



# 再见了，烂牙！ 追加锥管螺纹

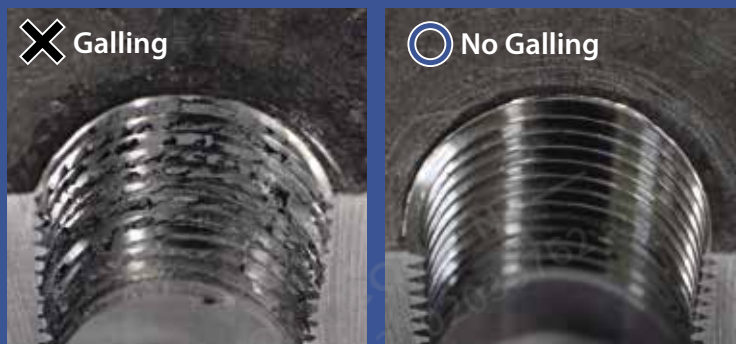
Newly expanded taper pipe tap lineup to help you achieve the perfect thread with no galling!

“即使是锥管螺纹，有没有一把丝锥能够加工出无烂牙的螺纹？”  
为了回应客户的需求，我们追加了 A 丝锥管用型丝锥。

封面的内螺纹照片，是分别使用以往型与 A 丝锥在加工 SS400 时的对比图。

Manufacturers have demanded for “a reliable tap for taper pipe threads free of galling.”  
We have answered such a calling with the new A-Tap series taper pipe tap lineup.

The images below features a comparison of hole quality between a conventional taper pipe tap and the A-Tap series taper pipe tap in SS400.



加工 SS400 的照片  
Image to process taper pipe thread in SS400 material

## 刃倾角丝锥 通孔用 Spiral Pointed Tap for Through Holes

### 公制螺纹 Metric Screw Thread

A-POT ..... 39

铣刀柄型 ..... 51  
End Mill Shank

A-LT-POT 长柄型 ..... 47  
Long Shank

铣刀柄型 ..... 52  
End Mill Shank

### 美制螺纹 Unified Screw Thread

A-POT ..... 46

## DIN 规格

### DIN Standard

A-SFT ..... 53

A-LT-SFT ..... 58

A-OIL-SFT ..... 59

A-POT ..... 61

A-LT-POT ..... 65

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A-SFT (A-SPT) ..... 67

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## 攻丝刀柄

Tap Holder

SynchroMaster ..... 61

### 标记种类 Guide for Icons

#### 1 材质 Tool Materials

CPM 粉末高速钢  
Powder Metallurgy HSS (CPM)

HSSE 高钒高速钢  
High Vanadium HSS

#### 2 表面处理 Surface Treatment

V 涂层  
(复合多层涂层)  
V (Composite multi-layered) Coating

#### 3 柄部 Shank

SHANK  
h7 表示柄部精度  
Tolerance for Shank Diameter

#### 4 螺旋角 Helix Angle

45° 表示丝锥螺旋角  
Helix angle of flute for taps

#### 5 切削条件 Cutting Conditions

SPEED FEED 表示切削条件表所在页码  
Indicates page number for cutting conditions

### ■ A-TPT·A-S-TPT·A-SPT(Rp·NPS)

切削速度(m/min) Cutting Speed		0	10	20	30	40	50	60	70
中·高碳素钢 Medium Carbon Steel High Carbon Steel	S45C		2-5	5-10					
合金钢 Alloy Steel	SCM		2-5 <sup>(*)</sup>						
一般构造用钢 Mild Steel	SS400		2-5	5-10					
不锈钢 Stainless Steel	SUS304 SUS420		2-5						
铝 Aluminum	AC ADC		2-5	5-10					
球墨铸铁 Ductile Cast Iron	FCD		2-5						

### ■ A-POT·A-LT-POT

切削速度(m/min) Cutting Speed		0	10	20	30	40	50	60	70
中·高碳素钢 Medium Carbon Steel High Carbon Steel	S45C		5-15	15-50	15-50	15-50	50-75	50-75	50-75
合金钢 Alloy Steel	SCM		5-10	10-30	10-30	30-50	30-50		
一般构造用钢 Mild Steel	SS400		5-15	15-50	15-50	15-50	50-75	50-75	50-75
不锈钢 Stainless Steel	SUS304 SUS420		5-15	15-30	15-30				
铝 Aluminum	AC ADC			5-50	5-50	5-50	5-50		
球墨铸铁 Ductile Cast Iron	FCD			5-50	5-50	5-50	5-50		

