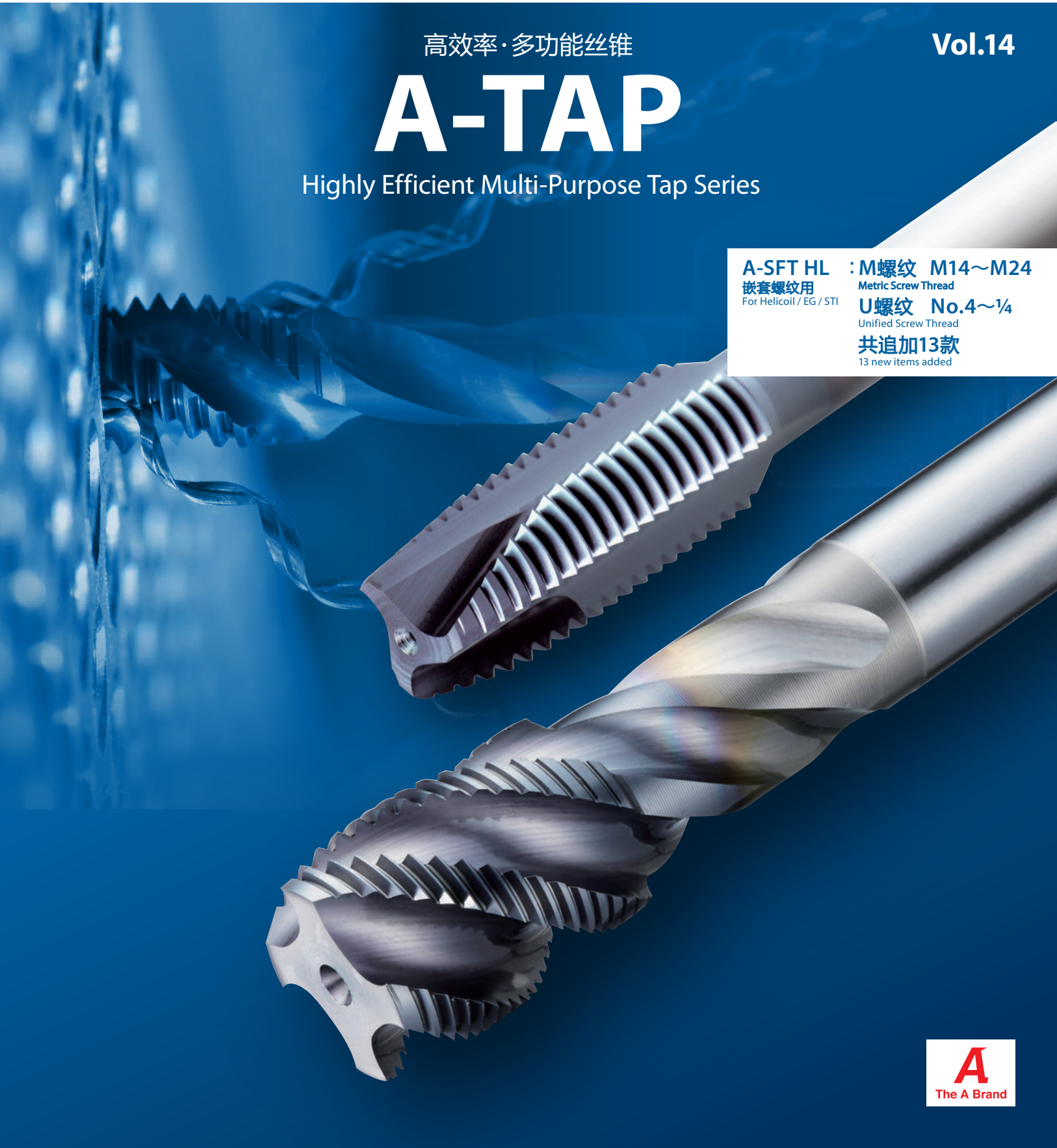
高效率·多功能丝锥

Vol.14

A-TAP

Highly Efficient Multi-Purpose Tap Series

A-SFT HL ：M螺纹 M14～M24
Metric Screw Thread
嵌套螺纹用
For Helicoil / EG / STI
U螺纹 No.4～¼
Unified Screw Thread
共追加13款
13 new items added



The A Brand

INDEX 目录

A-TAP is••• A-TAP…

螺旋槽丝锥 盲孔用 For Blind Holes
Spiral Fluted Tap

・螺旋槽丝锥 标准切削锥部：2.5P
Standard chamfer length of spiral fluted tap : 2.5P

再见了，烂牙！
追加锥管螺纹丝锥

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（A-TPT）。

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
Machining example in SS400

刃倾角丝锥 通孔用
For Through Holes
Spiral Pointed Tap

References 参考资料

■ 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 — **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

你有攻丝方面的问题吗?

Do you have any problems with tapping?

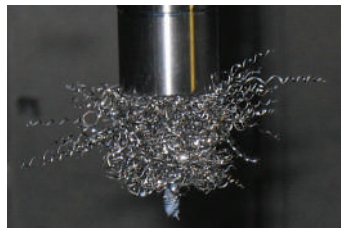
多数的攻丝问题都是由排屑不畅所引起的。A 丝锥系列出色的排屑性能使其能广泛的适用于各种切削材料和机械。

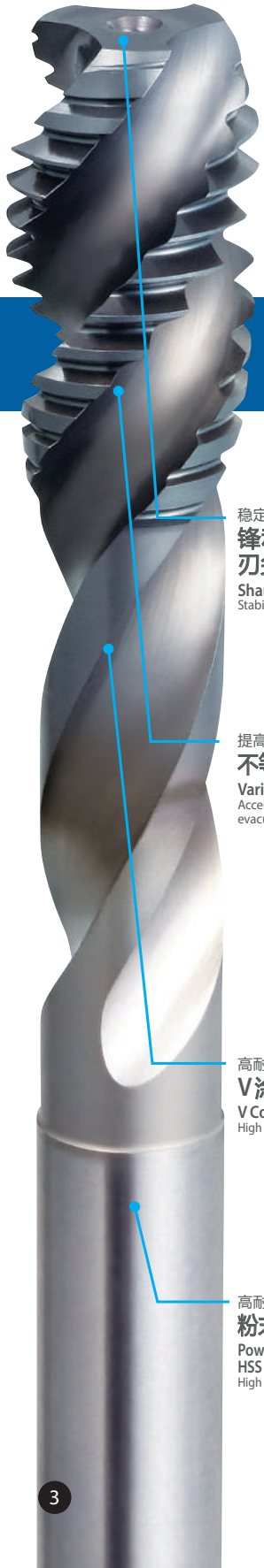
Most tapping troubles are caused by unstable chip evacuation. The A-Tap series resolves such troubles and is applicable to a wide range of work materials and cutting conditions.

攻丝加工的问题 TOP3 Tapping Troubles		
No.1	折损·崩刃 Breakage and chipping	26%
No.2	螺纹精度不良 Dimensional error	17%
No.3	烂牙, 切痕等 Galling	14%
	其他 Others	43%

根据本公司咨询热线统计所得
Source: OSG Technical Consultation Division

造成问题的要因是“切屑”
Main factor is chip packing





A 丝锥还可以做到这些!

A-Tap takes it to another level.

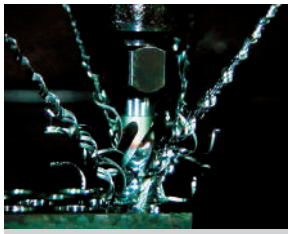
稳定的切屑形状
锋利的刃尖样式
Sharp Cutting Edge
Stabilizes chip shape

提高排屑速度
不等导程排屑槽
Variable Lead Flute
Accelerate chip evacuation

高耐磨损性
V涂层
V Coating
High wear resistance

高耐磨损性
粉末高速钢
Powder Metallurgy HSS (CPM)
High wear resistance

绝对出众的排屑性! Chip Evacuation Redefined!



以往产品 Conventional

A-SFT

高质量的内螺纹加工 High-Grade Internal Threading

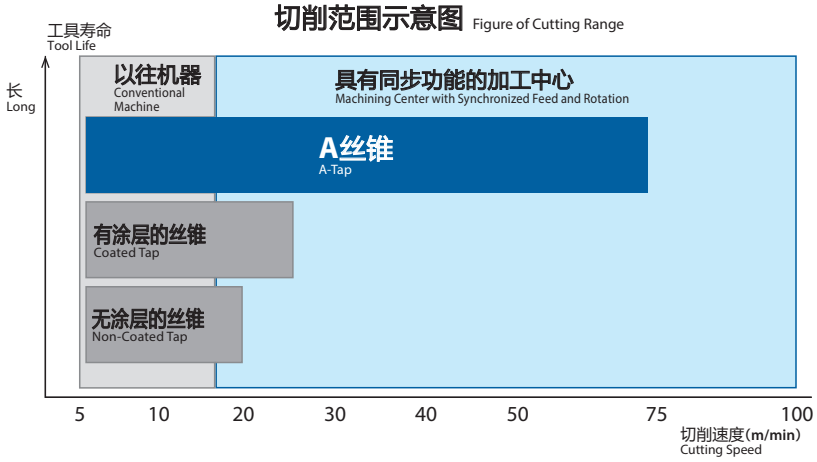
无烂牙·切痕
No Galling

加工材料：SS400
Work Material: Mild Steel

加工材料：SUS304
Work Material: Stainless Steel

广泛的切削范围 Comparison of Cutting Range

切削范围示意图 Figure of Cutting Range



※此图是使用水溶性切削油剂加工中、高碳素钢(S45C等)。
※切当切削速度在15m/min 以上时，推荐使用有同步功能的机械。
※最佳速度根据使用条件而有所不同。请根据试加工数据进行选择。

※ Cutting range in medium and high carbon steel with water-soluble coolant.
※ Machining center with synchronized feed and rotation is recommended for more than 15m/min.
※ Results may vary based on cutting condition. Please adjust speeds and feeds accordingly.

适用于所有类型的加工设备 A-Tap is compatible with any type of machining equipment.

A丝锥无论是手动攻丝机还是最新的加工中心，都能对应。当然，如果配合加工中心使用的话，可以发挥A丝锥最大的性能。

A-Tap is compatible with various types of machining equipment, from manual drilling machines to the latest machining centers. A-Tap can maximize the performance of any machining center.

对应各式各样的加工材料 Applies to a wide variety of work materials

A丝锥可以对应不锈钢，合金钢等各式各样的加工材料。

A-Tap excels in a wide variety of materials, including stainless steels and alloy steels.

切削条件基准表 Cutting Conditions

■A-SFT・A-LT-SFT（～ M24、2.5P）

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 / 50-75
合金钢 Alloy Steel	SCM	5-10 / 10-15 / 15-30
一般构造用钢 Mild Steel	SS400	5-20(*)
不锈钢 Stainless Steel	SUS304 SUS420	5-10 / 10-15
铝 Aluminum	AC ADC	5-50
球墨铸铁 Ductile Cast Iron	FCD	5-50

■A-SFT（～ M24、短切削锥型1.5P・1P Short Chamfer）・A-SFT HL・A-LT-SFT HL

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	3-15 / 15-30
合金钢 Alloy Steel	SCM	3-8 (*)
一般构造用钢 Mild Steel	SS400	3-20(*)
不锈钢 Stainless Steel	SUS304 SUS420	3-8 (*)
铝 Aluminum	AC ADC	3-30
球墨铸铁 Ductile Cast Iron	FCD	3-15

■A-SFT（M27 ～、2.5P）・A-SFT(U)・A-SPT(G)

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	3-8 / 8-15
合金钢 Alloy Steel	SCM	3-8 / 8-15
一般构造用钢 Mild Steel	SS400	3-15(*)
不锈钢 Stainless Steel	SUS304 SUS420	3-8
铝 Aluminum	AC ADC	3-20
球墨铸铁 Ductile Cast Iron	FCD	3-15

■A-SFT・A-LT-SFT（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 / 15-50 / 50-75
合金钢 Alloy Steel	SCM	5-10 / 10-15 / 15-30
一般构造用钢 Mild Steel	SS400	5-20(*)
不锈钢 Stainless Steel	SUS304 SUS420	5-10 / 10-15
铝 Aluminum	AC ADC	5-50
球墨铸铁 Ductile Cast Iron	FCD	5-75

推荐范围 Advisable　可加工范围 Possible

■ 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 (*)
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 50-75
合金钢 Alloy Steel	SCM	5-10 10-30 30-50
一般构造用钢 Mild Steel	SS400	5-15 15-50 50-75
不锈钢 Stainless Steel	SUS304 SUS420	5-15 15-30
铝 Aluminum	AC ADC	5-50
球墨铸铁 Ductile Cast Iron	FCD	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
合金钢 Alloy Steel	SCM	5-10 10-30 30-50
一般构造用钢 Mild Steel	SS400	5-15 15-50 50-75
不锈钢 Stainless Steel	SUS304 SUS420	5-15 15-30
铝 Aluminum	AC ADC	5-50
球墨铸铁 Ductile Cast Iron	FCD	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后进行选定。
2. 此切削条件基准表适用于使用水溶性切削油剂的情况。
3. 根据切削油剂的情况，有可能不能充分发挥性能。
4. 虽然铣刀柄产品可与筒夹刀柄、铣刀刀柄等兼容，但仍建议使用带防转结构的刀柄。

(*)请注意加工范围。

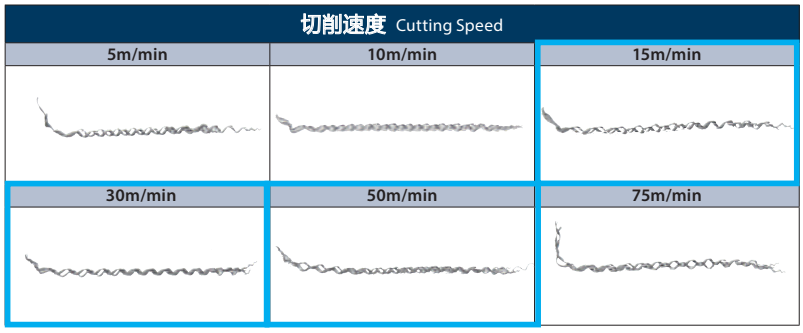
1. Cutting speed should be adjusted according to the machining conditions.
2. The indicated speeds and feeds are for tapping with water-soluble oil.
3. Depending on the coolant condition, it may not show a good results.
4. Although taps with end mill shank are compatible with a collet holder, milling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

(*)Please set cutting speed carefully.

■ 切削速度和切屑形状 Cutting speed and shape of chips

使用工具 Tool	A-SFT M8×1.25 2.5P
加工材料 Work Material	S45C
底孔 Drill Hole Size	φ6.8×18mm（盲孔） Blind
攻丝长度 Tapping Length	12mm（1.5D）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	立式加工中心（有同步进给功能） Vertical Synchronized Machining Center

・即使变更切削速度，切屑形状也能稳定
・即使在10m/min以下的切削速度，切屑形状也能稳定。随着高速切削时离心力的增加，使得切屑更易脱离丝锥



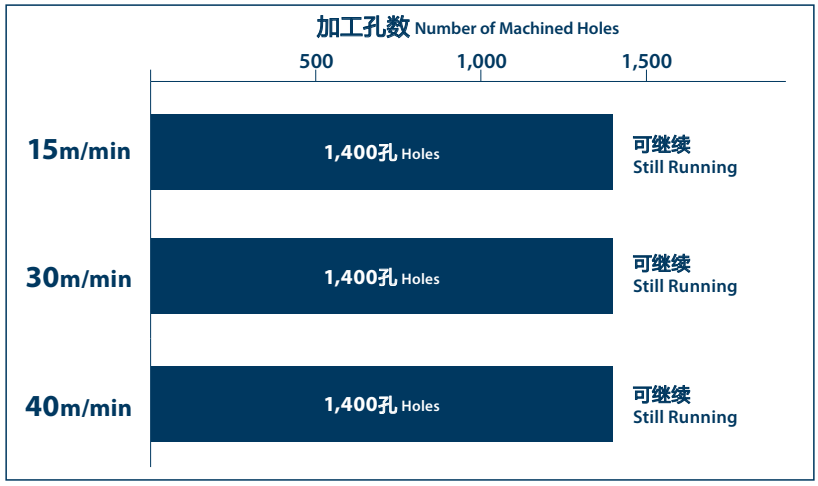
・The shape of chips is stable even if the tapping speed is high.
・Shape of chips is stable even if the tapping speed is 10m/min or less; however, separation of chip would improve tremendously by increasing the speed and centrifugal force.

推荐条件 Recommended Speed

■ 切削速度与稳定性 Cutting speed and performance stability

使用工具 Tool	A-SFT M6×1 2.5P
加工材料 Work Material	S45C
底孔 Drill Hole Size	φ5×16mm（盲孔） Blind
攻丝长度 Tapping Length	12mm（2D）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	立式加工中心（有同步进给功能） Vertical Synchronized Machining Center

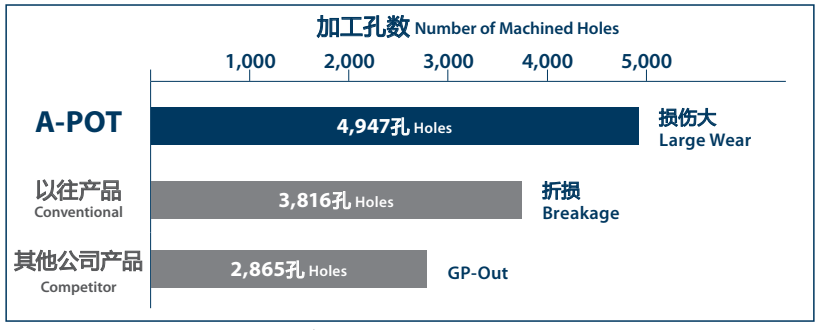
■切削40m/min时的切屑 Chip generated in 40m/min



分别在速度为15、30、40m/min时进行测试，都能稳定加工
The results of tapping operations in 15, 30, 40m/min are all stable.

■ 在充分利用加工中心能力的切削领域中发挥出色性能 A-POT maximizes the performance of machining center

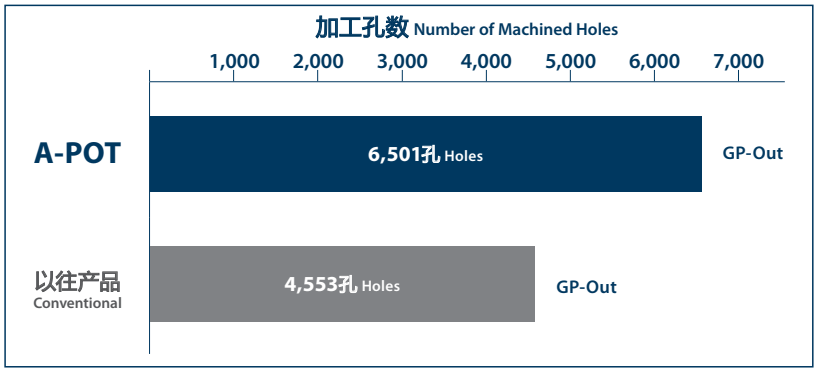
使用工具 Tool	A-POT M8×1.25
加工材料 Work Material	S50C
底孔 Drill Hole Size	φ6.8×16mm（通孔） Through
攻丝长度 Tapping Length	16mm（2D）
切削速度 Cutting Speed	30m/min（1,190min^{-1}）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	卧式加工中心（有同步进给功能） Horizontal Synchronized Machining Center



与其他公司产品和以往产品的性能相比
The advantage of A-POT over the competitors' and conventional taps was verified.

■ S45C通孔的高速加工 High speed machining of S45C（Through）

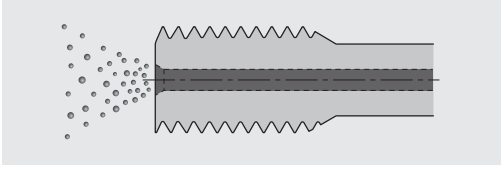
使用工具 Tool	A-POT	以往产品 Conventional
尺寸 Size	M8×1.25	
加工材料 Work Material	S45C	
底孔 Drill Hole Size	φ6.8×16mm（通孔） Through	
攻丝长度 Tapping Length	16mm（2D）	
切削速度 Cutting Speed	50m/min（1,990min^{-1}）	
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)	
使用机械 Machine	立式加工中心（有同步进给功能） Vertical Synchronized Machining Center	



A-POT(铣刀柄型)与以往产品相比，耐久性约为1.5倍
A-POT (End Mill Shank) has achieved 1.5 times of durability versus conventional tool.

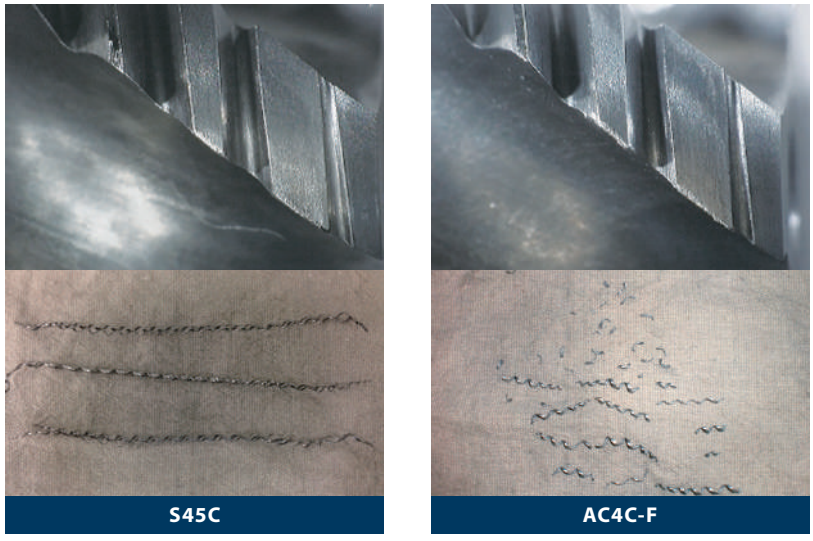
■ 十分稳定的供油，即使MQL也能加工 MQL possible with sufficient and stable coolant supply

使用工具 Tool	A-SFT M8×1.25 2.5P	
加工材料 Work Material	S45C	AC4C-F
底孔 Drill Hole Size	φ6.8×24mm（盲孔） Blind	
攻丝长度 Tapping Length	16mm（2D）	
切削速度 Cutting Speed	30m/min（1,194min^{-1}）	
切削油剂 Coolant	MQL 50cc/h(内部供油) (Internal)	
使用机械 Machine	卧式加工中心（有同步进给功能） Horizontal Synchronized Machining Center	



中心内冷 Center through coolant hole

■加工500孔后 Cutting edge after tapping 500 hole



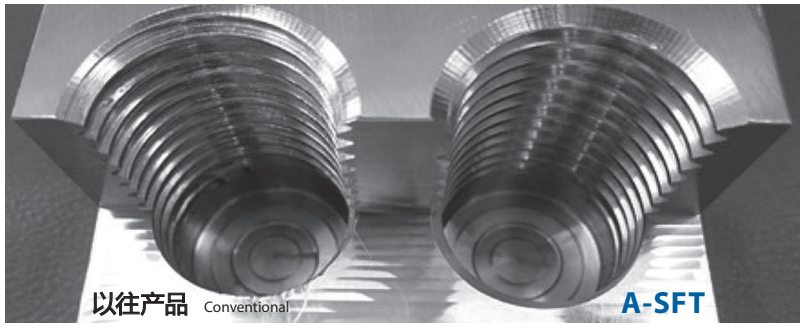
加工500孔后也无大磨损
No significant damage was found even after tapping 500 holes.

