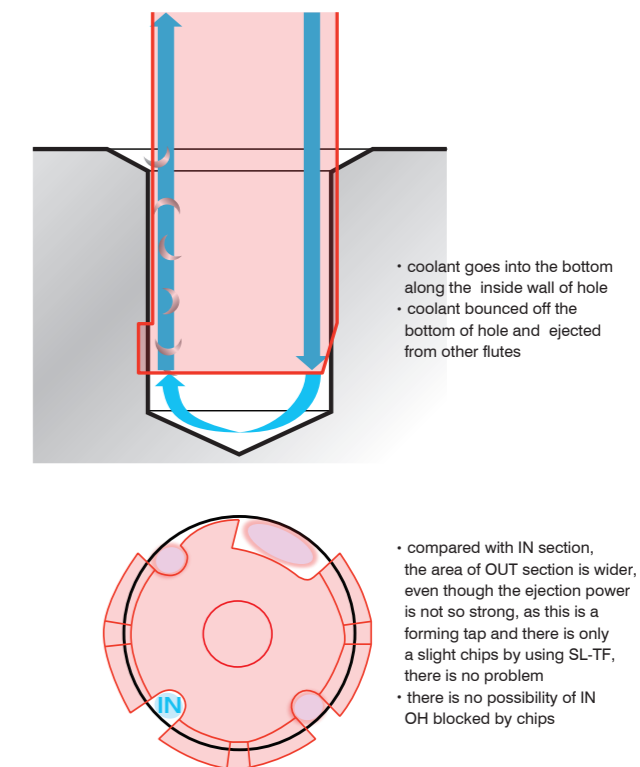
→ zero chip tap series side-through flute position (for both blind/through hole)

Even for through hole tapping, high performance could be achieved
Cooling · Lubrication · Chips Ejection performance is very high, tapping speed could be set with a higher level
Tool cost is low

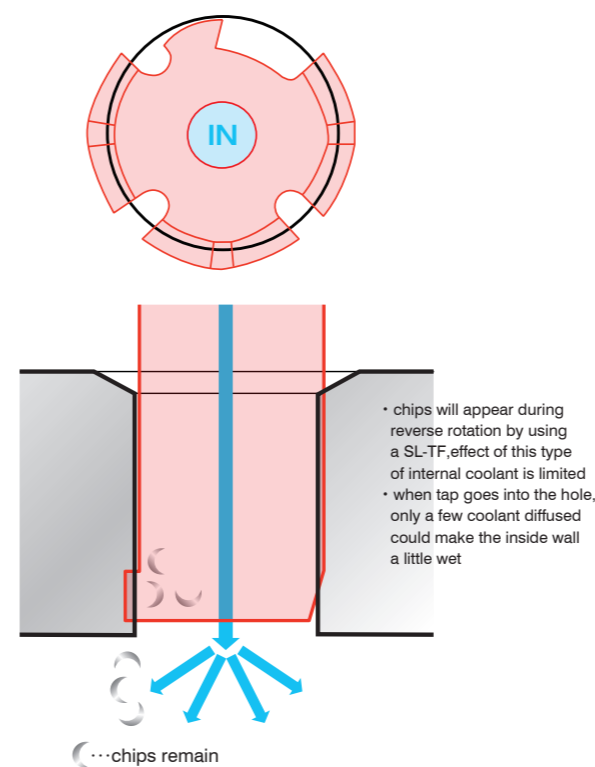
Blind hole coolant movement (Center OH Seamless Taplet)



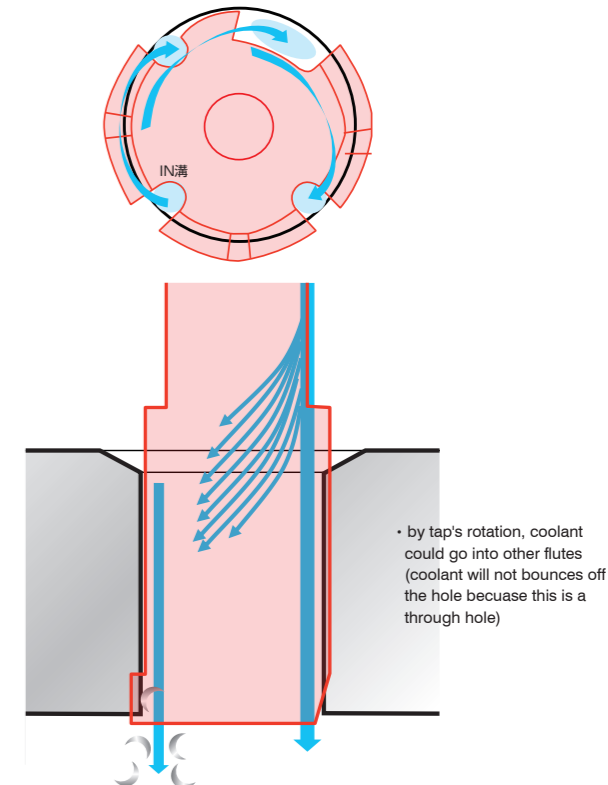
Blind hole coolant movement (Zero Chip Seamless Taplet)