### ■ A-POT·A-LT-POT (铣刀柄型 End Mill Shank)

切削速度(m/min) Cutting Speed		0	10	20	30	40	50	60	70
中·高碳素钢 Medium Carbon Steel High Carbon Steel	S45C		5-15	15-75	15-75	15-75	15-75	15-75	15-75
合金钢 Alloy Steel	SCM		5-10	10-30	10-30	30-50	30-50		
一般构造用钢 Mild Steel	SS400		5-15	15-50	15-50	15-50	50-75	50-75	50-75
不锈钢 Stainless Steel	SUS304 SUS420		5-15	15-30	15-30				
铝 Aluminum	AC ADC			5-50	5-50	5-50	5-50		
球墨铸铁 Ductile Cast Iron	FCD			5-75	5-75	5-75	5-75	5-75	5-75

推荐范围 Advisable  
可加工范围 Possible

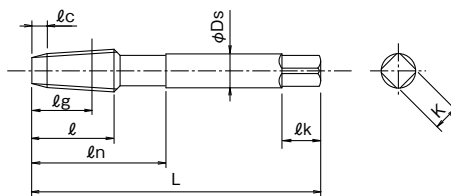
1. 切削速度请确认好实际加工情况进行选定。
2. 这张切削条件基准表是使用水溶性切削油剂的情况
3. 根据切削油剂的情况，有可能不能发挥十足的性能
4. 虽然铣刀柄产品可对应筒夹刀柄，铣刀刀柄等，但需使用弹簧夹头。  
(\*请注意加工范围。

1. Cutting speed should be adjusted according to the machining conditions.
2. The indicated speeds and feeds are for tapping with water-soluble oil.
3. Depending on the coolant condition, it may not show a good results.
4. Although taps with end mill shank are compatible with a collet holder, milling holder and etc., use a holder with a detent.  
(\*Please set cutting speed carefully.

# A-S-TPT



■ 切削锥长 ( $\ell_c$ ) 2.5P  
Chamfer Length



螺纹种类: PT(Rc)

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度 TAP Limit	全长 L	螺纹部长度 $\ell$	颈长 $\ell_n$	基准径位置 $\ell_g$	柄径 Ds	槽数 Flutes	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327661	PT 1/16 - 28	JIS2	90	16.5	36	8.6	8	3	*	○
8327662	PT 1/8 - 28	JIS2	90	16.5	37	10.5	8	3	*	
8327663	PT 1/4 - 19	JIS2	100	19.5	49	12.5	11	3	*	
8327664	PT 3/8 - 19	JIS2	100	21	50	14	14	4	*	
8327665	PT 1/2 - 14	JIS2	125	27	60	17	18	4	*	
8327667	PT 3/4 - 14	JIS2	140	29	74	19	23	4	*	
8327669	PT 1 - 11	JIS2	160	35	80	22	26	4	*	

螺纹种类: NPT

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度 TAP Limit	全长 L	螺纹部长度 $\ell$	颈长 $\ell_n$	基准径位置 $\ell_g$	柄径 Ds	槽数 Flutes	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327681	1/16 - 27 NPT	ANSI G	90	16	36	10	8	3	*	○
8327682	1/8 - 27 NPT	ANSI G	90	16.5	37	10.5	8	3	*	
8327683	1/4 - 18 NPT	ANSI G	100	19.5	49	12.5	11	3	*	
8327684	3/8 - 18 NPT	ANSI G	100	21	50	14	14	4	*	
8327685	1/2 - 14 NPT	ANSI G	125	27	60	17	18	4	*	
8327687	3/4 - 14 NPT	ANSI G	140	29	74	19	23	4	*	
8327689	1 - 11 1/2 NPT	ANSI G	160	35	80	22	26	4	*	

■ 标记的说明请参照 p.2.

■ 柄部四方部尺寸  $\ell_k$ , K 请参见 p.56.

\* 推荐底孔径请参考 p.60.

1. 丝锥精度不能保证内螺纹精度。

2. 使用进给不稳定的机械时, 可能会发生内螺纹扩大的问题, 请务必注意。

3. 不推荐再研磨。

■ See p.2 for explanation of marks.

■ See p.56 for shank square length ( $\ell_k$ ) and width (K).

\* Please see p.60 for recommended drill hole dia.

1. Tap limit does not guarantee thread limit for the internal thread after tapping.

2. Stable feed control machines are recommended to avoid over size tapping.

3. Regrinding is not recommended.

## 加工要点(A-TAP 管用)

Points of Tapping (Taper Pipe)

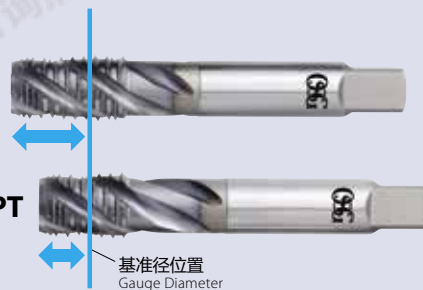
加工的注意点, 以及A-TPT与A-S-TPT 的区别请参照 p.55.

Please refer p.55 for precaution and difference between A-TPT and A-S-TPT.

形状  
Geometry

A-TPT

A-S-TPT



基准径位置  
Gauge Diameter