■ 大径加工 Threading in large hole

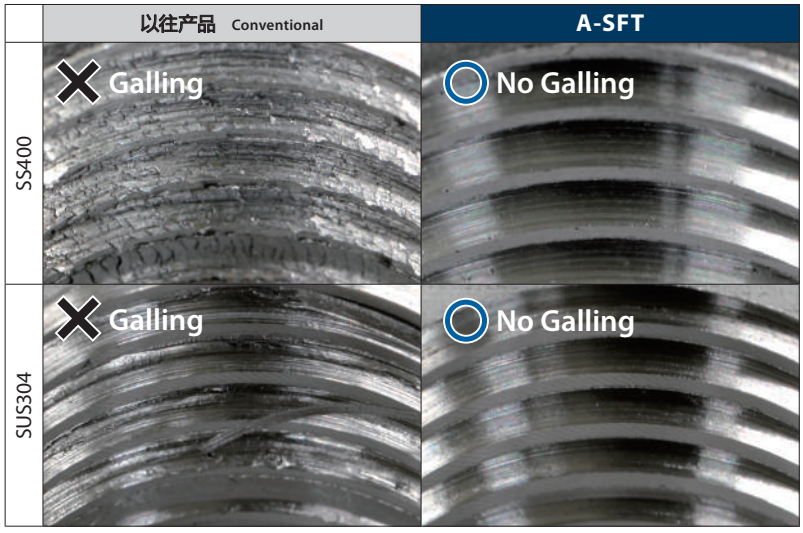
使用工具 Tool	A-SFT M36×4 2.5P	
加工材料 Work Material	SS400	SUS304
底孔 Drill Hole Size	φ32×70mm（盲孔） Blind	
攻丝长度 Tapping Length	54mm（1.5D）	
切削速度 Cutting Speed	7m/min（62min^{-1}）	
切削油剂 Coolant	水溶性切削油剂 无氯20倍 Water-soluble Chlorine-Free (5%)	
使用机械 Machine	卧式加工中心 Horizontal Machining Center	

以往内螺纹烂牙问题较多的SS400与SUS材料也能在水溶性切削油剂下加工

The use of water-soluble coolant is possible even in difficult-to-machine materials such as SS400 and stainless steels, which could not be achieved by conventional taps.



※内螺纹的示意图。实际加工效果可能因实际加工情况而异。
Visual reference of internal threads. Result may differ based on actual machining condition.

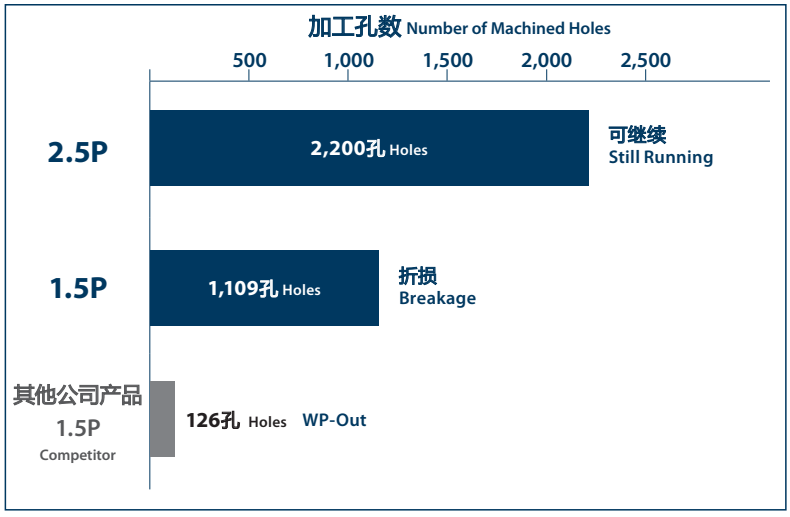


■ 切削锥长与耐久度 Chamfer length & durability

使用工具 Tool	A-SFT M6×1
加工材料 Work Material	S45C
底孔 Drill Hole Size	φ5×16mm（盲孔） Blind
攻丝长度 Tapping Length	12mm（2D）
切削速度 Cutting Speed	15m/min（796min^{-1}）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	立式加工中心 Vertical Machining Center

切削锥部为1.5P 的产品也能加工1000孔以上

The machining of over 1,000 holes is possible even with 1.5 chamfer length.



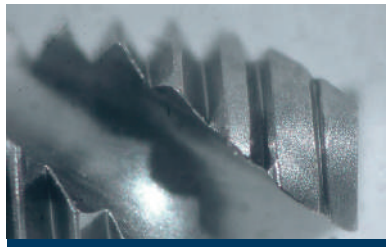
■小径的加工 Threading in small hole

使用工具 Tool	A-SFT M2×0.4 2.5P		
加工材料 Work Material	SUS304	S45C	
底孔 Drill Hole Size	φ1.6×4.5mm（盲孔） Blind		
攻丝长度 Tapping Length	3mm（1.5D）		
切削速度 Cutting Speed	5m/min（800min^{-1}）	10m/min（1,600min^{-1}）	30m/min（4,800min^{-1}）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)		
使用机械 Machine	立式加工中心（有同步进给功能） Vertical Synchronized Machining Center		

■加工100孔后 Cutting edge after tapping 100 hole

SUS304 5m/min

S45C 10m/min



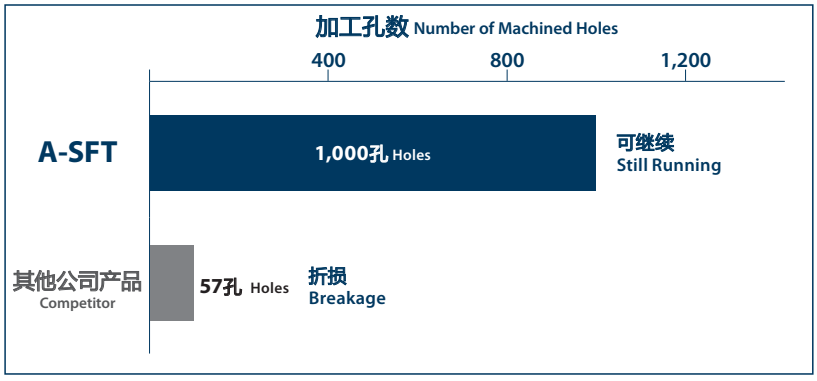
S45C 30m/min

一把丝锥可以稳定加工SUS304与S45C
A single tap for stable machining in SUS304 and S45C.

■SUS304的2D深孔加工 Deep hole tapping (2D) in stainless steel

使用工具 Tool	A-SFT M8×1.25 2.5P
加工材料 Work Material	SUS304
底孔 Drill Hole Size	φ6.8×22mm（盲孔） Blind
攻丝长度 Tapping Length	16mm（2D）
切削速度 Cutting Speed	10m/min（398min^{-1}）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	立式加工中心（有同步进给功能） Vertical Synchronized Machining Center

即使是不锈钢的水溶性加工，也能有超群的性能
High performance achieved in stainless steel with water-soluble coolant.



■加工1,000孔后 Cutting edge after tapping 1,000 holes

■ 锥管螺纹的加工 Processing of taper pipe threads

使用工具 Tool	A-TPT PT 1/8-28 2.5P		
加工材料 Work Material	SS400	FCD400	SUS304
底孔 Drill Hole Size	φ8.2×16mm（通孔） Through		
基准径位置 Position of Gauge Plane	13mm		
切削速度 Cutting Speed	5m/min（164min^{-1}）		
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)		
使用机械 Machine	立式加工中心（BT30） Vertical Machining Center		


SS400

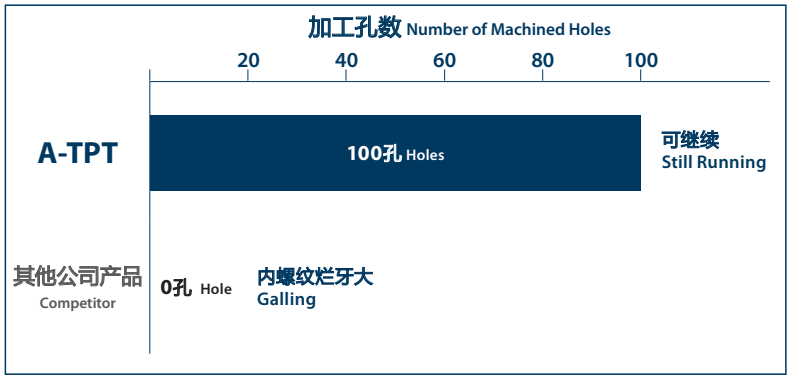

FCD400


SUS304

3种材料加工100孔后的损伤都很小，可以继续使用。
The taper pipe tap was observed with minimal wear and can continue to be used even after tapping 100 holes in three different work materials.

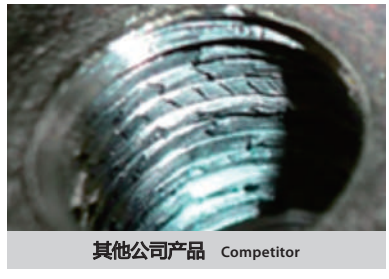
■ 锥管螺纹的加工 Processing with taper pipe taps

使用工具 Tool	A-TPT PT 1/8-28 2.5P
加工材料 Work Material	SS400
底孔 Drill Hole Size	φ8.2×16mm（通孔） Through
基准径位置 Position of Gauge Plane	13mm
切削速度 Cutting Speed	7m/min（230min^{-1}）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	卧式加工中心 Horizontal Machining Center



即使在其他公司产品不能加工的情况下也能稳定加工!
Stable performance can be achieved even under conditions where the competitor's tool failed to process a single hole.

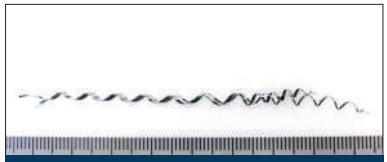

A-TPT

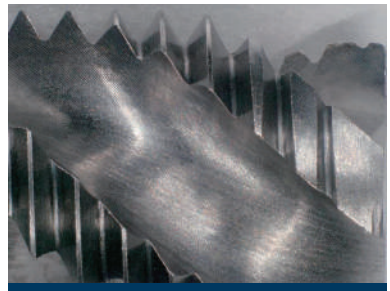

其他公司产品 Competitor

■ 15-5PH 的加工 Tapping in 15-5PH

使用工具 Tool	A-SFT HL No.10-32UNF
加工材料 Work Material	15-5PH H1025 40HRC / AMS5659
底孔 Drill Hole Size	ϕ5×16mm（盲孔） Blind
攻丝长度 Tapping Length	10mm
切削速度 Cutting Speed	5m/min（275min^{-1}）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	立式加工中心（有同步进给功能） Vertical Synchronized Machining Center

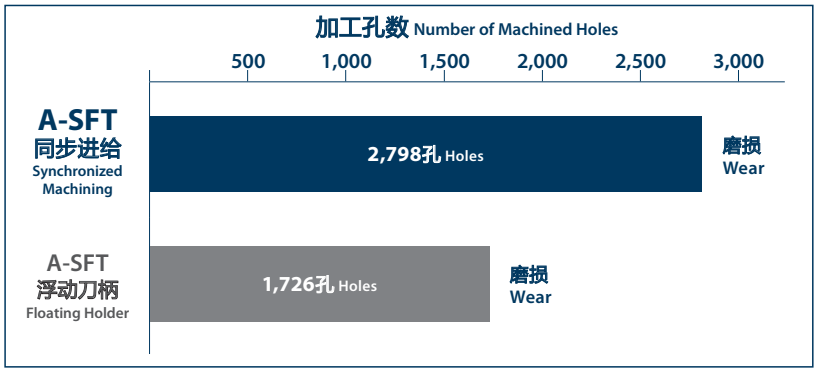
飞机用材料也能稳定加工!
Stable processing is possible even in advanced materials for aircraft!


切屑 Cutting Chips


加工100孔后 Cutting edge after tapping 100 holes

■ 带同步进给功能加工中心的效果 Benefit of machining center with synchronized feed and rotation

使用工具 Tool	A-SFT M6×1 2.5P
加工材料 Work Material	S45C
底孔 Drill Hole Size	ϕ5×16mm（盲孔） Blind
攻丝长度 Tapping Length	12mm（2D）
切削速度 Cutting Speed	15m/min（796min^{-1}）
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	立式加工中心 Vertical Machining Center



以往的机械可以加工1,700孔以上，而具备同步进给功能的机械可以达到更高的耐久性。
Over 1,700 holes can be processed by using a conventional machining center, but performance can be further improved by using machining with synchronized feed and rotation.

■ 丝锥的耐久是由底孔加工决定的! The tool life of a tap is determined by the drill used before tapping process!

使用工具 Tool	A-POT M10×1.5
攻丝长度 Tapping Length	19mm (通孔) Through
切削速度 Cutting Speed	20m/min (637min^{-1})
加工材料 Work Material	SUS304
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	卧式加工中心(有同步进给功能) Horizontal Synchronized Machining Center

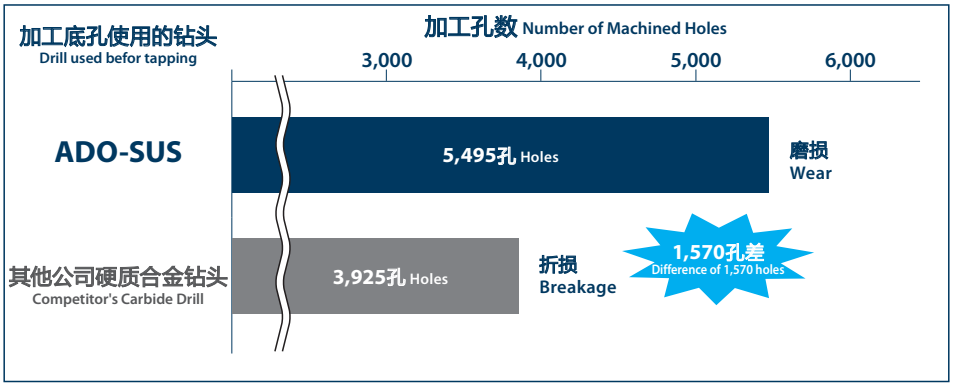
不同的两种钻头开孔后，用A-POT进行攻丝。使用ADO-SUS进行底孔加工时，丝锥的耐久差最大1,570个孔。
Two different drills were used before tapping process! Result demonstrates that with the use of ADO-SUS, tool life of A-POT can be extended by as many as 1,570 holes.

*底孔加工用钻头 :3D、φ8.5、孔深19mm(通孔)
*Drills: 3D, φ8.5, Depth of Hole 19mm (Through)

ADO-SUS钻头：70m/min (2,630min^{-1}), 526mm/min (0.2mm/rev)

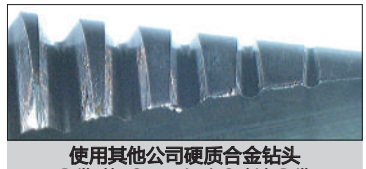
其他公司硬质合金钻头： 60m/min (2,250min^{-1}), 450mm/min (0.2mm/rev)
Competitor's Carbide Drill

■不同底孔加工钻头对应的丝锥加工孔数不同
Difference in the number of tapped holes based on drill type used prior to threading



■丝锥损伤状态 (加工3,500孔时)
Wear on cutting edge after tapping 3,500 holes


使用ADO-SUS
Drilled by ADO-SUS


使用其他公司硬质合金钻头
Drilled by Competitor's Carbide Drill

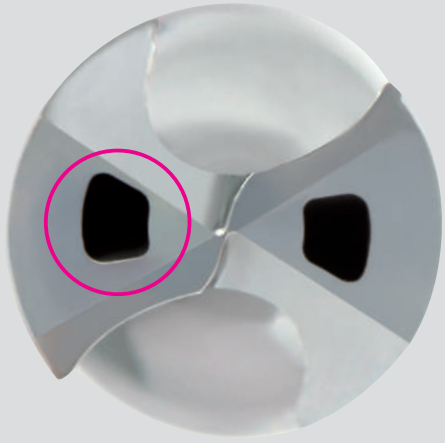
A-DRILL的优势在这里! The A-DRILL Advantage

不锈钢·钛合金用硬质合金钻头 Carbide Drill Series for Stainless Steels and Titanium Alloy **ADO-SUS**

ADO-SUS采用了新型油孔形状 “MEGA COOLER”
By adopting the new oil hole shape "MEGA COOLER," coolant flow velocity can be increased by 120%


通常形状
Oil Hole

切削油剂供给量
Feed Rate of Coolant
120%



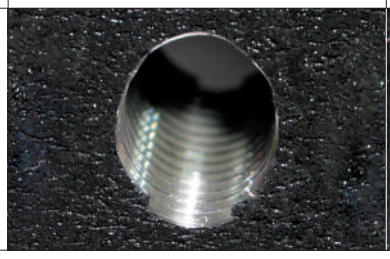
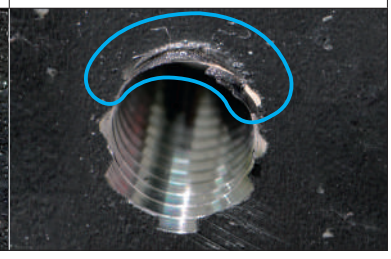
■ 丝锥的耐久由底孔加工决定! The tool life of a tap is determined by the drill used before tapping process!

使用工具 Tool	A-POT M10×1.5
攻丝长度 Tapping Length	20mm (通孔) Through
切削速度 Cutting Speed	30m/min (955min^{-1})
加工材料 Work Material	SS400
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	卧式加工中心(有同步进给功能) Horizontal Synchronized Machining Center

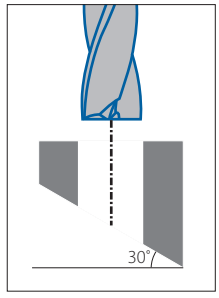
其他公司通用钻头在贯穿时很容易产生毛刺导致丝锥耐久不稳定。另一边，ADF加工出来的底孔可以使丝锥耐久稳定。
With the use of a competitor's carbide general-purpose drill, large burrs were left resulting in instability of the after tapping process. With the ADF, on the other hand, stable tapping performance can be achieved.

*底孔加工用钻头 : φ8.5、孔深20mm(通孔)
*Drills: φ8.5, Depth of Hole 20mm (Through)
50m/min (1,873min^{-1}), 318mm/min (0.17mm/rev)

■使用不同钻头刃尖与贯穿面的比较 Damage comparison based on drill type used prior to threading

损伤状态 State of Damage	ADF使用 Drilled by ADF	使用其他公司通用硬质合金钻头 Drilled by Competitor's General Carbide Drill
刃尖 (加工200孔后的丝锥) Wear on cutting edge after tapping 200 holes		
	可继续 Still Running	崩刃大 Chipping
贯穿面 Hole Exit		

■加工示意图 Application

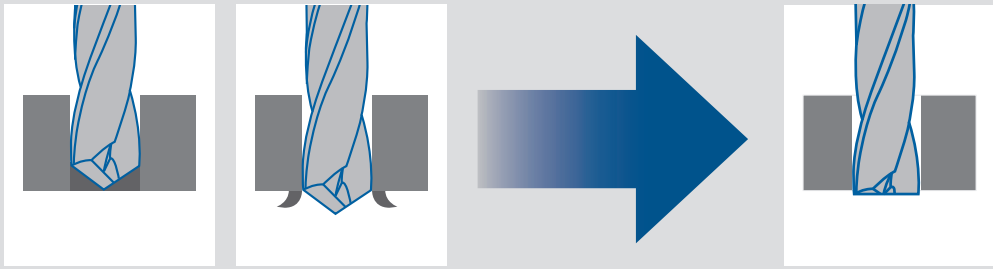


A-DRILL的优势在这里! The A-DRILL Advantage

硬质合金平头钻 Carbide Flat Drill **ADF**

ADF的底刃形状是平的
With a flat cutting edge geometry,

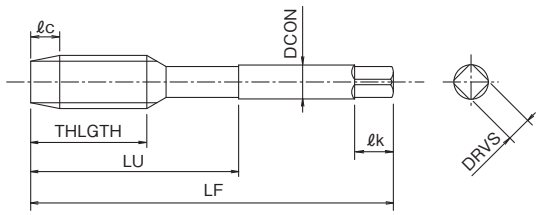
由于切削阻力，推力集中在一个方向上，所以可以实现稳定加工。
cutting resistance can be reduced with thrust force concentrated in one direction, enabling stable machining.



通用钻头 General Drills

ADF (先端平头)
ADF (flat cutting edge)

A-SFT



- 切削锥长(ℓc) 2.5P、1.5P、1P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325234	M 1.4 × 0.3	STD	OH1	2.5P	34	6	—	3	2	1.12	●
8325239	M 1.6 × 0.35	STD	OH1.5	2.5P	36	7	—	3	2	1.27	●
8325244	M 1.7 × 0.35	STD	OH1.5	2.5P	36	8	—	3	2	1.37	●
8325249	M 2 × 0.4	STD	OH1.5	2.5P	40	3.2	10	3	2	1.63	●
8325630		STD+1	OH2.5								●
8325631		STD+2	OH3.5								●
8327449		STD	OH1.5	1.5P							●
8325250	M 2 × 0.25	STD	OH1	2.5P	40	3.2	10	3	2	1.77	●
8325632		STD+1	OH2								●
8327450		STD	OH1	1.5P							●
8325252	M 2.2 × 0.45	STD	OH2	2.5P	42	3.6	11	3	2	1.77	●
8325634		STD+1	OH3								●
8327452		STD	OH2	1.5P							●
8325253	M 2.2 × 0.25	STD	OH1	2.5P	42	3.6	11	3	2	1.97	●
8325636		STD+1	OH2								●
8327453		STD	OH1	1.5P							●
8325254	M 2.3 × 0.4	STD	OH1.5	2.5P	42	3.6	12	3	2	1.92	●
8325638		STD+1	OH2.5								●
8327454		STD	OH1.5	1.5P							●
8325259	M 2.5 × 0.45	STD	OH2	2.5P	44	3.6	13	3	2	2.08	●
8325640		STD+1	OH3								●
8325641		STD+2	OH4								●
8327459		STD	OH2	1.5P							●
8325262	M 2.5 × 0.35	STD	OH1.5	2.5P	44	3.6	13	3	2	2.17	●
8325642		STD+1	OH2.5								●
8327462		STD	OH1.5	1.5P							●
8325264	M 2.6 × 0.45	STD	OH2	2.5P	44	3.6	13	3	2	2.17	●
8325644		STD+1	OH3								●
8327464		STD	OH2	1.5P							●

●＝标准库存品 ●=Standard stock item

NEXT

优势在这!
Key Point

A-SFT为全尺寸螺纹侧突顶尖去除品，
所以适用于无底孔余量的加工。

The entire lineup of A-SFT is without external center on the screw side,
which is ideal for applications with tight clearance at the bottom of the hole.