Through hole coolant movement (Center OH Seamless Taplet)



Through hole coolant movement (Zero Chip Seamless Taplet)



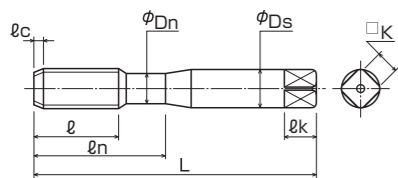
Attention : If tap full length is too long and coolant pressure is too weak, maybe total amount of coolant arrived to tap is more by using an OH tap

[Caution about the holder]

- You can use a normal collet holder
- For the following specifications, please kindly contact TANOI sales staff
 - *Model to hold the tap with a rubber or resin
 - *Spring collet of those number of divisions is too many (more than 8 divisions)
 - *Model discharged from the gap and the end face of the collet
 - *Model to hold the tap in the steel ball (such as tapper)
 - *Shrink fit holders
 - *For mist processing



TYPE 1



*For chamfer 1.5P type, the male center is removed with a flat bottom.

●メートルねじ用 Metric

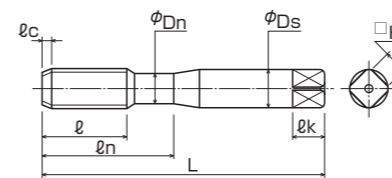
単位(Unit): mm

アイテム No. Item No.	呼び Nominal size	食付 ϕc	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D_s	ℓ_n	D_n	K	ϕk			
18058	M3 × 0.5	1.5P	5	1	100	10	4	18	2.3	3.2	6	4	1	有
□	M3 × 0.5	1.5P	6	1	100	10	4	18	2.3	3.2	6	4	1	有
□	M3 × 0.5	1.5P	7	1	100	10	4	18	2.3	3.2	6	4	1	有
18059	M4 × 0.7	1.5P	6	1	100	10	5	20	3	4	7	4	1	有
□	M4 × 0.7	1.5P	7	1	100	10	5	20	3	4	7	4	1	有
□	M4 × 0.7	1.5P	8	1	100	10	5	20	3	4	7	4	1	有
18060	M5 × 0.8	1.5P	6	1	100	10	5.5	25	3.9	4.5	7	4	1	有
□	M5 × 0.8	1.5P	7	1	100	10	5.5	25	3.9	4.5	7	4	1	有
□	M5 × 0.8	1.5P	8	1	100	10	5.5	25	3.9	4.5	7	4	1	有
18061	M6 × 1	1.5P	7	1	100	10	6	30	4.6	4.5	7	4	1	有
□	M6 × 1	1.5P	8	1	100	10	6	30	4.6	4.5	7	4	1	有
□	M6 × 1	1.5P	9	1	100	10	6	30	4.6	4.5	7	4	1	有
18063	M8 × 1.25	1.5P	7	1	100	18	8	40	6.2	6	9	6	2	有
□	M8 × 1.25	1.5P	8	1	100	18	8	40	6.2	6	9	6	2	有
□	M8 × 1.25	1.5P	9	1	100	18	8	40	6.2	6	9	6	2	有
18064	M10 × 1.5	1.5P	7	1	100	19	8	39	7.8	6	9	6	2	有
□	M10 × 1.5	1.5P	8	1	100	19	8	39	7.8	6	9	6	2	有
□	M10 × 1.5	1.5P	9	1	100	19	8	39	7.8	6	9	6	2	有
18065	M10 × 1.25	1.5P	7	1	100	19	8	39	7.8	6	9	6	2	有
□	M10 × 1.25	1.5P	8	1	100	19	8	39	7.8	6	9	6	2	有
□	M10 × 1.25	1.5P	9	1	100	19	8	39	7.8	6	9	6	2	有
18066	M10 × 1	1.5P	7	1	100	19	8	39	7.8	6	9	6	2	有
□	M10 × 1	1.5P	8	1	100	19	8	39	7.8	6	9	6	2	有
□	M10 × 1	1.5P	9	1	100	19	8	39	7.8	6	9	6	2	有
□	M12 × 1.75	1.5P	8	1	100	19	10	43	9.8	8	11	6	2	有
18067	M12 × 1.75	1.5P	10	1	100	19	10	43	9.8	8	11	6	2	有
□	M12 × 1.75	1.5P	12	1	100	19	10	43	9.8	8	11	6	2	有
□	M12 × 1.5	1.5P	8	1	100	19	10	43	9.8	8	11	6	2	有
18068	M12 × 1.5	1.5P	10	1	100	19	10	43	9.8	8	11	6	2	有
□	M12 × 1.5	1.5P	12	1	100	19	10	43	9.8	8	11	6	2	有
□	M12 × 1.25	1.5P	8	1	100	19	10	43	9.8	8	11	6	2	有
□	M12 × 1.25	1.5P	10	1	100	19	10	43	9.8	8	11	6	2	有
18069	M12 × 1.25	1.5P	12	1	100	19	10	43	9.8	8	11	6	2	有

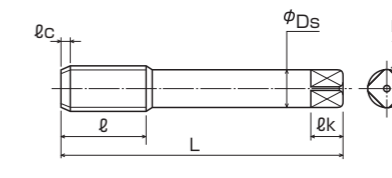
- The recommended tap limit in corresponds to JIS Class 2 internal thread standard.
- □ This symbol indicates that the products stocked by specific distributors. For details, please contact us.



TYPE 1



TYPE 4



*For chamfer 1.5P type, the male center is removed with a flat bottom.

●メートルねじ用 Metric

単位(Unit): mm

アイテム No. Item No.	呼び Nominal size	食付 ϕc	精度 Limit	形状 Type	形状寸法 (mm) Dimensions							溝数 Flutes	ZC溝数 ZC groove	連結溝 Consolidated
					L	ℓ	D_s	ℓ_n	D_n	K	ϕk			
81628	M3 × 0.5	1.5P	5	1	70	10	4	18	2.4	3.2	6	4	1	有
□	M3 × 0.5	1.5P	6	1	70	10	4	18	2.4	3.2	6	4	1	有
□	M3 × 0.5	1.5P	7	1	70	10	4	18	2.4	3.2	6	4	1	有
81629	M4 × 0.7	1.5P	6	1	70	10	5	20	3.1	4	7	4	1	有
□	M4 × 0.7	1.5P	7	1	70	10	5	20	3.1	4	7	4	1	有
□	M4 × 0.7	1.5P	8	1	70	10	5	20	3.1	4	7	4	1	有
81630	M5 × 0.8	1.5P	6	1	100	10	5.5	25	4	4.5	7	4	1	有
□	M5 × 0.8	1.5P	7	1	100	10	5.5	25	4	4.5	7	4	1	有
□	M5 × 0.8	1.5P	8	1	100	10	5.5	25	4	4.5	7	4	1	有
81631	M6 × 1	1.5P	7	1	100	10	6	30	4.6	4.5	7	4	1	有
□	M6 × 1	1.5P	8	1	100	10	6	30	4.6	4.5	7	4	1	有
□	M6 × 1	1.5P	9	1	100	10	6	30	4.6	4.5	7	4	1	有
81632	M8 × 1.25	1.5P	7	1	100	18	8	40	6.2	6	9	6	2	有
□	M8 × 1.25	1.5P	8	1	100	18	8	40	6.2	6	9	6	2	有
□	M8 × 1.25	1.5P	9	1	100	18	8	40	6.2	6	9	6	2	有
81633	M10 × 1.5	1.5P	7	2	100	19	8	—	—	6	9	6	2	有
□	M10 × 1.5	1.5P	8	2	100	19	8	—	—	6	9	6	2	有
□	M10 × 1.5	1.5P	9	2	100	19	8	—	—	6	9	6	2	有
81634	M10 × 1.25	1.5P	7	2	100	19	8	—	—	6	9	6	2	有
□	M10 × 1.25	1.5P	8	2	100	19	8	—	—	6	9	6	2	有
□	M10 × 1.25	1.5P	9	2	100	19	8	—	—	6	9	6	2	有
81635	M10 × 1	1.5P	7	2	100	19	8	—	—	6	9	6	2	有
□	M10 × 1	1.5P	8	2	100	19	8	—	—	6	9	6	2	有
□	M10 × 1	1.5P	9	2	100	19	8	—	—	6	9	6	2	有

- The recommended tap limit in corresponds to JIS Class 2 internal thread standard.
- □ This symbol indicates that the products stocked by specific distributors. For details, please contact us.



Tapping video