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325269	M 3 × 0.5	STD	OH2	2.5P	46	4	19	4	3	2.53	●
8325650		STD+1	OH3								●
8325651		STD+2	OH4								●
8326711		STD	OH2	1.5P							●
8326811		STD	OH2	1P							●
8325272	M 3 × 0.35	STD	OH2	2.5P	46	4	19	4	3	2.67	●
8325652		STD+1	OH3								●
8327472		STD	OH2	1.5P							●
8325276	M 3.5 × 0.6	STD	OH2	2.5P	48	4.8	20	4	3	2.92	●
8325654		STD+1	OH3								●
8327476		STD	OH2	1.5P							●
8325279	M 3.5 × 0.35	STD	OH2	2.5P	48	4.8	20	4	3	3.15	●
8325655		STD+1	OH3								●
8327479		STD	OH2	1.5P							●
8325283	M 4 × 0.7	STD	OH3	2.5P	52	5.6	21	5	3	3.35	●
8325660		STD+1	OH4								●
8325661		STD+2	OH5								●
8326714		STD	OH3	1.5P							●
8326814		STD	OH3	1P							●
8325286	M 4 × 0.5	STD	OH2	2.5P	52	5.6	21	5	3	3.5	●
8325662		STD+1	OH3								●
8327486		STD	OH2	1.5P							●

●=标准库存品 ●=Standard stock item

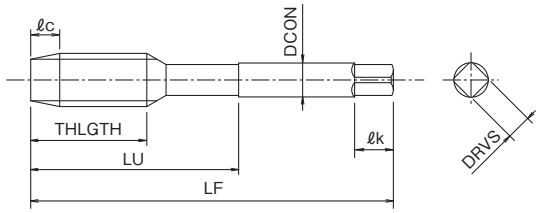
■标记说明请参考 p.2。
■柄部四方部尺寸 ℓk, DRVS请参考 p.58。

1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

A-SFT



- 切削锥长(ℓc) 2.5P、1.5P、1P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325287	M 4.5 × 0.75	STD	OH2	2.5P	55	6	21	5	3	3.8	●
8325664		STD+1	OH3								●
8327487		STD	OH2	1.5P							●
8325288	M 4.5 × 0.5	STD	OH2	2.5P	55	6	21	5	3	4	●
8325665		STD+1	OH3								●
8327488		STD	OH2	1.5P							●
8325290	M 5 × 0.8	STD	OH3	2.5P	60	6.4	24	5.5	3	4.25	●
8325668		STD+1	OH4								●
8325669		STD+2	OH5								●
8326717		STD	OH3	1.5P							●
8326817		STD	OH3	1P							●
8325293	M 5 × 0.5	STD	OH2	2.5P	60	6.4	24	5.5	3	4.5	●
8325673		STD+1	OH3								●
8327493		STD	OH2	1.5P							●
8325295	M 5.5 × 0.5	STD	OH2	2.5P	60	7.2	25	5.5	3	5.05	●
8325676		STD+1	OH3								●
8327495		STD	OH2	1.5P							●
8325297	M 6 × 1	STD	OH3	2.5P	62	8	29	6	3	5.1	●
8325678		STD+1	OH4								●
8325679		STD+2	OH5								●
8326720		STD	OH3	1.5P							●
8326820		STD	OH3	1P							●
8325300	M 6 × 0.75	STD	OH2	2.5P	62	8	29	6	3	5.3	●
8325680		STD+1	OH3								●
8327500		STD	OH2	1.5P							●

●＝标准库存品 ●=Standard stock item

NEXT

优势在这!
Key Point

A-SFT为全尺寸螺纹侧突顶尖去除品，
所以适用于无底孔余量的加工。

The entire lineup of A-SFT is without external center on the screw side,
which is ideal for applications with tight clearance at the bottom of the hole.

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325302	M 6 × 0.5	STD	OH2	2.5P	62	8	29	6	3	5.5	●
8325681		STD+1	OH3								●
8327502		STD	OH2	1.5P							●
8325304	M 7 × 1	STD	OH3	2.5P	65	12	33	6.2	3	6.1	●
8325684		STD+1	OH4								●
8327504		STD	OH3	1.5P							●
8325305	M 7 × 0.75	STD	OH2	2.5P	65	9	33	6.2	3	6.3	●
8325685		STD+1	OH3								●
8327505		STD	OH2	1.5P							●
8325307	M 8 × 1.25	STD	OH3	2.5P	70	15	37	6.2	3	6.8	●
8325688		STD+1	OH4								●
8325689		STD+2	OH5								●
8326723		STD	OH3	1.5P							●
8326823		STD	OH3	1P							●
8325311	M 8 × 1	STD	OH3	2.5P	70	12	37	6.2	3	7.1	●
8325690		STD+1	OH4								●
8327511		STD	OH3	1.5P							●
8325312	M 8 × 0.75	STD	OH3	2.5P	70	12	37	6.2	3	7.3	●
8325691		STD+1	OH4								●
8327512		STD	OH3	1.5P							●
8325314	M 9 × 1.25	STD	OH3	2.5P	72	15	38	7	3	7.8	●
8325694		STD+1	OH4								●
8327514		STD	OH3	1.5P							●

●=标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■柄部四方部尺寸 ℓk, DRVS请参考 p.58。

1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

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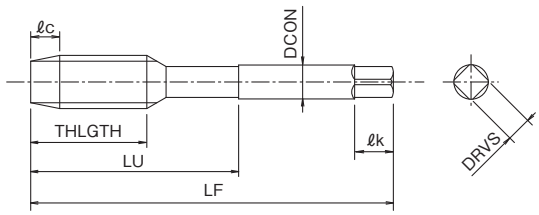
The recommended drill hole size that are not listed on JIS is as reference.

NEXT

A-SFT



- 切削锥长(ℓc) 2.5P、1.5P、1P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325315	M 9 × 1	STD	OH3	2.5P	72	12	38	7	3	8.1	●
8325695		STD+1	OH4								●
8327515		STD	OH3	1.5P							●
8325316	M 9 × 0.75	STD	OH3	2.5P	72	12	38	7	3	8.3	●
8325696		STD+1	OH4								●
8327516		STD	OH3	1.5P							●
8325317	M 10 × 1.5	STD	OH3	2.5P	75	18	41	7	3	8.6	●
8325700		STD+1	OH4								●
8325701		STD+2	OH5								●
8326726		STD	OH3	1.5P							●
8326826		STD	OH3	1P							●
8325321	M 10 × 1.25	STD	OH3	2.5P	75	15	41	7	3	8.8	●
8325702		STD+1	OH4								●
8326729		STD	OH3	1.5P							●
8326829		STD	OH3	1P							●
8325324	M 10 × 1	STD	OH3	2.5P	75	15	41	7	3	9.1	●
8325703		STD+1	OH4								●
8327524		STD	OH3	1.5P							●
8325325	M 10 × 0.75	STD	OH3	2.5P	75	15	41	7	3	9.3	●
8325704		STD+1	OH4								●
8327525		STD	OH3	1.5P							●
8325327	M 11 × 1.5	STD	OH3	2.5P	80	18	48	8	3	9.6	●
8325710		STD+1	OH4								●
8327527		STD	OH3	1.5P							●

●=标准库存品 ●=Standard stock item

NEXT

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325328	M 11 × 1	STD	OH3	2.5P	80	15	48	8	3	10.1	●
8325714		STD+1	OH4								●
8327528		STD	OH3	1.5P							●
8325329	M 11 × 0.75	STD	OH3	2.5P	80	15	48	8	3	10.3	●
8325715		STD+1	OH4								●
8327529		STD	OH3	1.5P							●
8325330	M 12 × 1.75	STD	OH4	2.5P	82	21	48	8.5	3	10.3	●
8325718		STD+1	OH5								●
8325719		STD+2	OH6								●
8326732		STD	OH4	1.5P							●
8326832		STD	OH4	1P							●
8325334	M 12 × 1.5	STD	OH3	2.5P	82	18	48	8.5	3	10.6	●
8325720		STD+1	OH4								●
8327534		STD	OH3	1.5P							●
8325337	M 12 × 1.25	STD	OH3	2.5P	82	18	48	8.5	3	10.8	●
8325721		STD+1	OH4								●
8326736		STD	OH3	1.5P							●
8326836		STD	OH3	1P							●
8325340	M 12 × 1	STD	OH3	2.5P	82	18	48	8.5	3	11.1	●
8325722		STD+1	OH4								●
8327540		STD	OH3	1.5P							●
8325347	M 14 × 2	STD	OH4	2.5P	88	24	48	10.5	3	12.1	●
8325730		STD+1	OH5								●
8327547		STD	OH4	1.5P							●
8325350	M 14 × 1.5	STD	OH3	2.5P	88	18	48	10.5	3	12.5	●
8325731		STD+1	OH4								●
8327550		STD	OH3	1.5P							●
8325352	M 14 × 1.25	STD	OH3	2.5P	88	18	48	10.5	3	12.8	●
8325732		STD+1	OH4								●
8327552		STD	OH3	1.5P							●

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■柄部四方部尺寸 ℓk, DRVS 请参考 p.58。

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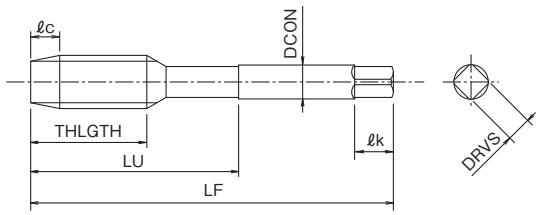
NEXT

A-SFT



- 切削锥长(ℓc) 2.5P、1.5P、1P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325354	M 14 × 1	STD	OH3	2.5P	88	18	48	10.5	3	13	●
8325733		STD+1	OH4								●
8325355	M 15 × 1.5	STD	OH3	2.5P	95	18	52	10.5	3	13.5	●
8325736		STD+1	OH4								●
8325356	M 15 × 1	STD	OH3	2.5P	95	18	52	10.5	3	14	●
8325737		STD+1	OH4								●
8325357	M 16 × 2	STD	OH4	2.5P	95	24	52	12.5	3	14	●
8325740		STD+1	OH5								●
8327557		STD	OH4	1.5P							●
8325360	M 16 × 1.5	STD	OH3	2.5P	95	18	52	12.5	3	14.5	●
8325741		STD+1	OH4								●
8327560		STD	OH3	1.5P							●
8325362	M 16 × 1	STD	OH3	2.5P	95	18	52	12.5	3	15	●
8325742		STD+1	OH4								●
8325364	M 17 × 1.5	STD	OH3	2.5P	100	18	55	13	3	15.5	●
8325745		STD+1	OH4								●
8325366	M 17 × 1	STD	OH3	2.5P	100	18	55	13	3	16	●
8325746		STD+1	OH4								●
8325367	M 18 × 2.5	STD	OH5	2.5P	100	30	55	14	4	15.5	●
8325749		STD+1	OH6								●
8327567		STD	OH5	1.5P							●
8325369	M 18 × 2	STD	OH4	2.5P	100	24	55	14	4	16	●
8325750		STD+1	OH5								●
8327569		STD	OH4	1.5P							●

●＝标准库存品 ●=Standard stock item

NEXT

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325370	M 18 × 1.5	STD	OH4	2.5P	100	24	55	14	4	16.5	●
8325751		STD+1	OH5								●
8327570		STD	OH4	1.5P							●
8325372	M 18 × 1	STD	OH3	2.5P	100	24	55	14	4	17	●
8325752		STD+1	OH4								●
8325377	M 20 × 2.5	STD	OH5	2.5P	105	30	58	15	4	17.5	●
8325757		STD+1	OH6								●
8327577		STD	OH5	1.5P							●
8325379	M 20 × 2	STD	OH4	2.5P	105	24	58	15	4	18	●
8325758		STD+1	OH5								●
8327579		STD	OH4	1.5P							●
8325380	M 20 × 1.5	STD	OH4	2.5P	105	24	58	15	4	18.5	●
8325759		STD+1	OH5								●
8327580		STD	OH4	1.5P							●
8325382	M 20 × 1	STD	OH3	2.5P	105	24	58	15	4	19	●
8325760		STD+1	OH4								●
8325387	M 22 × 2.5	STD	OH5	2.5P	115	30	63	17	4	19.5	●
8325763		STD+1	OH6								●
8327587		STD	OH5	1.5P							●
8325389	M 22 × 2	STD	OH4	2.5P	115	24	63	17	4	20	●
8325764		STD+1	OH5								●
8327589		STD	OH4	1.5P							●
8325390	M 22 × 1.5	STD	OH4	2.5P	115	24	63	17	4	20.5	●
8325765		STD+1	OH5								●
8327590		STD	OH4	1.5P							●
8325392	M 22 × 1	STD	OH3	2.5P	115	24	63	17	4	21	●
8325766		STD+1	OH4								●
8325397	M 24 × 3	STD	OH5	2.5P	120	36	66	19	4	21	●
8325769		STD+1	OH6								●
8327597		STD	OH5	1.5P							●

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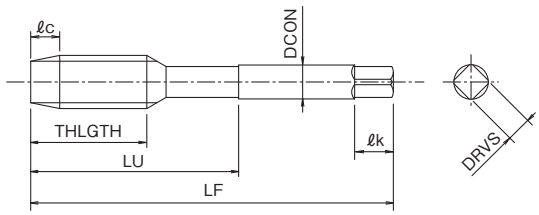
NEXT

A-SFT



- 切削锥长(ℓc) 2.5P、1.5P、1P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325399	M 24 × 2	STD	OH4	2.5P	120	24	66	19	4	22	●
8325770		STD+1	OH5								●
8327599		STD	OH4	1.5P							●
8325400	M 24 × 1.5	STD	OH4	2.5P	120	24	66	19	4	22.5	●
8325771		STD+1	OH5								●
8327600		STD	OH4	1.5P							●
8325402	M 24 × 1	STD	OH3	2.5P	120	24	66	19	4	23	●
8325772		STD+1	OH4								●

●＝标准库存品 ●=Standard stock item

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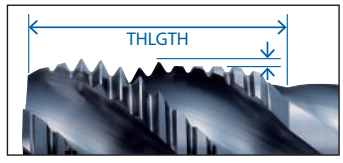
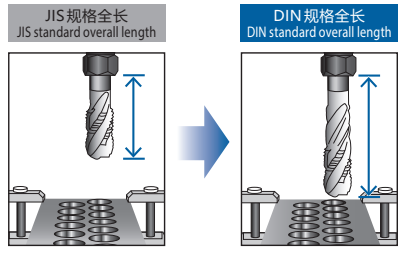
优势在这!
Key Point

大型零件加工用 For the machining of large parts

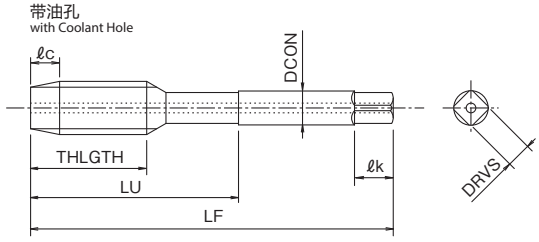
1. 长槽长及悬伸可以防止切屑问题!
   Long flute and overhang length geometry minimizes chip evacuation troubles!
   - 全长：加长的DIN规格
     • Total length : DIN standard (longer than conventional)
   - 柄部：以往JIS规格
     • Shank : JIS standard (conventional)





2. 半牙处理防止崩刃!
   Half thread ground off to prevent chipping!
3. 带油孔！无论是“内部供油”还是“外部供油”，都可稳定加工。
   Available with internal coolant holes! Capable of machining large components, which are difficult to feed coolant to the work area. Stable machining can be ensured with both internal and external coolant supply.

A-SFT



- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.
- 全尺寸带油孔
  All sizes are equipped with coolant hole.

HSSE | V | 45° | SPEED FEED P5

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	油孔 Oil Hole	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326605	M 27 × 3	Yes	STD	OH5	160	36	79	20	4	24	●
8326608	M 27 × 1.5	Yes	STD	OH4	140	24	79	20	4	25.5	●
8326614	M 30 × 3.5	Yes	STD	OH5	180	42	88	23	4	26.5	●
8326615	M 30 × 3	Yes	STD	OH5	180	36	88	23	4	27	●
8326618	M 30 × 1.5	Yes	STD	OH4	150	36	88	23	4	28.5	●
8326624	M 33 × 3.5	Yes	STD	OH5	180	42	95	25	4	29.5	●
8326625	M 33 × 3	Yes	STD	OH5	180	36	95	25	4	30	●
8326628	M 33 × 1.5	Yes	STD	OH4	160	36	92	25	4	31.5	●
8326633	M 36 × 4	Yes	STD	OH6	200	48	104	28	4	32	●
8326635	M 36 × 3	Yes	STD	OH6	200	36	104	28	4	33	●
8326638	M 36 × 1.5	Yes	STD	OH4	170	36	97	28	4	34.5	●
8326643	M 39 × 4	Yes	STD	OH6	200	48	112	30	4	35	●
8326652	M 42 × 4.5	Yes	STD	OH6	200	54	118	32	4	37.5	●
8326655	M 42 × 3	Yes	STD	OH6	200	48	118	32	4	39	●
8326658	M 42 × 1.5	Yes	STD	OH4	170	48	88	32	4	40.5	●
8326659	M 45 × 4.5	Yes	STD	OH6	220	54	128	35	4	40.5	●
8326661	M 48 × 5	Yes	STD	OH6	250	60	137	38	4	43	●
8326665	M 48 × 3	Yes	STD	OH6	225	48	137	38	4	45	●
8326668	M 52 × 5	Yes	STD	OH7	250	60	147	42	4	47	●
8326670	M 56 × 5.5	Yes	STD	OH8	250	66	153	44	4	50.5	●

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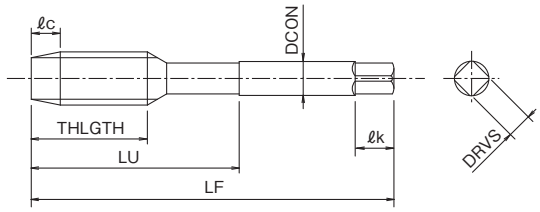
A-LT-SFT



- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326202	M2 ×0.4 × 80	STD	OH1.5	80	3.2	10	3	2	1.63	●
8326201	M2 ×0.25 × 80	STD	OH1	80	3.2	10	3	2	1.77	●
8326204	M2.2 ×0.45 × 80	STD	OH2	80	3.6	11	3	2	1.77	●
8326203	M2.2 ×0.25 × 80	STD	OH1	80	3.6	11	3	2	1.97	●
8326205	M2.3 ×0.4 × 80	STD	OH1.5	80	3.6	12	3	2	1.92	●
8326207	M2.5 ×0.45 × 80	STD	OH2	80	3.6	13	3	2	2.08	●
8326206	M2.5 ×0.35 × 80	STD	OH1.5	80	3.6	13	3	2	2.17	●
8326208	M2.6 ×0.45 × 80	STD	OH2	80	3.6	13	3	2	2.17	●
8326210	M3 ×0.5 ×100	STD	OH2	100	4	19	4	3	2.53	●
8326209	M3 ×0.35 ×100	STD	OH2	100	4	19	4	3	2.67	●
8326212	M3.5 ×0.6 ×100	STD	OH2	100	4.8	19	4	3	2.92	●
8326211	M3.5 ×0.35 ×100	STD	OH2	100	4.8	19	4	3	3.15	●
8326214	M4 ×0.7 ×100	STD	OH3	100	5.6	21	5	3	3.35	●
8326213	M4 ×0.5 ×100	STD	OH2	100	5.6	21	5	3	3.5	●
8326216	M4.5 ×0.75 ×100	STD	OH2	100	6	21	5	3	3.8	●
8326215	M4.5 ×0.5 ×100	STD	OH2	100	6	21	5	3	4	●
8326218	M5 ×0.8 ×100	STD	OH3	100	6.4	24	5.5	3	4.25	●
8326217	M5 ×0.5 ×100	STD	OH2	100	6.4	24	5.5	3	4.5	●
8326219	M5.5 ×0.5 ×100	STD	OH2	100	7.2	25	5.5	3	5.05	●
8326222	M6 ×1 ×100	STD	OH3	100	8	29	6	3	5.1	●
8326223	M6 ×1 ×150	STD	OH3	150	8	29	6	3	5.1	●
8326220	M6 ×0.75 ×100	STD	OH2	100	8	29	6	3	5.3	●
8326221	M6 ×0.75 ×150	STD	OH2	150	8	29	6	3	5.3	●
8326226	M7 ×1 ×100	STD	OH3	100	12	33	6.2	3	6.1	●
8326227	M7 ×1 ×150	STD	OH3	150	12	33	6.2	3	6.1	●

●＝标准库存品 ●=Standard stock item

NEXT

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326224	M7 ×0.75 ×100	STD	OH2	100	9	33	6.2	3	6.3	●
8326225	M7 ×0.75 ×150			150						●
8326232	M8 ×1.25 ×100	STD	OH3	100	15	37	6.2	3	6.8	●
8326233	M8 ×1.25 ×150			150						●
8326230	M8 ×1 ×100	STD	OH3	100	12	37	6.2	3	7.1	●
8326231	M8 ×1 ×150			150						●
8326228	M8 ×0.75 ×100	STD	OH3	100	12	37	6.2	3	7.3	●
8326229	M8 ×0.75 ×150			150						●
8326238	M9 ×1.25 ×100	STD	OH3	100	15	38	7	3	7.8	●
8326239	M9 ×1.25 ×150			150						●
8326236	M9 ×1 ×100	STD	OH3	100	12	38	7	3	8.1	●
8326237	M9 ×1 ×150			150						●
8326234	M9 ×0.75 ×100	STD	OH3	100	12	38	7	3	8.3	●
8326235	M9 ×0.75 ×150			150						●
8326246	M10 ×1.5 ×100	STD	OH3	100	18	41	7	3	8.6	●
8326247	M10 ×1.5 ×150			150						●
8326244	M10 ×1.25 ×100	STD	OH3	100	15	41	7	3	8.8	●
8326245	M10 ×1.25 ×150			150						●
8326242	M10 ×1 ×100	STD	OH3	100	15	41	7	3	9.1	●
8326243	M10 ×1 ×150			150						●
8326240	M10 ×0.75 ×100	STD	OH3	100	15	41	7	3	9.3	●
8326241	M10 ×0.75 ×150			150						●
8326252	M11 ×1.5 ×100	STD	OH3	100	18	48	8	3	9.6	●
8326253	M11 ×1.5 ×150			150						●
8326292	M11 ×1.25 ×100	STD	OH3	100	15	48	8	3	9.8	●
8326293	M11 ×1.25 ×150			150						●
8326250	M11 ×1 ×100	STD	OH3	100	15	48	8	3	10.1	●
8326251	M11 ×1 ×150			150						●
8326248	M11 ×0.75 ×100	STD	OH3	100	15	48	8	3	10.3	●
8326249	M11 ×0.75 ×150			150						●

●=标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■柄部四方部尺寸 ℓk, DRVS请参考 p.58。

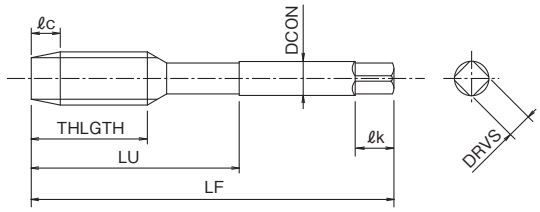
1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 使用进给不稳定的机械时，可能会发生内螺纹扩大的问题，请务必注意。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

NEXT

A-LT-SFT



- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size		精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326260	M12 ×1.75	×100	STD	OH4	100	21	48	8.5	3	10.3	●
8326261		×150			150						●
8326258	M12 ×1.5	×100	STD	OH3	100	18	48	8.5	3	10.6	●
8326259		×150			150						●
8326256	M12 ×1.25	×100	STD	OH3	100	18	48	8.5	3	10.8	●
8326257		×150			150						●
8326254	M12 ×1	×100	STD	OH3	100	18	48	8.5	3	11.1	●
8326255		×150			150						●
8326265	M14 ×2	×150	STD	OH4	150	24	50	10.5	3	12.1	●
8326264	M14 ×1.5	×150	STD	OH3	150	18	50	10.5	3	12.5	●
8326263	M14 ×1.25	×150	STD	OH3	150	18	50	10.5	3	12.8	●
8326262	M14 ×1	×150	STD	OH3	150	18	50	10.5	3	13	●
8326267	M15 ×1.5	×150	STD	OH3	150	18	52	10.5	3	13.5	●
8326266	M15 ×1	×150	STD	OH3	150	18	52	10.5	3	14	●
8326270	M16 ×2	×150	STD	OH4	150	24	56	12.5	3	14	●
8326271		×200			200						●
8326269	M16 ×1.5	×150	STD	OH3	150	18	56	12.5	3	14.5	●
8326268	M16 ×1	×150	STD	OH3	150	18	56	12.5	3	15	●
8326273	M17 ×1.5	×150	STD	OH3	150	18	58	13	3	15.5	●
8326272	M17 ×1	×150	STD	OH3	150	18	58	13	3	16	●
8326277	M18 ×2.5	×150	STD	OH5	150	30	64	14	4	15.5	●
8326276	M18 ×2	×150	STD	OH4	150	24	64	14	4	16	●
8326275	M18 ×1.5	×150	STD	OH4	150	24	64	14	4	16.5	●
8326274	M18 ×1	×150	STD	OH3	150	24	64	14	4	17	●

●＝标准库存品 ●=Standard stock item

NEXT

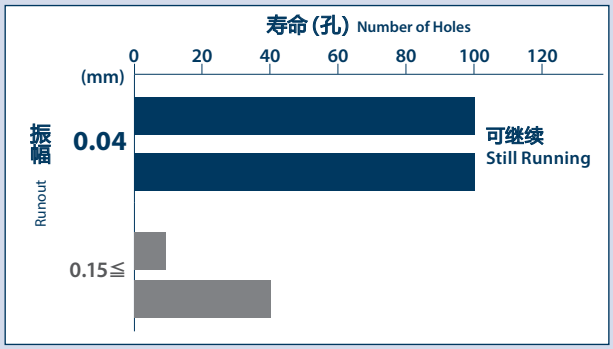
加工要点(安装跳动的影响)
Points of tapping (effect of attachment runout)

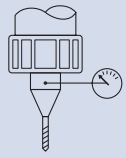
·抑制安装跳动使其稳定加工。

Stable tapping can be ensured by controlling the attachment runout.

使用工具 Tool	A-LT-SFT M2×0.4×80
加工材料 Work Material	S45C
切削速度 Cutting Speed	15m/min (2,400min^{-1})
底孔径 Drilling Hole Size	1.6mm
攻丝长度 Tapping Length	3mm (1.5D)
刀具悬伸量 Overhang Length	60mm
切削油剂 Coolant	水溶性切削油剂 无氯10倍 Water-soluble Chlorine-Free (10%)
使用机械 Machine	立式加工中心 Vertical Machining Center

■安装跳动与寿命 Attachment runout and number of holes





·安装跳动是在刀柄端面处40mm 附近测定的。
The attachment runout is the value measured at a point about 40mm away from the end face of the holder.

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size		精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326281	M20 ×2.5	×150	STD	OH5	150	30	70	15	4	17.5	●
8326282		×200			200						●
8326280	M20 ×2	×150	STD	OH4	150	24	70	15	4	18	●
8326279	M20 ×1.5	×150	STD	OH4	150	24	70	15	4	18.5	●
8326278	M20 ×1	×150	STD	OH3	150	24	70	15	4	19	●
8326286	M22 ×2.5	×150	STD	OH5	150	30	76	17	4	19.5	●
8326285	M22 ×2	×150	STD	OH4	150	24	76	17	4	20	●
8326284	M22 ×1.5	×150	STD	OH4	150	24	76	17	4	20.5	●
8326283	M22 ×1	×150	STD	OH3	150	24	76	17	4	21	●
8326290	M24 ×3	×150	STD	OH5	150	36	83	19	4	21	●
8326291		×200			200						●
8326289	M24 ×2	×150	STD	OH4	150	24	83	19	4	22	●
8326288	M24 ×1.5	×150	STD	OH4	150	24	83	19	4	22.5	●
8326287	M24 ×1	×150	STD	OH3	150	24	83	19	4	23	●

●=标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■柄部四方部尺寸 ℓk, DRVS请参考 p.58。

1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

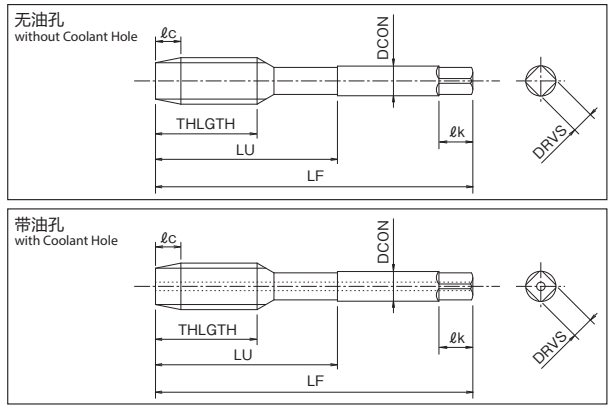
螺旋槽丝锥（立铣刀柄型） Spiral Fluted Tap (End Mill Shank)

A-SFT

- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.
- 部分尺寸含有带油孔的款式
  Some sizes are available with coolant hole.

CPM | V | 45° | SHANK h7 | SPEED FEED P5

立铣刀柄型采用与高速同步丝锥 HS 系列相同的柄部形状。
A-SFT with end mill style shank uses the same shank shape as OSG's HS (high speed) synchro tap series.



螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	油孔 Oil Hole	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325900	M 3 × 0.5 – 4	—	STD	OH3	46	4	19	4	3	2.53	●
8325901	M 4 × 0.7 – 6	—	STD	OH3	52	5.6	21	6	3	3.35	●
8325902	M 5 × 0.8 – 6	—	STD	OH3	60	6.4	24	6	3	4.25	●
8325903	M 6 × 1 – 6	—	STD	OH3	62	8	29	6	3	5.1	●
8326951		Yes									●
8326952	M 6 × 0.75 – 6	Yes	STD	OH3	62	19	29	6	3	5.3	●
8325904	M 8 × 1.25 – 8	—	STD	OH4	70	15	37	8	3	6.8	●
8326953		Yes									●
8326954	M 8 × 1 – 8	Yes	STD	OH3	70	22	37	8	3	7.1	●
8325906	M 10 × 1.5 – 8	—	STD	OH4	75	18	41	8	3	8.6	●
8326955		Yes									●
8325905	M 10 × 1.25 – 8	—	STD	OH4	75	15	41	8	3	8.8	●
8326956		Yes									●
8325907	M 12 × 1.75 – 10	—	STD	OH4	82	21	48	10	3	10.3	●
8326957		Yes									●
8326958	M 12 × 1.5 – 10	Yes	STD	OH4	82	18	48	10	3	10.6	●
8326959	M 12 × 1.25 – 10	Yes	STD	OH4	82	18	48	10	3	10.8	●
8325908	M 14 × 2 – 12	—	STD	OH5	88	24	48	12	3	12.1	●

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■柄部四方部尺寸 ℓk, DRVS 请参考 p.58。

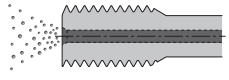
1. 虽然铣刀柄产品可与筒夹刀柄、铣刀刀柄等兼容，但仍建议使用带防转结构的刀柄。
2. 精度栏 是以确保高精度及完全同步进给相结合为前提的相当于2级丝锥的推荐精度。
3. 丝锥精度不能保证内螺纹精度。
4. 使用进给不稳定的机械时，可能会发生内螺纹扩大的问题，请务必注意。
5. 不推荐再研磨。
6. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
   JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

1. Although taps with end mill shank are compatible with a collet holder, milling holder and etc., use a holder with a detent.
2. The recommended tap limit corresponds to JIS class 2 internal thread standards only if combination of maintaining the high accuracy and complete synchronous feed is applied.
3. Tap limit does not guarantee thread limit for the internal thread after tapping.
4. Stable feed control machines are recommended to avoid over size tapping.
5. Regrinding is not recommended.
6. The recommended tap limit corresponds to JIS class 2 internal thread standard. The recommended drill hole size that are not listed on JIS is as reference.

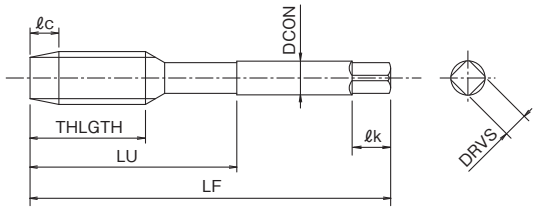
优势在这! Key Point

铣刀柄根据用途可以选择带油孔型。
油雾冷却(MQL)等推荐带油孔型。(油孔栏：Yes)
Choose end mill shank with oil hole based on usage. For mist (MQL) and similar machining environment, oil hole type (those marked with "yes" in the chart above) is recommended.



A-LT-SFT

立铣刀柄型采用与高速同步丝锥HS系列相同的柄部形状。
A-SFT with end mill style shank uses the same shank shape as OSG's HS (high speed) synchro tap series.



- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SHANK h7 | SPEED FEED P5

螺纹种类：M

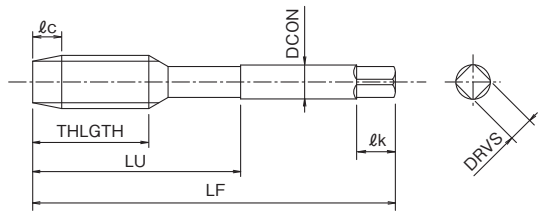
单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	
8326500	M 3 ×0.5 ×100– 4	STD	OH3	100	4	19	4	3	2.53	●
8326520	×150– 4			150						●
8326501	M 4 ×0.7 ×100– 6	STD	OH3	100	5.6	21	6	3	3.35	●
8326521	×150– 6			150						●
8326502	M 5 ×0.8 ×100– 6	STD	OH3	100	6.4	24	6	3	4.25	●
8326522	×150– 6			150						●
8326503	M 6 ×1 ×100– 6	STD	OH3	100	8	29	6	3	5.1	●
8326523	×150– 6			150						●
8326524	×200– 6			200						●
8326504	M 8 ×1.25 ×100– 8	STD	OH4	100	15	37	8	3	6.8	●
8326525	×150– 8			150						●
8326526	×200– 8			200						●
8326506	M10 ×1.5 ×100– 8	STD	OH4	100	18	41	8	3	8.6	●
8326527	×150– 8			150		60				●
8326528	×200– 8			200		80				●
8326505	M10 ×1.25 ×100– 8	STD	OH4	100	15	41	8	3	8.8	●
8326529	×150– 8			150		60				●
8326530	×200– 8			200		80				●
8326507	M12 ×1.75 ×100–10	STD	OH4	100	21	48	10	3	10.3	●
8326531	×150–10			150		60				●
8326532	×200–10			200		80				●
8326508	M14 ×2 ×150–12	STD	OH5	150	24	50	12	3	12.1	●
8326533	×200–12			200		80				●
8326509	M16 ×2 ×150–16	STD	OH5	150	24	60	16	3	14	●
8326534	×200–16			200						●
8326510	M20 ×2.5 ×150–16	STD	OH5	150	30	75	16	4	17.5	●
8326535	×200–16			200		80				●
8326511	M24 ×3 ×150–20	STD	OH5	150	36	90	20	4	21	●
8326536	×200–20			200						●

●＝标准库存品 ●=Standard stock item

■使用上注意点请参考 p.29。
■Please refer p.29 for notes/precaution of usage.

A-SFT



- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

螺纹种类：U

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327221	No. 4 – 40UNC	STD	OH2	44	5.1	17	3	2	2.3	●
8327227	No. 5 – 40UNC	STD	OH2	46	5.1	19	4	2	2.6	●
8327233	No. 6 – 32UNC	STD	OH2	48	6.4	21	4	2	2.8	●
8327240	No. 8 – 32UNC	STD	OH2	52	6.4	21	5	2	3.4	●
8327246	No. 10 – 24UNC	STD	OH2	60	8.5	24	5.5	2	3.8	●
8327249	No. 10 – 32UNF	STD	OH2	60	8.5	24	5.5	2	4.1	●
8327258	1/4 – 20UNC	STD	OH3	62	10.2	29	6	2	5.1	●
8327261	1/4 – 28UNF	STD	OH2	62	10.2	29	6	2	5.5	●
8327267	5/16 – 18UNC	STD	OH3	70	17	37	6.1	3	6.6	●
8327270	5/16 – 24UNF	STD	OH3	70	13	37	6.1	3	6.9	●
8327276	3/8 – 16UNC	STD	OH3	75	19	41	7	3	8	●
8327282	3/8 – 24UNF	STD	OH3	75	13	41	7	3	8.5	●
8327291	7/16 – 14UNC	STD	OH3	80	22	48	8	3	9.4	●
8327294	7/16 – 20UNF	STD	OH3	80	15	48	8	3	9.9	●
8327300	1/2 – 13UNC	STD	OH3	85	23	48	9	3	10.8	●
8327306	1/2 – 20UNF	STD	OH3	85	15	48	9	3	11.5	●
8327312	9/16 – 12UNC	STD	OH4	90	25	48	10.5	3	12.2	●
8327315	9/16 – 18UNF	STD	OH3	90	17	48	10.5	3	12.9	●
8327319	5/8 – 11UNC	STD	OH4	95	28	52	12	3	13.6	●
8327321	5/8 – 18UNF	STD	OH3	95	17	52	12	3	14.5	●
8327325	3/4 – 10UNC	STD	OH4	105	31	58	14	4	16.5	●
8327327	3/4 – 16UNF	STD	OH3	105	19	58	14	4	17.5	●
8327331	7/8 – 9UNC	STD	OH5	115	34	63	17	4	19.5	●
8327333	7/8 – 14UNF	STD	OH4	115	22	63	17	4	20.5	●

●＝标准库存品 ●=Standard stock item

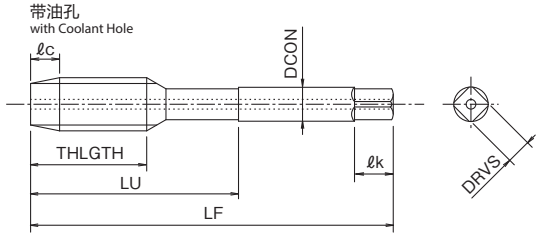
■标记说明请参考p.2。
■柄部四方部尺寸ℓk, DRVS请参考p.58。

1. 精度栏 是相当于2B内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为JIS2B内螺纹用。(除旧JIS规格没有的内螺纹)
   JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS 2 B internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS 2 B internal thread standard (with the exception of internal threads not listed in the JIS standard).
   The recommended drill hole size that are not listed on JIS is as reference.

A-SFT



- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.
- 全尺寸带油孔
  All sizes are equipped with coolant hole.

HSSE | V | 45° | SPEED FEED P5

螺纹种类：U

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	油孔 Oil Hole	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327337	1 – 8UNC	Yes	STD	OH5	160	38	88	20	4	22.2	●
8327345	1 1/8 – 8UN	Yes	STD	OH5	180	38	97	22	4	25.5	●
8327352	1 1/4 – 8UN	Yes	STD	OH5	180	38	100	24	4	28.7	●
8327358	1 3/8 – 8UN	Yes	STD	OH5	200	38	115	26	4	31.8	●
8327364	1 1/2 – 8UN	Yes	STD	OH6	200	38	115	30	4	35	●
8327367	1 5/8 – 8UN	Yes	STD	OH6	200	38	115	32	4	38.2	●
8327370	1 3/4 – 8UN	Yes	STD	OH6	200	51	103	35	4	41.4	●
8327374	1 7/8 – 8UN	Yes	STD	OH6	225	51	130	38	4	44.5	●
8327376	2 – 8UN	Yes	STD	OH6	225	51	122	40	4	47.7	●

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■柄部四方部尺寸ℓk, DRVS请参考 p.58。

1. 精度栏 是相当于2B内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为JIS2B内螺纹用。(除旧JIS规格没有的内螺纹)
   JIS规格中没有的内螺纹底孔径仅供参考。

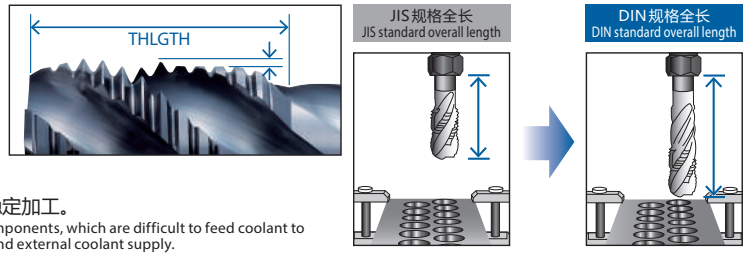
■ See p.2 for explanation of icons.
■ See p.58 for shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS 2B internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS 2 B internal thread standard (with the exception of internal threads not listed in the JIS standard).
   The recommended drill hole size that are not listed on JIS is as reference.

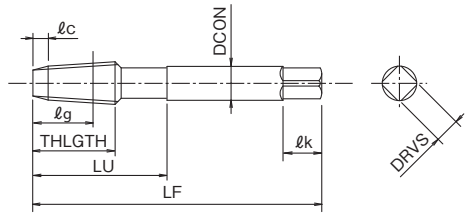
优势在这！ Key Point

大型零件加工用 For the machining of large parts

1. 长槽长及悬伸可以防止切屑问题！
   Long flute and overhang length geometry minimizes chip evacuation troubles!
   - 全长：加长的DIN规格
     • Total length : DIN standard (longer than conventional)
   - 柄部：以往JIS规格
     • Shank : JIS standard (conventional)
2. 半牙处理防止崩刃！
   Half thread ground off to prevent chipping!
3. 带油孔！无论是“内部供油”还是“外部供油”，都可稳定加工。
   Available with internal coolant holes! Capable of machining large components, which are difficult to feed coolant to the work area. Stable machining can be ensured with both internal and external coolant supply.



A-TPT



■ 切削锥长(ℓc) 2.5P
Chamfer Length

HSSE | V | 40° | SPEED FEED P6

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 LF	螺纹部长度 THLGTH	颈长 LU	基准径位置 ℓg	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327651	PT 1/16 - 28	JIS2	90	18	36	10.1	8	3	6.2	●
8327652	PT 1/8 - 28	JIS2	90	19	37	13	8	3	8.2	●
8327653	PT 1/4 - 19	JIS2	100	28	49	21	11	3	10.9	●
8327654	PT 3/8 - 19	JIS2	100	28	50	21	14	4	14.4	●
8327655	PT 1/2 - 14	JIS2	125	35	60	25	18	4	18	●
8327657	PT 3/4 - 14	JIS2	140	35	74	25	23	4	23	●
8327659	PT 1 - 11	JIS2	160	45	80	32	26	4	29	●

●＝标准库存品 ●=Standard stock item

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 LF	螺纹部长度 THLGTH	颈长 LU	基准径位置 ℓg	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327671	1/16 - 27 NPT	ANSI G	90	18	36	12	8	3	*	●
8327672	1/8 - 27 NPT	ANSI G	90	19	37	12.1	8	3	*	●
8327673	1/4 - 18 NPT	ANSI G	100	28	49	17.4	11	3	*	●
8327674	3/8 - 18 NPT	ANSI G	100	28	50	17.6	14	4	*	●
8327675	1/2 - 14 NPT	ANSI G	125	35	60	22.9	18	4	*	●
8327677	3/4 - 14 NPT	ANSI G	140	35	74	22.9	23	4	*	●
8327679	1 - 11 1/2 NPT	ANSI G	160	45	80	27.4	26	4	*	●

●＝标准库存品 ●=Standard stock item

螺纹种类：Rc

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	基准径位置 ℓg	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327721	Rc 1/16 - 28	—	90	14	36	10.1	8	3	6.2	●
8327722	Rc 1/8 - 28	—	90	15	37	10.1	8	3	8.2	●
8327723	Rc 1/4 - 19	—	100	19	49	15	11	3	10.9	●
8327724	Rc 3/8 - 19	—	100	21	50	15.4	14	4	14.4	●
8327725	Rc 1/2 - 14	—	125	26	60	20.5	18	4	18	●
8327727	Rc 3/4 - 14	—	140	28	74	21.8	23	4	23	●
8327729	Rc 1 - 11	—	160	33	80	26	26	4	29	●

●＝标准库存品 ●=Standard stock item

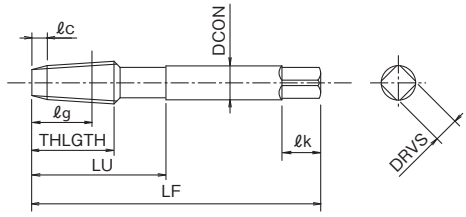
■标记说明请参考 p.2。
■柄部四方部尺寸ℓk, DRVS请参考 p.58。
＊推荐底孔径请参考 p.62。

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 icons.
■See p.58 for shank square length(ℓk) and width(DRVS).
＊Please see p.62 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.

A-S-TPT



■ 切削锥长(ℓc) 2.5P
Chamfer Length

HSSE | V | 40° | SPEED FEED P6

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 LF	螺纹部长度 THLGTH	颈长 LU	基准径位置 ℓg	柄径 DCON	槽数 NOF	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	6.2	●
8327662	PT 1/8 - 28	JIS2	90	16.5	37	10.5	8	3	8.2	●
8327663	PT 1/4 - 19	JIS2	100	19.5	49	12.5	11	3	10.9	●
8327664	PT 3/8 - 19	JIS2	100	21	50	14	14	4	14.4	●
8327665	PT 1/2 - 14	JIS2	125	27	60	17	18	4	18	●
8327667	PT 3/4 - 14	JIS2	140	29	74	19	23	4	23	●
8327669	PT 1 - 11	JIS2	160	35	80	22	26	4	29	●

●＝标准库存品 ●=Standard stock item

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 LF	螺纹部长度 THLGTH	颈长 LU	基准径位置 ℓg	柄径 DCON	槽数 NOF	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	*	●

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■柄部四方部尺寸 ℓk, DRVS请参考 p.58。
＊推荐底孔径请参考 p.62。

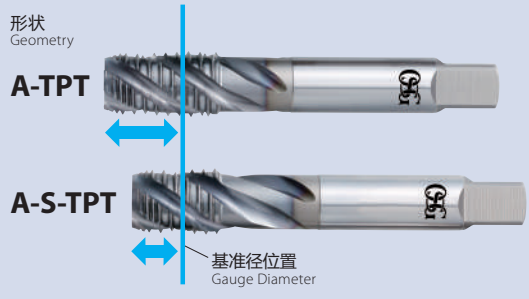
1. 丝锥精度不能保证内螺纹精度。
2. 使用进给不稳定的机械时，可能会发生内螺纹扩大的问题，请务必注意。
3. 不推荐再研磨。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).
＊Please see p.62 for recommended drill hole dia.

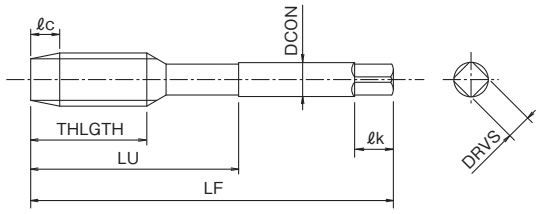
1. Tap limit does not guarantee thread limit for the internal thread after tapping.
2. Stable feed control machines are recommended to avoid over size tapping.
3. Regrinding is not recommended.

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的区别等请参考 p.57。
Please refer p.57 for precaution and difference between A-TPT and A-S-TPT.



A-SPT



■ 切削锥长(ℓc) 2.5P、1.5P
Chamfer Length

HSSE | V | 45° | SPEED FEED P5

螺纹种类：Rp　螺纹部精度符合ISO(JIS B 4446:1998)

Thread tolerance is following ISO standard.　单位:mm　Unit:mm

商品号 EDP No.	尺寸 Thread Size	切削锥部 ℓc	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327701	Rp 1/16 - 28	2.5P	90	14	36	8	3	6.5	●
8327711		1.5P							●
8327702	Rp 1/8 - 28	2.5P	90	15	37	8	3	8.5	●
8327712		1.5P							●
8327703	Rp 1/4 - 19	2.5P	100	19	49	11	3	11.4	●
8327713		1.5P							●
8327704	Rp 3/8 - 19	2.5P	100	21	50	14	4	14.9	●
8327714		1.5P							●
8327705	Rp 1/2 - 14	2.5P	125	26	60	18	4	18.5	●
8327715		1.5P							●
8327707	Rp 3/4 - 14	2.5P	140	28	74	23	4	24	●
8327717		1.5P							●
8327709	Rp 1 - 11	2.5P	160	33	80	26	4	30	●
8327719		1.5P							●

·也可使用于旧记号PS螺纹的加工。　· Can also be used for machining threads with the old PS symbol.　●＝标准库存品 ●=Standard stock item

螺纹种类：G　螺纹部精度符合ISO(JIS B 4445:1998)

Thread tolerance is following ISO standard.　单位:mm　Unit:mm

商品号 EDP No.	尺寸 Thread Size	切削锥部 ℓc	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327400	G 1/16 - 28	2.5P	STD	OH3	90	14	36	8	3	6.7	●
8327401	G 1/8 - 28	2.5P	STD	OH3	90	15	32	8	3	8.7	●
8327402	G 1/4 - 19	2.5P	STD	OH3	100	19	35	11	3	11.7	●
8327403	G 3/8 - 19	2.5P	STD	OH3	100	21	44	14	4	15.2	●
8327404	G 1/2 - 14	2.5P	STD	OH3.5	125	26	55	18	4	19	●
8327405	G 5/8 - 14	2.5P	STD	OH3.5	125	26	60	19	4	21	●
8327406	G 3/4 - 14	2.5P	STD	OH3.5	140	28	69	23	4	24.5	●
8327407	G 7/8 - 14	2.5P	STD	OH3.5	150	29	75	24	4	28	●
8327408	G 1 - 11	2.5P	STD	OH4	160	33	80	26	4	30.5	●

·也可使用于旧记号PF螺纹的加工。　· Can also be used for machining threads with the old PF symbol.　●＝标准库存品 ●=Standard stock item

■标记说明请参考p.2。
■柄部四方部尺寸ℓk, DRVS请参考p.58。

■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.

1982年，随着ISO导入后，JIS的管用螺纹规格，螺纹尺寸记号都已被修订。因为螺纹精度没有变化，所以新、旧记号可通用。

The JIS pipe thread standard was revised in 1982 to meet ISO standards. Although thread symbols changed, the limits were not changed. Therefore, it is still acceptable to use taps with both new and old symbols.
(JIS B 0202-1982 / JIS B 0203-1982)

种类 Type	旧记号 Old Symbol	新记号 New Symbol
耐密用锥管内螺纹 Taper pipe threads for pressure-tight joints	PT	Rc
耐密用平行管内螺纹 Parallel pipe threads for pressure-tight joints	PS	Rp
机械结合用平行管内螺纹 Parallel pipe threads for mechanical joints	PF	G

螺纹种类：NPS

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	切削锥部 ℓc	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327691	1/16 – 27 NPS	2.5P	ANSI G	90	14	36	8	3	*	●
8327692	1/8 – 27 NPS	2.5P	ANSI G	90	15	37	8	3	*	●
8327693	1/4 – 18 NPS	2.5P	ANSI G	100	19	49	11	3	*	●
8327694	3/8 – 18 NPS	2.5P	ANSI G	100	21	50	14	4	*	●
8327695	1/2 – 14 NPS	2.5P	ANSI G	125	26	60	18	4	*	●
8327697	3/4 – 14 NPS	2.5P	ANSI G	140	28	74	23	4	*	●
8327699	1 – 11 1/2 NPS	2.5P	ANSI G	160	33	80	26	4	*	●

·适用于NPSC螺纹和NPSM螺纹。 · Compatible with NPSC and NPSM threads.

●＝标准库存品 ●=Standard stock item

■标记说明请参考p.2。
■柄部四方部尺寸ℓk, DRVS请参考p.58。
＊推荐底孔径请参考p.62。

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 icons.
■See p.58 for shank square length(ℓk) and width(DRVS).
＊Please see p.62 for recommended drill hole dia.

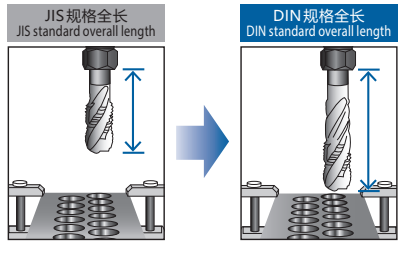
1. Tap limit does not guarantee thread limit for the internal thread after tapping.
2. Stable feed control machines are recommended to avoid over size tapping.
3. Regrinding is not recommended.

优势在这! Key Point

A-TAP管用 A-Tap Pipe Taps

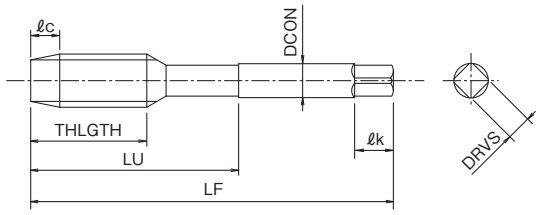
长槽长及悬伸可以防止切屑问题!
Long flute and overhang length geometry minimizes chip evacuation troubles!

・全长：加长的DIN规格
・Total length : DIN standard (longer than conventional)
・柄部：以往JIS规格
・Shank : JIS standard (conventional)



NEW SIZE

A-SFT HL



- 切削锥长(ℓc) 2.5P、1.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM <M24 | HSSE M24≧ | V | 45° | SPEED FEED P5

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	切削锥部 ℓc	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327751	M 2 × 0.4	2.5P	OH1	44	3.6	13	3	2	2.15	●
8327753	M 2.5 × 0.45	2.5P	OH1.5	46	4	19	4	3	2.65	●
8327755	M 2.6 × 0.45	2.5P	OH1.5	46	4	19	4	3	2.75	●
8327757	M 3 × 0.5	2.5P	OH1.5	48	4.8	20	4	3	3.15	●
8327759		1.5P								●
8327761	M 4 × 0.7	2.5P	OH2	60	6.4	24	5.5	3	4.25	●
8327763		1.5P								●
8327765	M 5 × 0.8	2.5P	OH2	62	8	29	6	3	5.25	●
8327767		1.5P								●
8327769	M 6 × 1	2.5P	OH2	65	12	33	6.2	3	6.3	●
8327771		1.5P								●
8327773	M 8 × 1.25	2.5P	OH2	75	15	41	7	3	8.4	●
8327775		1.5P								●
8327777	M 10 × 1.5	2.5P	OH2	82	18	48	8.5	3	10.45	●
8327779		1.5P								●
8327781	M 12 × 1.75	2.5P	OH2	90	21	48	10.5	3	12.5	●
※ 8328701	M 14 × 2	2.5P	OH2	95	24	52	13	3	14.6	○
※ 8328703	M 16 × 2	2.5P	OH2	95	24	55	14	4	16.6	○
※ 8328705	M 18 × 2.5	2.5P	OH3	115	30	63	17	4	18.7	○
※ 8328707	M 20 × 2.5	2.5P	OH3	120	30	66	19	4	20.7	○
※ 8328709	M 24 × 3	2.5P	OH3	160	36	79	21	4	24.8	○

※=NEW SIZES

●=标准库存品 ○=准标准库存品(请确认库存。)
●=Standard stock item ○=Limited standard stock item

■ 标记说明请参考 p.2。
■ 柄部四方部尺寸 ℓk, DRVS 请参考 p.58。

■ See p.2 for explanation of icons.
■ See p.58 for shank square length(ℓk) and width(DRVS).

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。

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.

螺纹种类：U

单位:mm Unit:mm

	商品号 EDP No.	尺寸 Thread Size	切削锥部 ℓc	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
※	8328711	No. 4 - 40UNC	2.5P	GH2	48	6	21	4	2	3.1	●
※	8328713	No. 6 - 32UNC	2.5P	GH2	55	8	21	5	3	3.75	●
※	8328715	No. 8 - 32UNC	2.5P	GH2	60	8	24	5.5	3	4.45	●
※	8328717	No. 8 - 36UNF	2.5P	GH2	60	7	24	5.5	3	4.4	●
※	8328719	No.10 - 24UNC	2.5P	GH2.5	62	11	29	6	3	5.2	●
	8327785	No.10 – 32UNF	2.5P	GH2	62	8	29	6	3	5.1	●
※	8328721		1.5P	GH2							●
※	8328723	¼ - 20UNC	2.5P	GH3	70	15	37	6.2	3	6.75	●
	8327787	¼ – 28UNF	2.5P	GH2.5	70	11	37	6.2	3	6.65	●
※	8328725		1.5P	GH2.5							●
	8327789	5/16 – 24UNF	2.5P	GH3	75	13	41	7	3	8.25	●
	8327791	⅜ – 24UNF	2.5P	GH3	80	13	48	8	3	9.85	●

※=NEW SIZES

●=标准库存品 ●=Standard stock item

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■See p.2 for explanation of icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

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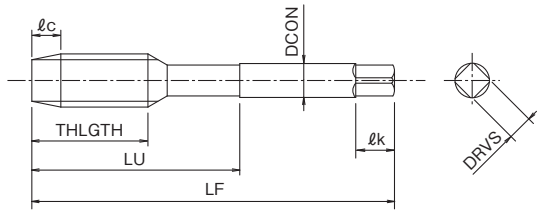
优势在这!
Key Point

GH精度 GH Limit

为了对应有高精度要求的飞机零部件加工，采用相对于OH精度公差较小的GH精度。
Applied tighter torerance GH limits to satisfy high precision demand from aerospace threading parts operation.

A-LT-SFT HL



- 切削锥长(ℓc) 2.5P
  Chamfer Length
- 全尺寸螺纹侧突顶尖去除品
  The entire lineup of A-SFT is without external center on the screw side.

CPM | V | 45° | SPEED FEED P5

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327801	M 3 × 0.5 × 100	OH1.5	100	4.8	20	4	3	3.15	●
8327803	M 4 × 0.7 × 100	OH2	100	6.4	24	5.5	3	4.25	●
8327805	M 5 × 0.8 × 100	OH2	100	8	29	6	3	5.25	●
8327807	M 6 × 1 × 100	OH2	100	12	33	6.2	3	6.3	●
8327809	M 8 × 1.25 × 100	OH2	100	15	41	7	3	8.4	●
8327811	M 10 × 1.5 × 100	OH2	100	18	48	8.5	3	10.45	●

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■柄部四方部尺寸ℓk, DRVS请参考 p.58。

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 icons.
■See p.58 for shank square length(ℓk) and width(DRVS).

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2. Stable feed control machines are recommended to avoid over size tapping.
3. Regrinding is not recommended.

嵌套安装前螺纹检查！
For inspection of threads before insert installation!

嵌套螺纹用极限塞规
Limit Gauges for Helicoil/EG/STI

HL-LG

- 公制螺纹(M)　2级
  Metric Screw Threads　Class 2
  M2.6×0.45 ～ M20×1.5
- 美制螺纹(U)　2B级
  Unified Inch Screw Threads　Class 2B
  No.4-40UNC～1-12UNF

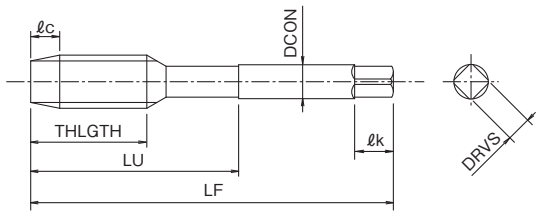
TiN 涂层 嵌套螺纹用极限塞规
TiN Coated Insert Thread Limit Plug Gauge

TIN-HL-LG

通过高硬度的TiN涂层，实现螺纹量规的长寿命化
Long tool life of the thread gauge is achieved by the high hardness TiN coating

- 美制螺纹(UNJ)　3B级
  Unified Inch Screw Threads(UNJ Thread form)　Class 3B
  0.1380-32UNJC～0.7500-16UNJF

A-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V SPEED FEED P6

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325034	M 1.4 × 0.3	STD	OH1	34	9	—	3	2	Yes	1.12	●
8325039	M 1.6 × 0.35	STD	OH1.5	36	10	—	3	2	Yes	1.27	●
8325044	M 1.7 × 0.35	STD	OH1.5	36	11	—	3	2	Yes	1.37	●
8325049	M 2 × 0.4	STD	OH1.5	40	12	—	3	2	Yes	1.63	●
8325430		STD+1	OH2.5								●
8325431		STD+2	OH3.5								●
8325050	M 2 × 0.25	STD	OH1	40	12	—	3	2	Yes	1.77	●
8325432		STD+1	OH2								●
8325052	M 2.2 × 0.45	STD	OH2	42	13	—	3	2	Yes	1.77	●
8325434		STD+1	OH3								●
8325053	M 2.2 × 0.25	STD	OH1	42	13	—	3	2	Yes	1.97	●
8325436		STD+1	OH2								●
8325054	M 2.3 × 0.4	STD	OH1.5	42	13	—	3	2	Yes	1.92	●
8325438		STD+1	OH2.5								●
8325059	M 2.5 × 0.45	STD	OH2	44	14	—	3	2	Yes	2.08	●
8325440		STD+1	OH3								●
8325441		STD+2	OH4								●
8325062	M 2.5 × 0.35	STD	OH2	44	14	—	3	2	Yes	2.17	●
8325442		STD+1	OH3								●
8325064	M 2.6 × 0.45	STD	OH2	44	14	—	3	2	Yes	2.17	●
8325444		STD+1	OH3								●
8325069	M 3 × 0.5	STD	OH3	46	11	19	4	3	Yes	2.53	●
8325450		STD+1	OH4								●
8325451		STD+2	OH5								●

●＝标准库存品 ●=Standard stock item

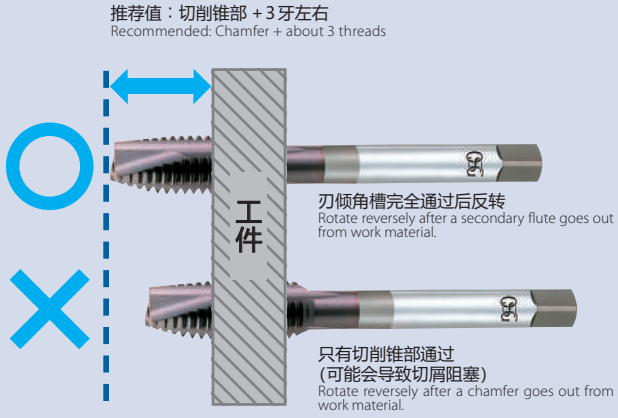
NEXT

加工要点
(刃倾角丝锥的最佳用法)

Points of Tapping (how to use a spiral pointed tap properly)

刃倾角丝锥是贯穿工件端面，通过它前面的副槽排出切屑的。

Spiral pointed tap can discharge chips smoothly by setting the stroke so that a secondary flute goes out from the end face of work material.



FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325072	M 3 × 0.35	STD	OH2	46	11	19	4	3	Yes	2.67	●
8325452		STD+1	OH3								●
8325076	M 3.5 × 0.6	STD	OH2	48	13	20	4	3	Yes	2.92	●
8325454		STD+1	OH3								●
8325079	M 3.5 × 0.35	STD	OH2	48	13	20	4	3	Yes	3.15	●
8325455		STD+1	OH3								●
8325083	M 4 × 0.7	STD	OH3	52	13	21	5	3	Yes	3.35	●
8325460		STD+1	OH4								●
8325461		STD+2	OH5								●
8325086	M 4 × 0.5	STD	OH3	52	13	21	5	3	Yes	3.5	●
8325462		STD+1	OH4								●
8325087	M 4.5 × 0.75	STD	OH3	55	13	21	5	3	Yes	3.8	●
8325464		STD+1	OH4								●

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考 p.58。

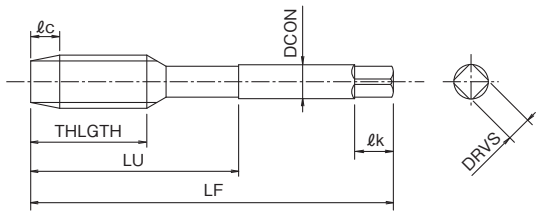
1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 使用进给不稳定的机械时，可能会发生内螺纹扩大的问题，请务必注意。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

NEXT

A-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V SPEED FEED P6

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325088	M 4.5 × 0.5	STD	OH3	55	13	21	5	3	Yes	4	●
8325465		STD+1	OH4								●
8325090	M 5 × 0.8	STD	OH3	60	16	24	5.5	3	Yes	4.25	●
8325468		STD+1	OH4								●
8325469		STD+2	OH5								●
8325093	M 5 × 0.5	STD	OH3	60	16	24	5.5	3	Yes	4.5	●
8325473		STD+1	OH4								●
8325095	M 5.5 × 0.5	STD	OH3	60	17	25	5.5	3	Yes	5.05	●
8325476		STD+1	OH4								●
8325097	M 6 × 1	STD	OH3	62	19	29	6	3	Yes	5.1	●
8325478		STD+1	OH4								●
8325479		STD+2	OH5								●
8325100	M 6 × 0.75	STD	OH3	62	19	29	6	3	Yes	5.3	●
8325480		STD+1	OH4								●
8325102	M 6 × 0.5	STD	OH3	62	19	29	6	3	Yes	5.5	●
8325481		STD+1	OH4								●
8325104	M 7 × 1	STD	OH3	65	19	33	6.2	3	Yes	6.1	●
8325484		STD+1	OH4								●
8325105	M 7 × 0.75	STD	OH3	65	19	33	6.2	3	Yes	6.3	●
8325485		STD+1	OH4								●
8325107	M 8 × 1.25	STD	OH3	70	22	37	6.2	3	Yes	6.8	●
8325488		STD+1	OH4								●
8325489		STD+2	OH5								●

●＝标准库存品 ●=Standard stock item

NEXT

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325111	M 8 × 1	STD	OH3	70	22	37	6.2	3	Yes	7.1	●
8325490		STD+1	OH4								●
8325112	M 8 × 0.75	STD	OH3	70	22	37	6.2	3	Yes	7.3	●
8325491		STD+1	OH4								●
8325114	M 9 × 1.25	STD	OH3	72	22	38	7	3	Yes	7.8	●
8325494		STD+1	OH4								●
8325115	M 9 × 1	STD	OH3	72	22	38	7	3	Yes	8.1	●
8325495		STD+1	OH4								●
8325116	M 9 × 0.75	STD	OH3	72	22	38	7	3	Yes	8.3	●
8325496		STD+1	OH4								●
8325117	M 10 × 1.5	STD	OH4	75	24	41	7	3	—	8.6	●
8325500		STD+1	OH5								●
8325501		STD+2	OH6								●
8325121	M 10 × 1.25	STD	OH3	75	24	41	7	3	—	8.8	●
8325502		STD+1	OH4								●
8325124	M 10 × 1	STD	OH3	75	24	41	7	3	—	9.1	●
8325503		STD+1	OH4								●
8325125	M 10 × 0.75	STD	OH3	75	24	41	7	3	—	9.3	●
8325504		STD+1	OH4								●
8325127	M 11 × 1.5	STD	OH4	80	25	48	8	3	—	9.6	●
8325510		STD+1	OH5								●
8325128	M 11 × 1	STD	OH3	80	25	48	8	3	—	10.1	●
8325514		STD+1	OH4								●
8325129	M 11 × 0.75	STD	OH3	80	25	48	8	3	—	10.3	●
8325515		STD+1	OH4								●

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5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

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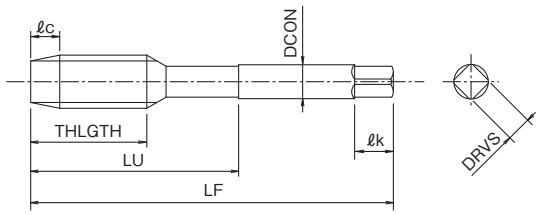
The recommended drill hole size that are not listed on JIS is as reference.

NEXT

A-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V SPEED FEED P6

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325130	M 12 × 1.75	STD	OH4	82	29	48	8.5	3	—	10.3	●
8325518		STD+1	OH5								●
8325519		STD+2	OH6								●
8325134	M 12 × 1.5	STD	OH4	82	29	48	8.5	3	—	10.6	●
8325520		STD+1	OH5								●
8325137	M 12 × 1.25	STD	OH4	82	29	48	8.5	3	—	10.8	●
8325521		STD+1	OH5								●
8325140	M 12 × 1	STD	OH3	82	29	48	8.5	3	—	11.1	●
8325522		STD+1	OH4								●
8325147	M 14 × 2	STD	OH4	88	30	48	10.5	3	—	12.1	●
8325530		STD+1	OH5								●
8325150	M 14 × 1.5	STD	OH4	88	30	48	10.5	3	—	12.5	●
8325531		STD+1	OH5								●
8325152	M 14 × 1.25	STD	OH4	88	30	48	10.5	3	—	12.8	●
8325532		STD+1	OH5								●
8325154	M 14 × 1	STD	OH3	88	30	48	10.5	3	—	13	●
8325533		STD+1	OH4								●
8325155	M 15 × 1.5	STD	OH4	95	32	52	10.5	3	—	13.5	●
8325536		STD+1	OH5								●
8325156	M 15 × 1	STD	OH3	95	32	52	10.5	3	—	14	●
8325537		STD+1	OH4								●
8325157	M 16 × 2	STD	OH4	95	32	52	12.5	3	—	14	●
8325540		STD+1	OH5								●

●＝标准库存品 ●=Standard stock item

NEXT

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325160	M 16 × 1.5	STD	OH4	95	32	52	12.5	3	—	14.5	●
8325541		STD+1	OH5								●
8325162	M 16 × 1	STD	OH3	95	32	52	12.5	3	—	15	●
8325542		STD+1	OH4								●
8325164	M 17 × 1.5	STD	OH4	100	37	55	13	3	—	15.5	●
8325545		STD+1	OH5								●
8325166	M 17 × 1	STD	OH3	100	37	55	13	3	—	16	●
8325546		STD+1	OH4								●
8325167	M 18 × 2.5	STD	OH5	100	37	55	14	3	—	15.5	●
8325549		STD+1	OH6								●
8325169	M 18 × 2	STD	OH4	100	37	55	14	3	—	16	●
8325550		STD+1	OH5								●
8325170	M 18 × 1.5	STD	OH4	100	37	55	14	3	—	16.5	●
8325551		STD+1	OH5								●
8325172	M 18 × 1	STD	OH3	100	37	55	14	3	—	17	●
8325552		STD+1	OH4								●
8325177	M 20 × 2.5	STD	OH5	105	37	58	15	3	—	17.5	●
8325557		STD+1	OH6								●
8325179	M 20 × 2	STD	OH4	105	37	58	15	3	—	18	●
8325558		STD+1	OH5								●
8325180	M 20 × 1.5	STD	OH4	105	37	58	15	3	—	18.5	●
8325559		STD+1	OH5								●
8325182	M 20 × 1	STD	OH3	105	37	58	15	3	—	19	●
8325560		STD+1	OH4								●
8325187	M 22 × 2.5	STD	OH5	115	38	63	17	3	—	19.5	●
8325563		STD+1	OH6								●
8325189	M 22 × 2	STD	OH4	115	38	63	17	3	—	20	●
8325564		STD+1	OH5								●

●＝标准库存品 ●=Standard stock item

■标记说明请参考p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考p.58。

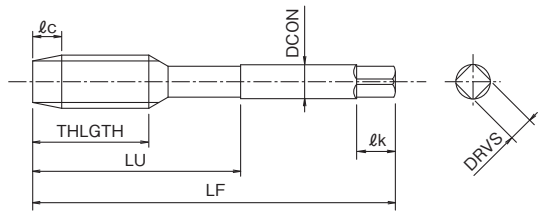
1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 使用进给不稳定的机械时，可能会发生内螺纹扩大的问题，请务必注意。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

NEXT

A-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V SPEED FEED P6

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8325190	M 22 × 1.5	STD	OH4	115	38	63	17	3	—	20.5	●
8325565		STD+1	OH5								●
8325192	M 22 × 1	STD	OH3	115	38	63	17	3	—	21	●
8325566		STD+1	OH4								●
8325197	M 24 × 3	STD	OH5	120	45	66	19	3	—	21	●
8325569		STD+1	OH6								●
8325199	M 24 × 2	STD	OH4	120	45	66	19	3	—	22	●
8325570		STD+1	OH5								●
8325200	M 24 × 1.5	STD	OH4	120	45	66	19	3	—	22.5	●
8325571		STD+1	OH5								●
8325202	M 24 × 1	STD	OH3	120	45	66	19	3	—	23	●
8325572		STD+1	OH4								●

●＝标准库存品 ●=Standard stock item

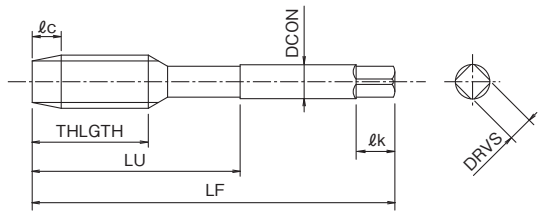
■标记说明请参考p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考p.58。

1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除JIS规格没有的内螺纹)
   JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard (with the exception of internal threads not listed in the JIS standard).
   The recommended drill hole size that are not listed on JIS is as reference.

A-LT-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V SPEED FEED P6

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326002	M2 × 0.4 × 80	STD	OH1.5	80	12	—	3	2	Yes	1.63	●
8326001	M2 × 0.25 × 80	STD	OH1	80	12	—	3	2	Yes	1.77	●
8326004	M2.2× 0.45 × 80	STD	OH2	80	13	—	3	2	Yes	1.77	●
8326003	M2.2× 0.25 × 80	STD	OH1	80	13	—	3	2	Yes	1.97	●
8326005	M2.3× 0.4 × 80	STD	OH1.5	80	13	—	3	2	Yes	1.92	●
8326007	M2.5× 0.45 × 80	STD	OH2	80	14	—	3	2	Yes	2.08	●
8326006	M2.5× 0.35 × 80	STD	OH2	80	14	—	3	2	Yes	2.17	●
8326008	M2.6× 0.45 × 80	STD	OH2	80	14	—	3	2	Yes	2.17	●
8326010	M3 × 0.5 ×100	STD	OH3	100	11	20	4	3	Yes	2.53	●
8326009	M3 × 0.35 ×100	STD	OH2	100	11	20	4	3	Yes	2.67	●
8326012	M3.5× 0.6 ×100	STD	OH2	100	13	24	4	3	Yes	2.92	●
8326011	M3.5× 0.35 ×100	STD	OH2	100	13	24	4	3	Yes	3.15	●
8326014	M4 × 0.7 ×100	STD	OH3	100	13	27	5	3	Yes	3.35	●
8326013	M4 × 0.5 ×100	STD	OH3	100	13	27	5	3	Yes	3.5	●
8326016	M4.5× 0.75 ×100	STD	OH3	100	13	30	5	3	Yes	3.8	●
8326015	M4.5× 0.5 ×100	STD	OH3	100	13	30	5	3	Yes	4	●
8326018	M5 × 0.8 ×100	STD	OH3	100	16	33	5.5	3	Yes	4.25	●
8326017	M5 × 0.5 ×100	STD	OH3	100	16	33	5.5	3	Yes	4.5	●
8326019	M5.5× 0.5 ×100	STD	OH3	100	17	37	5.5	3	Yes	5.05	●
8326022	M6 × 1 ×100	STD	OH3	100	19	40	6	3	Yes	5.1	●
8326023	M6 × 1 ×150	STD	OH3	150	19	40	6	3	Yes	5.1	●
8326020	M6 × 0.75 ×100	STD	OH3	100	19	40	6	3	Yes	5.3	●
8326021	M6 × 0.75 ×150	STD	OH3	150	19	40	6	3	Yes	5.3	●

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考 p.58。

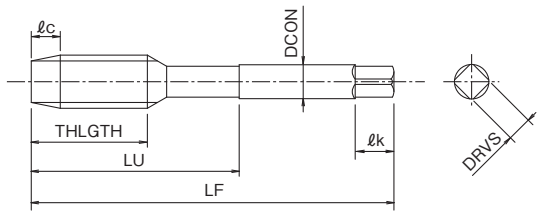
1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 使用进给不稳定的机械时，可能会发生内螺纹扩大的问题，请务必注意。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

NEXT

A-LT-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V SPEED FEED P6

FROM

螺纹种类：M

单位:mm Unit:mm

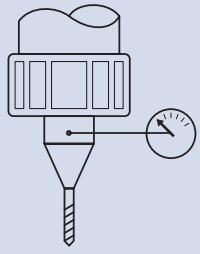
商品号 EDP No.	尺寸 Thread Size		精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326026	M7 × 1	×100	STD	OH3	100	19	40	6.2	3	Yes	6.1	●
8326027		×150			150		60					●
8326024	M7 × 0.75	×100	STD	OH3	100	19	40	6.2	3	Yes	6.3	●
8326025		×150			150		60					●
8326032	M8 × 1.25	×100	STD	OH3	100	22	40	6.2	3	Yes	6.8	●
8326033		×150			150		60					●
8326030	M8 × 1	×100	STD	OH3	100	22	40	6.2	3	Yes	7.1	●
8326031		×150			150		60					●
8326028	M8 × 0.75	×100	STD	OH3	100	22	40	6.2	3	Yes	7.3	●
8326029		×150			150		60					●
8326038	M9 × 1.25	×100	STD	OH3	100	22	40	7	3	Yes	7.8	●
8326039		×150			150		60					●
8326036	M9 × 1	×100	STD	OH3	100	22	40	7	3	Yes	8.1	●
8326037		×150			150		60					●
8326034	M9 × 0.75	×100	STD	OH3	100	22	40	7	3	Yes	8.3	●
8326035		×150			150		60					●
8326046	M10 × 1.5	×100	STD	OH4	100	24	41	7	3	—	8.6	●
8326047		×150			150		60					●
8326044	M10 × 1.25	×100	STD	OH3	100	24	41	7	3	—	8.8	●
8326045		×150			150		60					●
8326042	M10 × 1	×100	STD	OH3	100	24	41	7	3	—	9.1	●
8326043		×150			150		60					●
8326040	M10 × 0.75	×100	STD	OH3	100	24	41	7	3	—	9.3	●
8326041		×150			150		60					●

●＝标准库存品 ●=Standard stock item

加工要点(安装跳动的影响)
Points of Tapping (effect of attachment runout)

・抑制安装跳动使其稳定加工。
・详细请参考p.28。

・ Stable tapping can be ensured by controlling the attachment runout.
・ Please see p.28 for the furthur details.



NEXT

优势在这!
Key Point

A-LT-POT 采用长颈形状，可对应标准型无法处理的深孔加工!

A long-neck type "A-LT-POT" is introduced in A-POT.
It's suitble for deep hole tapping that regular taps cannot handle.

A-LT-POT

A-POT

FROM

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size		精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326052	M11 × 1.5	×100	STD	OH4	100	25	48	8	3	—	9.6	●
8326053		×150			150		60					●
8326092	M11 × 1.25	×100	STD	OH3	100	25	48	8	3	—	9.8	●
8326093		×150			150		60					●
8326050	M11 × 1	×100	STD	OH3	100	25	48	8	3	—	10.1	●
8326051		×150			150		60					●
8326048	M11 × 0.75	×100	STD	OH3	100	25	48	8	3	—	10.3	●
8326049		×150			150		60					●
8326060	M12 × 1.75	×100	STD	OH4	100	29	48	8.5	3	—	10.3	●
8326061		×150			150		60					●
8326058	M12 × 1.5	×100	STD	OH4	100	29	48	8.5	3	—	10.6	●
8326059		×150			150		60					●
8326056	M12 × 1.25	×100	STD	OH4	100	29	48	8.5	3	—	10.8	●
8326057		×150			150		60					●
8326054	M12 × 1	×100	STD	OH3	100	29	48	8.5	3	—	11.1	●
8326055		×150			150		60					●
8326065	M14 × 2	×150	STD	OH4	150	30	60	10.5	3	—	12.1	●
8326064	M14 × 1.5	×150	STD	OH4	150	30	60	10.5	3	—	12.5	●
8326063	M14 × 1.25	×150	STD	OH4	150	30	60	10.5	3	—	12.8	●
8326062	M14 × 1	×150	STD	OH3	150	30	60	10.5	3	—	13	●
8326067	M15 × 1.5	×150	STD	OH4	150	32	60	10.5	3	—	13.5	●
8326066	M15 × 1	×150	STD	OH3	150	32	60	10.5	3	—	14	●
8326070	M16 × 2	×150	STD	OH4	150	32	60	12.5	3	—	14	●
8326071		×200			200		80					●

●=标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考 p.58。

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3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

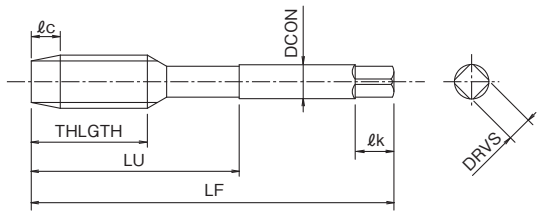
■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

NEXT

刃倾角丝锥 长柄型 Spiral Pointed Tap with Long Shank

A-LT-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM | V | SPEED FEED P6

FROM

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size		精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326069	M16 × 1.5	×150	STD	OH4	150	32	60	12.5	3	—	14.5	●
8326068	M16 × 1	×150	STD	OH3	150	32	60	12.5	3	—	15	●
8326073	M17 × 1.5	×150	STD	OH4	150	37	60	13	3	—	15.5	●
8326072	M17 × 1	×150	STD	OH3	150	37	60	13	3	—	16	●
8326077	M18 × 2.5	×150	STD	OH5	150	37	60	14	3	—	15.5	●
8326076	M18 × 2	×150	STD	OH4	150	37	60	14	3	—	16	●
8326075	M18 × 1.5	×150	STD	OH4	150	37	60	14	3	—	16.5	●
8326074	M18 × 1	×150	STD	OH3	150	37	60	14	3	—	17	●
8326081	M20 × 2.5	×150	STD	OH5	150	37	60	15	3	—	17.5	●
8326082		×200			200		80					●
8326080	M20 × 2	×150	STD	OH4	150	37	60	15	3	—	18	●
8326079	M20 × 1.5	×150	STD	OH4	150	37	60	15	3	—	18.5	●
8326078	M20 × 1	×150	STD	OH3	150	37	60	15	3	—	19	●
8326086	M22 × 2.5	×150	STD	OH5	150	38	63	17	3	—	19.5	●
8326085	M22 × 2	×150	STD	OH4	150	38	63	17	3	—	20	●
8326084	M22 × 1.5	×150	STD	OH4	150	38	63	17	3	—	20.5	●
8326083	M22 × 1	×150	STD	OH3	150	38	63	17	3	—	21	●
8326090	M24 × 3	×150	STD	OH5	150	45	66	19	3	—	21	●
8326091		×200			200							●
8326089	M24 × 2	×150	STD	OH4	150	45	66	19	3	—	22	●
8326088	M24 × 1.5	×150	STD	OH4	150	45	66	19	3	—	22.5	●
8326087	M24 × 1	×150	STD	OH3	150	45	66	19	3	—	23	●

●＝标准库存品 ●=Standard stock item

■标记说明请参考p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考p.58。

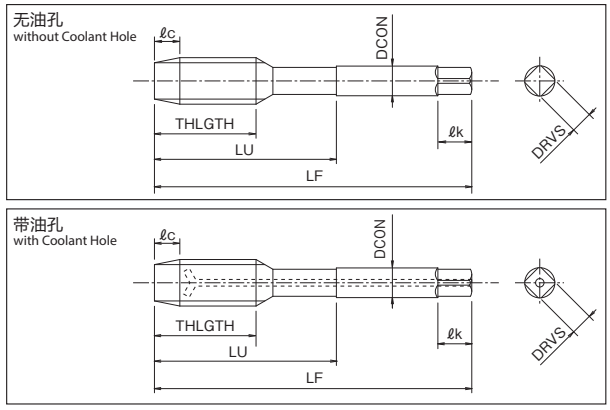
1. 精度栏 是相当于2级内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 使用进给不稳定的机械时，可能会发生内螺纹扩大的问题，请务必注意。
4. 不推荐再研磨。
5. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS class 2 internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS class 2 internal thread standard.
The recommended drill hole size that are not listed on JIS is as reference.

A-POT

立铣刀柄型采用与高速同步丝锥HS系列相同的柄部形状。
A-SFT with end mill style shank uses the same shank shape as OSG's HS (high speed) synchro tap series.



- 切削锥长(ℓc) 5P
  Chamfer Length
- 部分尺寸含有带油孔的款式
  Some sizes are available with coolant hole.

CPM V SHANK h7 SPEED FEED P6

螺纹种类：M

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	油孔 Oil Hole	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock		標準価格 (Yen)
8325800	M 3 × 0.5 – 4	—	STD	OH3	46	11	19	4	3	Yes	2.53	D	●	3,610
8325801	M 4 × 0.7 – 6	—	STD	OH3	52	13	21	6	3	Yes	3.35	D	●	3,540
8325802	M 5 × 0.8 – 6	—	STD	OH3	60	16	24	6	3	Yes	4.25	D	●	3,590
8325803	M 6 × 1 – 6	—	STD	OH3	62	19	29	6	3	Yes	5.1	D	●	3,630
8326901		Yes								—			●	6,770
8326902	M 6 × 0.75 – 6	Yes	STD	OH3	62	19	29	6	3	—	5.3	D	●	7,680
8325804	M 8 × 1.25 – 8	—	STD	OH4	70	22	37	8	3	Yes	6.8	D	●	4,780
8326903		Yes								—			●	8,210
8326904	M 8 × 1 – 8	Yes	STD	OH3	70	22	37	8	3	—	7.1	D	●	8,710
8325806	M 10 × 1.5 – 8	—	STD	OH4	75	24	41	8	3	—	8.6	D	●	5,740
8326905		Yes											●	9,320
8325805	M 10 × 1.25 – 8	—	STD	OH4	75	24	41	8	3	—	8.8	D	●	5,740
8326906		Yes											●	9,320
8325807	M 12 × 1.75 – 10	—	STD	OH4	82	29	48	10	3	—	10.3	D	●	7,540
8326907		Yes											●	11,300
8326908	M 12 × 1.5 – 10	Yes	STD	OH4	82	29	48	10	3	—	10.6	D	●	11,300
8326909	M 12 × 1.25 – 10	Yes	STD	OH4	82	29	48	10	3	—	10.8	D	●	11,300
8325808	M 14 × 2 – 12	—	STD	OH5	88	30	48	12	3	—	12.1	D	●	10,800

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考 p.58。

1. 虽然铣刀柄产品可与筒夹刀柄、铣刀刀柄等兼容，但仍建议使用带防转结构的刀柄。
2. 精度栏 是以确保高精度及完全同步进给相结合为前提的相当于2级丝锥的推荐精度。
3. 丝锥精度不能保证内螺纹精度。
4. 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。
5. 不推荐再研磨。
6. 推荐底孔径为旧JIS2级内螺纹用。(除旧JIS规格没有的内螺纹)
   JIS规格中没有的内螺纹底孔径仅供参考。

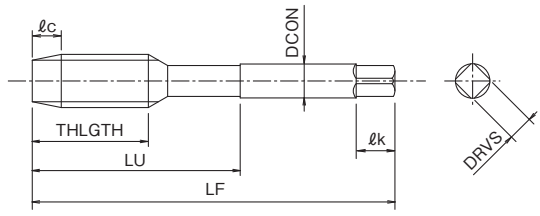
■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. Although taps with end mill shank are compatible with a collet holder, milling holder and etc., use a holder with a detent.
2. The recommended tap limit corresponds to JIS class 2 internal thread standards only if combination of maintaining the high accuracy and complete synchronous feed is applied.
3. Tap limit does not guarantee thread limit for the internal thread after tapping.
4. Stable feed control machines are recommended to avoid over size tapping.
5. Regrinding is not recommended.
6. The recommended tap limit corresponds to JIS class 2 internal thread standard. The recommended drill hole size that are not listed on JIS is as reference.

刃倾角丝锥 长柄型（立铣刀柄型） Spiral Pointed Tap with Long Shank (End Mill Shank)

A-LT-POT

立铣刀柄型采用与高速同步丝锥HS系列相同的柄部形状。
A-SFT with end mill style shank uses the same shank shape as OSG's HS (high speed) synchro tap series.



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V | SHANK h7 | SPEED FEED P6

螺纹种类：M

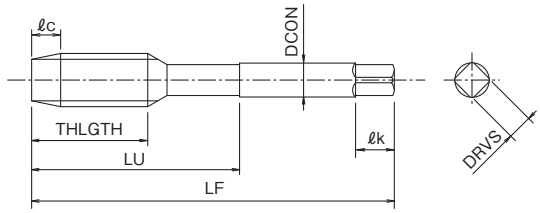
单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size		精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8326400	M 3 × 0.5	×100 – 4	STD	OH3	100	11	20	4	3	Yes	2.53	●
8326420		×150 – 4			150							●
8326401	M 4 × 0.7	×100 – 6	STD	OH3	100	13	27	6	3	Yes	3.35	●
8326421		×150 – 6			150							●
8326402	M 5 × 0.8	×100 – 6	STD	OH3	100	16	33	6	3	Yes	4.25	●
8326422		×150 – 6			150							●
8326403	M 6 × 1	×100 – 6	STD	OH3	100	19	40	6	3	Yes	5.1	●
8326423		×150 – 6			150							●
8326424		×200 – 6			200							●
8326404	M 8 × 1.25	×100 – 8	STD	OH4	100	22	53	8	3	Yes	6.8	●
8326425		×150 – 8			150							●
8326426		×200 – 8			200							●
8326406	M 10 × 1.5	×100 – 8	STD	OH4	100	24	41	8	3	—	8.6	●
8326427		×150 – 8			150		60					●
8326428		×200 – 8			200		80					●
8326405	M 10 × 1.25	×100 – 8	STD	OH4	100	24	41	8	3	—	8.8	●
8326429		×150 – 8			150		60					●
8326430		×200 – 8			200		80					●
8326407	M 12 × 1.75	×100 – 10	STD	OH4	100	29	48	10	3	—	10.3	●
8326431		×150 – 10			150		60					●
8326432		×200 – 10			200		80					●
8326408	M 14 × 2	×150 – 12	STD	OH5	150	30	60	12	3	—	12.1	●
8326433		×200 – 12			200		80					●
8326409	M 16 × 2	×150 – 16	STD	OH5	150	32	60	16	3	—	14	●
8326434		×200 – 16			200		80					●
8326410	M 20 × 2.5	×150 – 16	STD	OH5	150	37	75	16	3	—	17.5	●
8326435		×200 – 16			200		80					●
8326411	M 24 × 3	×150 – 20	STD	OH5	150	45	90	20	3	—	21	●
8326436		×200 – 20			200							●

●＝标准库存品 ●=Standard stock item

■使用上注意点请参考 p.52。 ■Please refer p.52 for notes/precaution of usage.

A-POT



■ 切削锥长(ℓc) 5P
Chamfer Length

CPM V SPEED FEED P6

螺纹种类：U

单位:mm Unit:mm

商品号 EDP No.	尺寸 Thread Size	精度标识 Grade	精度 TAP Limit	全长 LF	螺纹部长度 THLGTH	颈长 LU	柄径 DCON	槽数 NOF	突顶尖 External Center	推荐底孔径 Recommended drill hole dia.	库存 Stock
8327012	No. 4 – 40UNC	STD	OH2	44	15	—	3	2	Yes	2.3	●
8327018	No. 5 – 40UNC	STD	OH2	46	11	19	4	3	Yes	2.6	●
8327024	No. 6 – 32UNC	STD	OH2	48	13	21	4	3	Yes	2.8	●
8327030	No. 8 – 32UNC	STD	OH2	52	13	21	5	3	Yes	3.4	●
8327036	No. 10 – 24UNC	STD	OH2	60	16	24	5.5	3	Yes	3.8	●
8327039	No. 10 – 32UNF	STD	OH2	60	16	24	5.5	3	Yes	4.1	●
8327049	1/4 – 20UNC	STD	OH3	62	19	29	6	3	Yes	5.1	●
8327051	1/4 – 28UNF	STD	OH2	62	19	29	6	3	Yes	5.5	●
8327058	5/16 – 18UNC	STD	OH3	70	22	37	6.1	3	Yes	6.6	●
8327061	5/16 – 24UNF	STD	OH3	70	22	37	6.1	3	Yes	6.9	●
8327067	3/8 – 16UNC	STD	OH3	75	24	41	7	3	—	8	●
8327073	3/8 – 24UNF	STD	OH3	75	24	41	7	3	—	8.5	●
8327080	7/16 – 14UNC	STD	OH3	80	25	48	8	3	—	9.4	●
8327083	7/16 – 20UNF	STD	OH3	80	25	48	8	3	—	9.9	●
8327090	1/2 – 13UNC	STD	OH4	85	29	48	9	3	—	10.8	●
8327096	1/2 – 20UNF	STD	OH3	85	29	48	9	3	—	11.5	●
8327105	9/16 – 12UNC	STD	OH4	90	30	48	10.5	3	—	12.2	●
8327108	9/16 – 18UNF	STD	OH3	90	30	48	10.5	3	—	12.9	●
8327111	5/8 – 11UNC	STD	OH4	95	32	52	12	3	—	13.6	●
8327114	5/8 – 18UNF	STD	OH3	95	32	52	12	3	—	14.5	●
8327120	3/4 – 10UNC	STD	OH4	105	37	58	14	3	—	16.5	●
8327123	3/4 – 16UNF	STD	OH4	105	37	58	14	3	—	17.5	●
8327130	7/8 – 9UNC	STD	OH5	115	38	63	17	3	—	19.5	●
8327132	7/8 – 14UNF	STD	OH4	115	38	63	17	3	—	20.5	●

●＝标准库存品 ●=Standard stock item

■标记说明请参考 p.2。
■突顶尖长·柄部四方部尺寸ℓk, DRVS请参考 p.58。

1. 精度栏 是相当于2B内螺纹适应的丝锥推荐精度。
2. 丝锥精度不能保证内螺纹精度。
3. 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。
4. 不推荐再研磨。
5. 推荐底孔径为JIS2B内螺纹用。(除JIS规格没有的内螺纹)
   JIS规格中没有的内螺纹底孔径仅供参考。

■See p.2 for explanation of icons.
■See p.58 for length of external center and shank square length(ℓk) and width(DRVS).

1. The recommended tap limit corresponds to JIS 2 B internal thread standard.
2. Tap limit does not guarantee thread limit for the internal thread after tapping.
3. Stable feed control machines are recommended to avoid over size tapping.
4. Regrinding is not recommended.
5. The recommended tap limit corresponds to JIS 2 B internal thread standard (with the exception of internal threads not listed in the JIS standard).
   The recommended drill hole size that are not listed on JIS is as reference.

关于OH精度 OH Limit

OSG 的专用丝锥，在满足内螺纹精度的前提下，为了使操作者能够根据不同加工条件而选择丝锥精度，采用了独特的阶梯式精度方式，即OH精度。

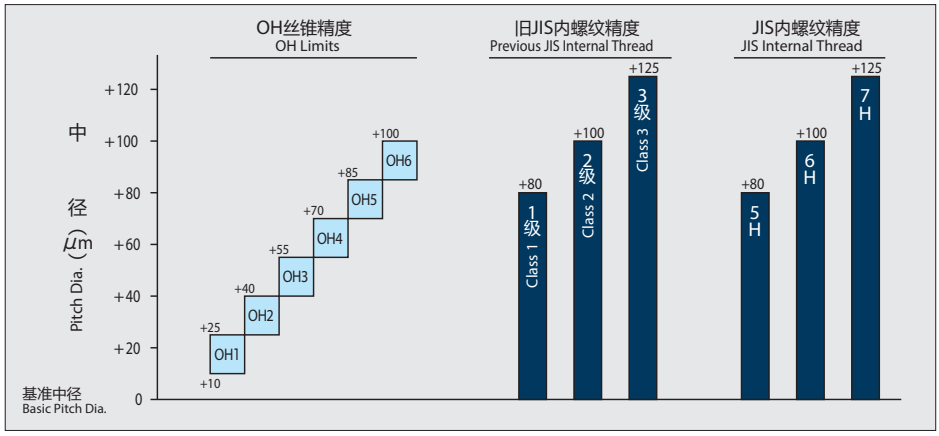
OSG applies a unique system of tap pitch diameter limits. We call it the OH Limit System. Using the step method, you can select the best tap pitch diameter limits to match your work conditions.

P≦0.6（40牙以上） P≦0.6 (T.P.I.≧40)

上公差：0.010+0.015×n
upper limit : 0.010+0.015×n
下公差：上公差−0.015
lower limit : (upper limit) −0.015

单位：mm（n=OH号）
Unit : mm (n=OH number)

■例 M3×0.5　Ex. M3×0.5

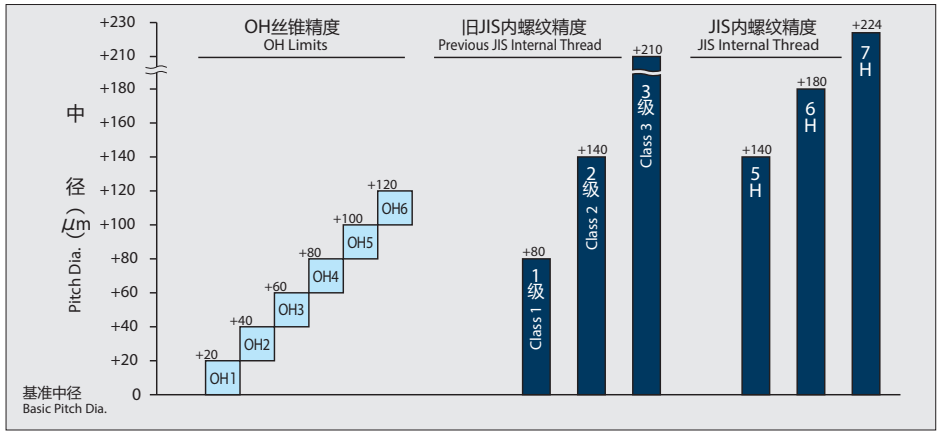


0.7（36牙以下）≦P<4（8牙以上） 0.7 (T.P.I.≦36) ≦P<4 (T.P.I.>8)

上公差：0.020×n
upper limit : 0.020×n
下公差：上公差−0.020
lower limit : (upper limit) −0.020

单位：mm（n=OH号）
Unit : mm (n=OH number)

■例 M10×1.5　Ex. M10×1.5

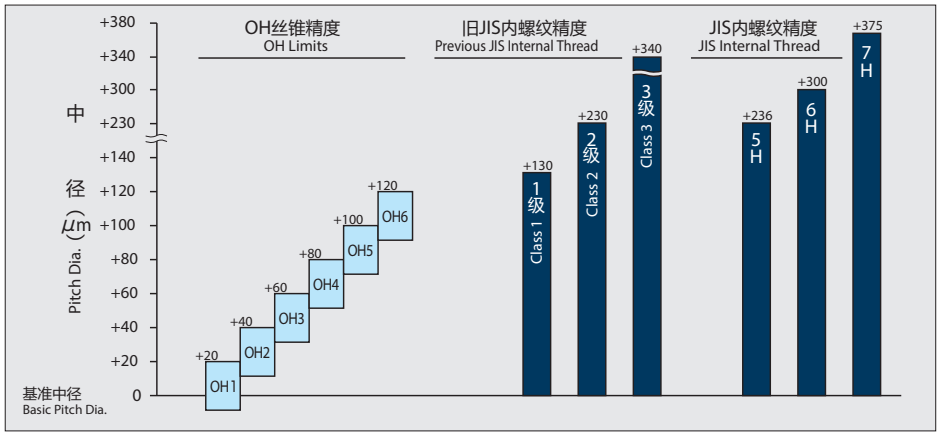


P≧4（8牙以下） P≧4 (T.P.I.≦8)

上公差：0.020×n
upper limit : 0.020×n
下公差：上公差−0.030
lower limit : (upper limit) −0.030

单位：mm（n=OH号）
Unit : mm (n=OH number)

■例 M36×4　Ex. M36×4



关于GH精度 GH Limit

为对应高精度要求的飞机零部件的螺纹加工，采用比OH精度公差更小的GH精度。

Applied tighter tolerance GH limits to satisfy high precision demand from aerospace threading parts operation.

GH精度 GH LIMIT

GH1, 2

上公差：0.013×n
upper limit : 0.013×n

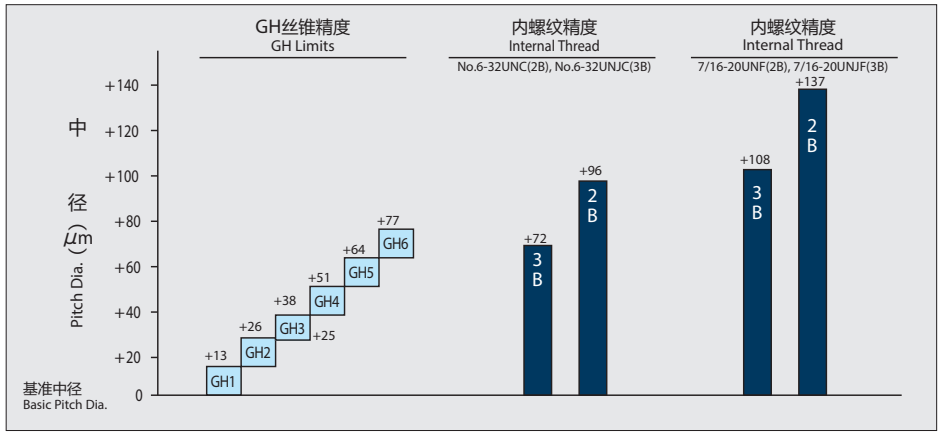
下公差：上公差－0.013 lower
limit : (upper limit) －0.013

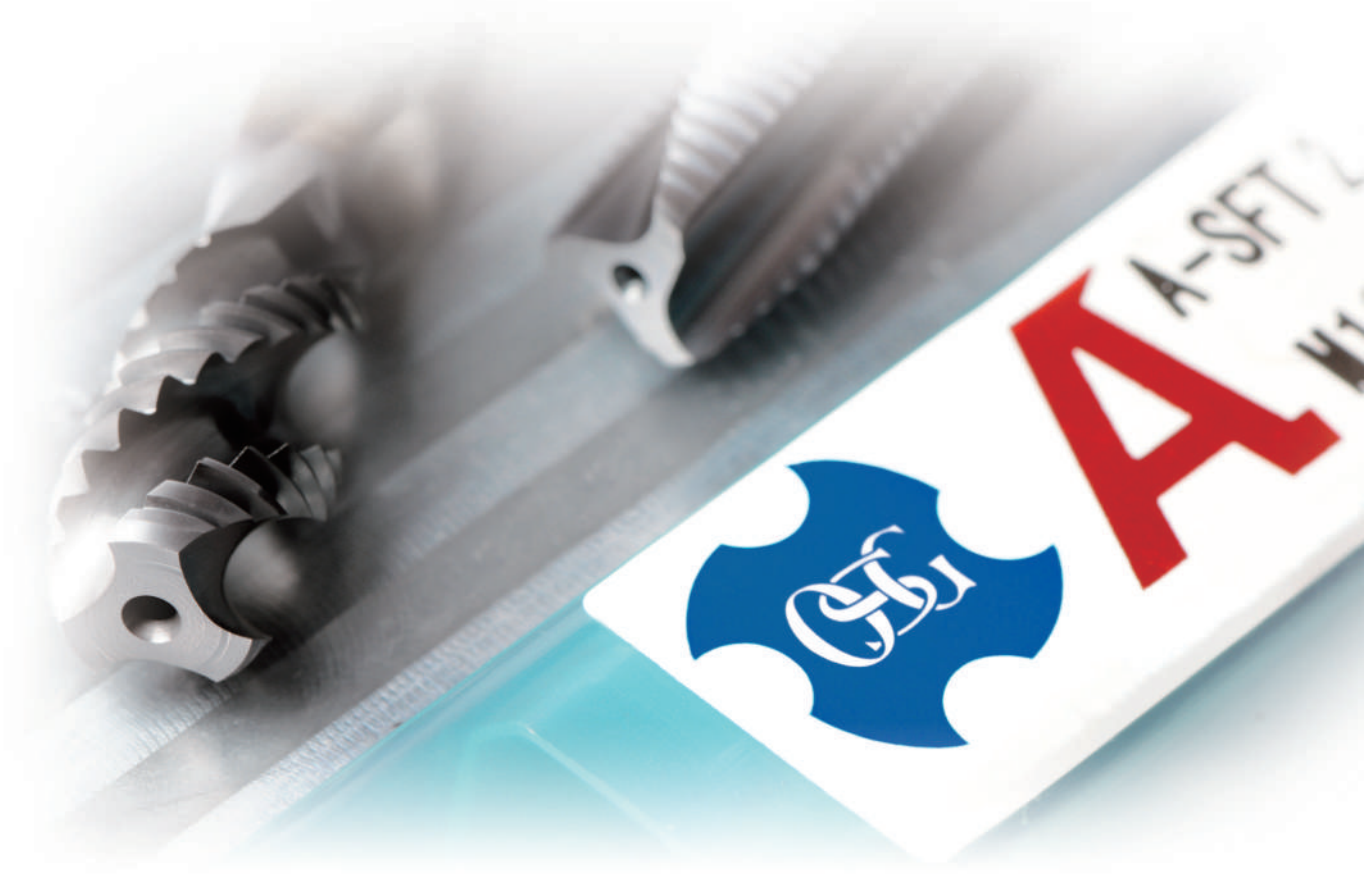
GH3以上 GH3 and over

上公差：0.013×(n-2)＋0.025
upper limit : 0.013×(n-2)+0.025

下公差：上公差－0.013 lower
limit : (upper limit) －0.013

单位：mm（n=GH号）
Unit : mm（n=GH number）



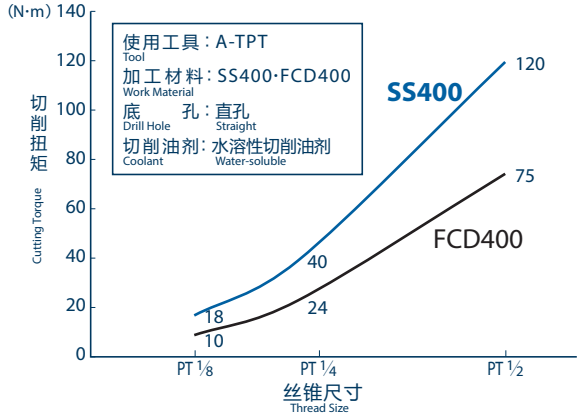


锥管螺纹丝锥的注意点

Precautions When Using Taper Pipe Taps

❶切削扭矩 Cutting Torque

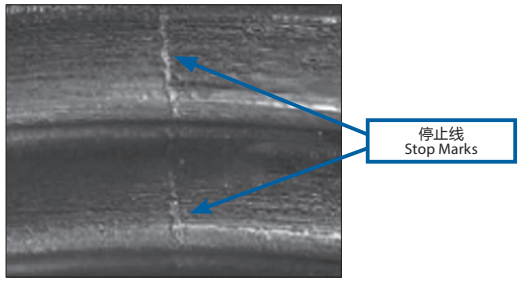
■锥管螺纹丝锥的切削扭矩 Cutting torque of taper pipe thread



锥管螺纹丝锥与一般的平行螺纹丝锥不同，完全螺纹部也参与切削，所以摩擦阻力会增加，是直槽丝锥2~3倍切削扭矩。

Unlike straight taps, taper pipe taps have a much higher volume of chip removal in the tapping process, resulting in greater friction and requires 2 - 3 times the tapping torque than hand taps.

❷停止线 Stop Marks



切削丝锥加工内螺纹，会产生停止线。发生这种不好的情况时，我们推荐使用螺纹铣刀。

Female screws processed by cut taps have stop marks. If it presents a problem, the use of OSG's thread mill series is recommended.

❸形状 Geometry

■采用跳牙形状 Interrupted thread geometry

交错刃的效果可以确保适当切深量的同时，防止烂牙。

The variable skip tooth geometry prevents galling by maintaining appropriate amount of cutting depth.

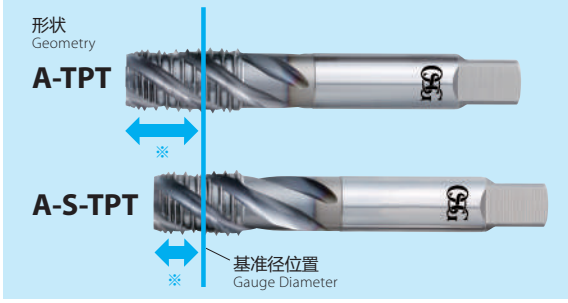
■A-TPT与A-S-TPT的形状区别 Geometry comparison of A-TPT and A-S-TPT

锥管螺纹Rc（PT）· NPT 采用以往的TPT 与S-TPT 两种形状。
螺纹部长度与基准径位置根据JIS B 4446附录（规定）锥管螺纹用丝锥（PT 形以及PS形）设定长螺纹型（TPT）与短螺纹型（S-TPT）。

Taper pipe taps Rc(PT) and NPT employs two types of geometries from the conventional TPT and S-TPT. The length of threaded parts and gauge diameters of TPT and S-TPT are following JIS B 4446 Appendix. Hand Taps for Pipe Thread for Taper Thread (PT Series Taper Taps and PS Series Parallel Taps).

例：Example

品名 Tool	商品号 EDP No.	尺寸 Thread Size	全长 Total Length	基准径位置※ Gauge Diameter
A-TPT	8327655	PT ½-14	125	25
A-S-TPT	8327665			17



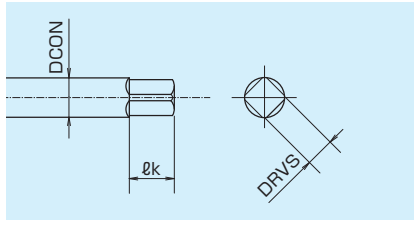
柄部四方部形状 Straight Shank with Flat Part

单位:mm Unit:mm

柄径 DCON	四方部长 ℓk	四方部宽 DRVS
3	5	2.5
4	6	3.2
5	7	4
5.5	7	4.5
6	7	4.5
6.1	8	5
6.2	8	5
7	8	5.5
8	9	6
8.5	9	6.5
9	10	7
10	11	8
10.5	11	8
11	12	9

柄径 DCON	四方部长 ℓk	四方部宽 DRVS
12	12	9
12.5	13	10
13	13	10
14	14	11
15	15	12
16	15	12
17	16	13
18	17	14
19	18	15
20	18	15
22	20	17
23	20	17
24	22	19
25	22	19

柄径 DCON	四方部长 ℓk	四方部宽 DRVS
26	24	21
28	24	21
30	26	23
32	30	26
35	30	26
38	32	29
40	35	32
44	38	35



A-POT突顶尖长 A-POT External Center Length

公制螺纹
Metric threads

单位:mm Unit:mm

尺寸 Size	长度 Length
M 1.4	0.6
M 1.6	0.6
M 1.7	0.7
M 2	0.8
M 2.2	0.8
M 2.3	1
M 2.5	1
M 2.6	1.1
M 3	1.2
M 3.5	1.5
M 4	1.7
M 4.5	1.9
M 5	2.2
M 5.5	2.4
M 6	2.6
M 7	3.1
M 8	3.5
M 9	4

美制螺纹
Unified threads

单位:mm Unit:mm

尺寸 Size	长度 Length
No. 4	1.2
No. 5	1.3
No. 6	1.5
No. 8	1.8
No. 10	2.1
U 1/4	2.7
U 5/16	3.4

※突顶尖长为参考值。
※The lengths listed above are for reference only.

螺纹底孔径表 Recommended Drill Hole Size

公制螺纹 Metric screw threads

JIS B 0209-1: 2001
JIS B 8031: 2006

螺纹尺寸 Thread Size	推荐底孔径 Recommended drill hole dia.	最小底孔径 Min. drill hole dia.	最大底孔径 Max. drill hole dia.	
		各精度通用	旧JIS2级用	6H用
M 1.4 × 0.3	1.12	1.08	1.14	1.16
M 1.6 × 0.35	1.27	1.23	1.32	1.32
※ M 1.7 × 0.35	1.37	1.33	—	1.42
M 2 × 0.4	1.63	1.57	1.67	1.67
M 2 × 0.25	1.77	1.73	—	1.8
M 2.2 × 0.45	1.77	1.72	1.83	1.83
M 2.2 × 0.25	1.97	1.93	—	2
※ M 2.3 × 0.4	1.92	1.87	—	1.97
M 2.5 × 0.45	2.08	2.02	2.13	2.13
M 2.5 × 0.35	2.17	2.13	2.22	2.22
※ M 2.6 × 0.45	2.17	2.12	—	2.23
M 3 × 0.5	2.53	2.46	2.59	2.59
M 3 × 0.35	2.67	2.63	2.72	2.72
M 3.5 × 0.6	2.92	2.86	3.01	3.01
M 3.5 × 0.35	3.15	3.13	3.22	3.22
M 4 × 0.7	3.35	3.25	3.42	3.42
M 4 × 0.5	3.5	3.46	3.59	3.59
M 4.5 × 0.75	3.8	3.69	3.87	3.87
M 4.5 × 0.5	4	3.96	4.09	4.09
M 5 × 0.8	4.25	4.14	4.33	4.33
M 5 × 0.5	4.5	4.46	4.59	4.59
M 5.5 × 0.5	5.05	4.96	5.09	5.09
M 6 × 1	5.1	4.92	5.15	5.15
M 6 × 0.75	5.3	5.19	5.37	5.37
※ M 6 × 0.5	5.5	5.46	—	5.59
M 7 × 1	6.1	5.92	6.15	6.15
M 7 × 0.75	6.3	6.19	6.37	6.37
M 8 × 1.25	6.8	6.65	6.91	6.91
M 8 × 1	7.1	6.92	7.15	7.15
M 8 × 0.75	7.3	7.19	7.37	7.37
M 9 × 1.25	7.8	7.65	7.91	7.91
M 9 × 1	8.1	7.92	8.15	8.15
M 9 × 0.75	8.3	8.19	8.37	8.37

※这是 JIS B 0205-2:2001表2中未列出的螺纹尺寸。
底孔径是根据JIS B 0209-1:2001计算得出的参考值。

单位:mm Unit:mm

螺纹尺寸 Thread Size	推荐底孔径 Recommended drill hole dia.	最小底孔径 Min. drill hole dia.	最大底孔径 Max. drill hole dia.	
		各精度通用	旧JIS2级用	6H用
M10 × 1.5	8.6	8.38	8.67	8.67
M10 × 1.25	8.8	8.65	8.91	8.91
M10 × 1	9.1	8.92	9.15	9.15
M10 × 0.75	9.3	9.19	9.37	9.37
M11 × 1.5	9.6	9.38	9.67	9.67
※ M11 × 1.25	9.8	9.65	9.8	9.91
M11 × 1	10.1	9.92	10.15	10.15
M11 × 0.75	10.3	10.19	10.37	10.37
M12 × 1.75	10.3	10.11	10.44	10.44
M12 × 1.5	10.6	10.38	10.67	10.67
M12 × 1.25	10.8	10.65	10.91	10.91
M12 × 1	11.1	10.92	11.15	11.15
M14 × 2	12.1	11.84	12.21	12.21
M14 × 1.5	12.5	12.38	12.67	12.67
M14 × 1.25	12.8	12.65	—	12.91
M14 × 1	13	12.92	13.15	13.15
M15 × 1.5	13.5	13.4	13.6	13.67
M15 × 1	14	13.95	14.15	14.15
M16 × 2	14	13.9	14.2	14.21
M16 × 1.5	14.5	14.4	14.6	14.67
M16 × 1	15	14.95	15.15	15.15
M17 × 1.5	15.5	15.4	15.68	15.67
M17 × 1	16	15.95	16.15	16.15
M18 × 2.5	15.5	15.3	15.7	15.74
M18 × 2	16	15.9	16.2	16.21
M18 × 1.5	16.5	16.4	16.6	16.67
M18 × 1	17	16.95	17.15	17.15
M20 × 2.5	17.5	17.3	17.7	17.74
M20 × 2	18	17.9	18.2	18.21
M20 × 1.5	18.5	18.4	18.6	18.67
M20 × 1	19	18.95	19.15	19.15

※Nominal size of a screw that is not listed in JIS B 0205-2:2001 Table 2.
The pilot hole diameter is a reference value calculated based on JIS B 0209-1:2001.

JIS B 0209-1: 2001
JIS B 8031: 2006

螺纹尺寸 Thread Size	推荐底孔径 Recommended drill hole dia.	最小底孔径 Min. drill hole dia.	最大底孔径 Max. drill hole dia.	
		各精度通用	旧JIS2级用	6H用
M22 × 2.5	19.5	19.3	19.7	19.74
M22 × 2	20	19.9	20.2	20.21
M22 × 1.5	20.5	20.4	20.6	20.67
M22 × 1	21	20.95	21.15	21.15
M24 × 3	21	20.8	21.2	21.25
M24 × 2	22	21.9	22.2	22.21
M24 × 1.5	22.5	22.4	22.6	22.67
M24 × 1	23	22.95	23.15	23.15
M27 × 3	24	23.8	24.2	24.25
M27 × 1.5	25.5	25.4	25.6	25.67
M30 × 3.5	26.5	26.3	26.7	26.77
M30 × 3	27	26.8	27.2	27.25
M30 × 1.5	28.5	28.4	28.6	28.67
M33 × 3.5	29.5	29.3	29.7	29.77
M33 × 3	30	29.8	30.2	30.25
M33 × 1.5	31.5	31.4	31.6	31.67

单位:mm Unit:mm

螺纹尺寸 Thread Size	推荐底孔径 Recommended drill hole dia.	最小底孔径 Min. drill hole dia.	最大底孔径 Max. drill hole dia.	
		各精度通用	旧JIS2级用	6H用
M36 × 4	32	31.7	32.2	32.27
M36 × 3	33	32.8	33.2	33.25
M36 × 1.5	34.5	34.4	34.6	34.67
M39 × 4	35	34.7	35.2	35.27
M42 × 4.5	37.5	37.2	37.7	37.79
M42 × 3	39	38.8	39.2	39.25
M42 × 1.5	40.5	40.4	40.6	40.67
M45 × 4.5	40.5	40.2	40.7	40.79
M48 × 5	43	42.6	43.2	43.29
M48 × 3	45	44.8	45.2	45.25
M52 × 5	47	46.6	47.2	47.2
M56 × 5.5	50.5	50.1	50.7	50.7

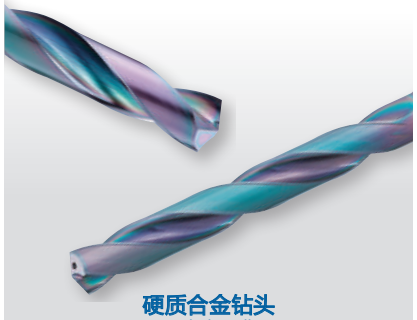
※这是 JIS B 0205-2:2001表2中未列出的螺纹尺寸。
底孔径是根据 JIS B 0209-1:2001计算得出的参考值。

※Nominal size of a screw that is not listed in JIS B 0205-2:2001 Table 2. The pilot hole diameter is a reference value calculated based on JIS B 0209-1:2001.

底孔加工 Flawless holes for perfect threading

A
The A Brand

详情请参考 for details:



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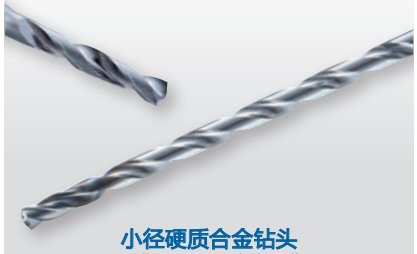

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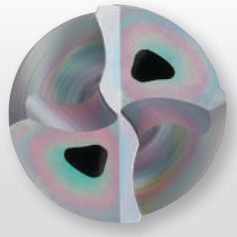
AD·ADO-MICRO



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ADOX

螺纹底孔径表 Recommended Drill Hole Size

美制螺纹 Unified screw threads

单位:mm Unit:mm

螺纹尺寸 Thread Size	外径 d Major dia.	推荐底孔径 Recommended drill hole dia.	JIS2B 级用 JIS class 2B drill hole dia.	
			最小底孔径 Min. drill hole dia.	最大底孔径 Max. drill hole dia.
No. 4 - 40UNC	2.845	2.3	2.16	2.38
5 - 40UNC	3.175	2.6	2.49	2.69
6 - 32UNC	3.505	2.8	2.65	2.89
8 - 32UNC	4.166	3.4	3.31	3.53
10 - 24UNC	4.826	3.81	3.69	3.93
10 - 32UNF		4.1	3.97	4.16
1/4 - 20UNC	6.35	5.1	4.98	5.25
1/4 - 28UNF		5.5	5.36	5.58
5/16 - 18UNC	7.938	6.6	6.41	6.73
5/16 - 24UNF		6.9	6.79	7.03
3/8 - 16UNC	9.525	8	7.8	8.15
3/8 - 24UNF		8.5	8.39	8.63
7/16 - 14UNC	11.112	9.4	9.15	9.55
7/16 - 20UNF		9.9	9.73	10.03
1/2 - 13UNC	12.7	10.8	10.6	11.02
1/2 - 20UNF		11.5	11.33	11.6
9/16 - 12UNC	14.288	12.2	12	12.4
9/16 - 18UNF		12.9	12.8	13
5/8 - 11UNC	15.875	13.6	13.4	13.8
5/8 - 18UNF		14.5	14.4	14.6
3/4 - 10UNC	19.05	16.5	16.4	16.8
3/4 - 16UNF		17.5	17.4	17.6
7/8 - 9UNC	22.225	19.5	19.2	19.7
7/8 - 14UNF		20.5	20.3	20.6
1 - 8UNC	25.4	22.2	22	22.6
※ 1 1/8 - 8UN	28.575	25.5	25.2	25.7
※ 1 1/4 - 8UN	31.75	28.7	28.4	28.9
※ 1 3/8 - 8UN	34.925	31.8	31.5	32.1
※ 1 1/2 - 8UN	38.1	35	34.7	35.3
※ 1 5/8 - 8UN	41.275	38.2	37.9	38.4
※ 1 3/4 - 8UN	44.45	41.4	41.1	41.6
※ 1 7/8 - 8UN	47.625	44.5	44.2	44.8
※ 2 - 8UN	50.8	47.7	47.4	48

※JIS规格中没有的内螺纹推荐底孔径仅供参考。
根据JIS B 1004-1975，基准牙型以及各个数据与公制螺纹相同。

※Reference for internal threads not listed in the JIS standard.
In accordance to JIS B 1004-1975. Thread values are the same as metric standard.

嵌套螺纹用公制螺纹
Helicoil / EG / STI : Metric screw threads

单位:mm Unit:mm

螺纹尺寸 Thread Size	丝锥底孔径 Drill hole dia.		适用钻径 Suitable Drill dia.
	最小尺寸 Min.	最大尺寸 Max.	
M 2 × 0.4 (2.52)	2.09	2.18	2.15
2.5 × 0.45 (3.085)	2.6	2.69	2.65
2.6 × 0.45 (3.185)	2.7	2.79	2.75
3 × 0.5 (3.65)	3.11	3.2	3.15
4 × 0.7 (4.909)	4.16	4.29	4.25
5 × 0.8 (6.039)	5.18	5.33	5.25
6 × 1 (7.3)	6.22	6.4	6.3
8 × 1.25 (9.624)	8.28	8.48	8.4
10 × 1.5 (11.948)	10.33	10.56	10.45
12 × 1.75 (14.274)	12.38	12.64	12.5
14 × 2 (16.598)	14.44	14.73	14.6
16 × 2 (18.598)	16.44	16.73	16.6
18 × 2.5 (21.248)	18.55	18.89	18.7
20 × 2.5 (23.248)	20.55	20.89	20.7
24 × 3 (27.898)	24.65	25.05	24.8

嵌套螺纹用美制粗牙螺纹 Helicoil / EG / STI : Unified coarse screw threads

单位:mm Unit:mm

螺纹尺寸 Thread Size	丝锥底孔径 Drill hole dia.		适用钻径 Suitable Drill dia.
	最小尺寸 Min.	最大尺寸 Max.	
No. 4 - 40UNC (3.67)	2.99	3.18	3.1
No. 6 - 32 (4.536)	3.68	3.87	3.75
No. 8 - 32 (5.197)	4.33	4.52	4.45
No. 10 - 24 (6.201)	5.06	5.28	5.2
1/4 - 20 (8)	6.63	6.86	6.75

嵌套螺纹用美制细牙螺纹
Helicoil / EG / STI : Unified fine screw threads

单位:mm Unit:mm

螺纹尺寸 Thread Size	丝锥底孔径 Drill hole dia.		适用钻径 Suitable Drill dia.
	最小尺寸 Min.	最大尺寸 Max.	
No. 8 - 36UNF (5.083)	4.33	4.49	4.4
No. 10 - 32 (5.857)	5	5.18	5.1
1/4 - 28 (7.528)	6.55	6.72	6.65
5/16 - 24 (9.313)	8.17	8.35	8.25
3/8 - 24 (10.9)	9.76	9.93	9.85

G(PF)

单位:mm　Unit:mm

管用螺纹 Pipe Thread 尺寸 Thread Size	外径 d Major dia.	推荐底孔径 Recommended drill hole dia.	最小底孔径（咬合率） Drill hole dia. min.	最大底孔径（咬合率） Drill hole dia. max.
G 1/16	7.723	6.7	6.56（100%）	6.79（80%）
G (PF) 1/8	9.728	8.7	8.57 〃	8.8 〃
1/4	13.157	11.7	11.45 〃	11.87（75%）
3/8	16.662	15.2	14.95 〃	15.38 〃
1/2	20.955	19	18.6 〃	19.1（80%）
5/8	22.911	21	20.6 〃	21 〃
3/4	26.441	24.5	24.1 〃	24.6 〃
7/8	30.201	28	27.9 〃	28.3 〃
1	33.249	30.5	30.3 〃	30.9 〃

1982年，随着ISO导入后，JIS的管用螺纹规格，螺纹尺寸记号都已被修订。因为螺纹精度没有变化，所以新、旧记号可通用。

The JIS pipe thread standard was revised in 1982 to meet ISO standards. Although thread symbols changed, the limits were not changed. Therefore, it is still acceptable to use taps with both new and old symbols.

(JIS B 0202-1982 / JIS B 0203-1982)

种类 Type	旧记号 Old Symbol	新记号 New Symbol
耐密用锥管内螺纹 Taper pipe threads for pressure-tight joints	PT	Rc
耐密用平行管内螺纹 Parallel pipe threads for pressure-tight joints	PS	Rp
机械结合用平行管内螺纹 Parallel pipe threads for mechanical joints	PF	G

1. JIS B 0203锥管内螺纹的计算值为，当基准值位于连接部端面时，允许有效螺纹的小端径处最后一牙为不完全牙形的直孔孔径。
2. JIS B 2301锥管内螺纹的计算值为，当基准值位于连接部端口时，不允许在小端径处存在不完全牙形的直孔孔径。
3. PT、PS的1/16参考JIS B 0203-1982的Rc、Rp内螺纹。

1. Calculated value of JIS B 0203 taper thread refers to the diameter of the straight hole in case that the last one thread at the small diameter position in useful threads is allowed to be incomplete when the reference is on the end surface of the joint.
2. Calculated value of JIS B 2301 taper thread refers to the diameter of the straight hole in case that the last thread at the small diameter position needs to be complete when the reference is on the end surface of the joint.
3. The values for 1/16 of OT and PS conform to those of Rc and Rp threads under JIS B 0203-1982.

Rc(PT)・Rp(PS)

单位:mm　Unit:mm

管用螺纹 Pipe Thread 尺寸 Thread Size	外径 d Major dia.	JIS B 0203 锥管内螺纹 Rc(PT) Taper internal threads Rc(PT) 计算值 Calculated value	JIS B 0203 锥管内螺纹 Rc(PT) Taper internal threads Rc(PT) 底孔径 Drill hole dia.	JIS B 0203 平行管内螺纹 Rp(PS) Parallel internal threads Rp(PS) 计算值 Calculated value	JIS B 0203 平行管内螺纹 Rp(PS) Parallel internal threads Rp(PS) 底孔径 Drill hole dia.	JIS B 2301 锥管内螺纹 Taper internal threads 计算值 Calculated value	JIS B 2301 锥管内螺纹 Taper internal threads 底孔径 Drill hole dia.
1/16	7.723	6.23	6.2	6.49	6.5	—	—
1/8	9.728	8.235	8.2	8.495	8.5	8.191	8.2
1/4	13.157	10.941	10.9	11.341	11.4	10.945	10.9
3/8	16.662	14.428	14.4	14.846	14.9	14.388	14.4
1/2	20.955	17.95	18	18.489	18.5	17.943	18
3/4	26.441	23.349	23	23.975	24	23.305	23
1	33.249	29.423	29	30.111	30	29.353	29

NPT・NPSC

单位：mm(　)=inch　Unit：mm(　)=inch

管用螺纹 Pipe Thread 尺寸 Thread Size	外径 d Major dia.	锥管螺纹 (NPT) Taper threads (NPT) 钻头直径 Drill dia. 使用铰刀时 Where Reamer is used		锥管螺纹 (NPT) Taper threads (NPT) 钻头直径 Drill dia. 不使用铰刀时 Where Reamer is not used		平行管螺纹 (NPSC) Parallel threads (NPSC) 钻头直径 Drill dia.	
1/16	7.770	—	5.94 (0.234)	—	6.15 (0.242)	1/4	6.35 (0.25)
1/8	10.117	21/64	8.33 (0.328)	—	8.43 (0.332)	11/32	8.74 (0.344)
1/4	13.426	27/64	10.72 (0.422)	7/16	11.13 (0.438)	7/16	11.13 (0.438)
3/8	16.866	9/16	14.27 (0.562)	9/16	14.27 (0.562)	37/64	14.68 (0.578)
1/2	20.980	11/16	17.48 (0.688)	45/64	17.86 (0.703)	23/32	18.26 (0.719)
3/4	26.325	57/64	22.63 (0.891)	29/32	23.01 (0.906)	59/64	23.42 (0.922)
1	32.934	1 1/8	28.58 (1.125)	1 9/64	28.98 (1.141)	1 5/32	29.36 (1.156)

钻头直径是美制管用螺纹ANSI/ASME B1.20.1-1983 Pipe Threads, General Purpose (Inch)附录推荐钻头直径。

The drill sizes are quoted from ANSI/ASME B1.20.1-1983 Pipe Threads, General Purpose (Inch) Appendix.

MEMO

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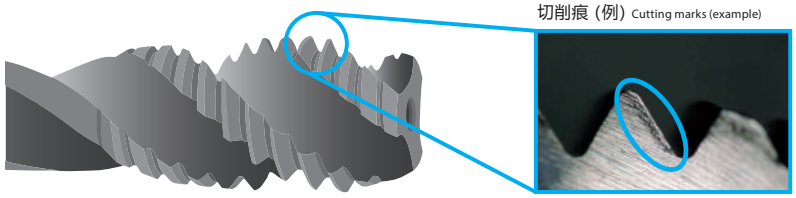
To manufacturers who are looking for a tap holder for equipment with synchronous feed mechanism

正在实施攻丝加工的问诊。
如果符合2项以上时，则需要优化刀柄。
请咨询我司营业人员。

Take the following survey to determine if the SynchroMaster tap holder is right for your threading application.
If two or more apply, the SynchroMaster tap holder can help you optimize performance.
Please consult with an OSG sales representative for details.

攻丝加工的困扰问诊
SynchroMaster Compatibility Checklist

- ☑ **使用具有同步进给功能的机械**
  ※SynchroMaster为同步进给功能机械专用
  Using equipment with synchronous feed mechanism
  *SynchroMaster is designed only for machines with synchronous feed mechanism
- ☐ **使用筒夹刀柄**
  Collet holder is used
- ☐ **寿命不稳定**
  Tool life is unstable
- ☐ **突发折损**
  Occurrence of sudden tool breakage
- ☐ **丝锥出现异常的切削痕**
  Abnormal cutting marks on the tap



与A-TAP完美搭配
Designed for the A-Tap

同步进给大师
攻丝刀柄 Tap Holder **SynchroMaster**

扫一扫了解详情
Scan for details

OSG 一直致力于环境保护政策

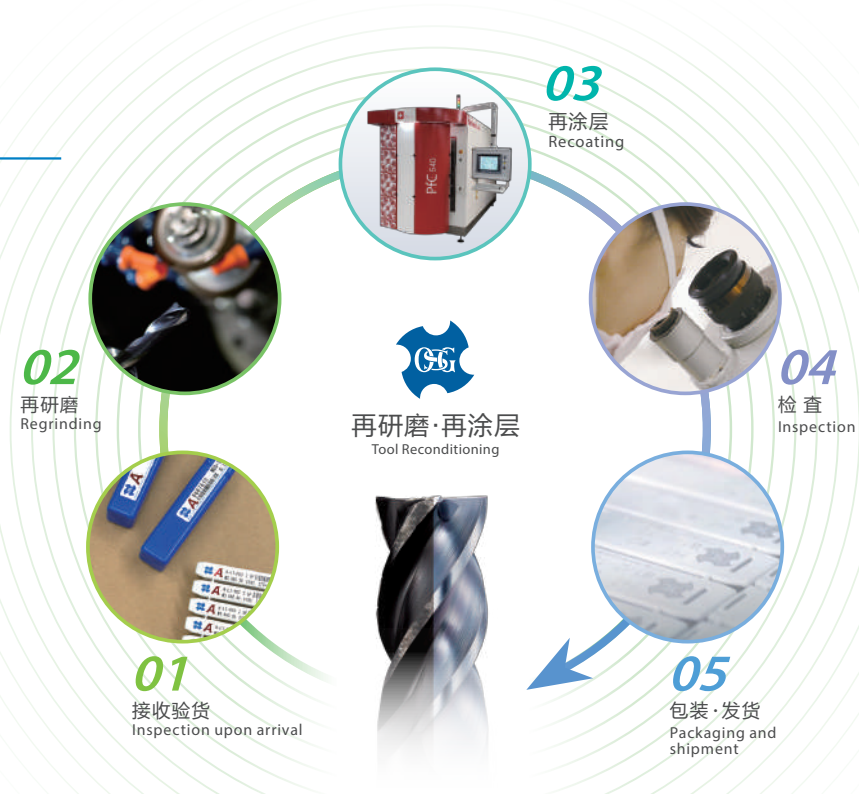
OSG's Environmental Initiatives

再研磨·再涂层

Tool Reconditioning

无法再使用的工具的翻新和再利用， 有助于节约资源和全球环境保护活动。

Tool reconditioning contributes to resource conservation by bringing worn cutting tools back to life, which is environmentally friendly and sustainable.



shaping your dreams

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OSG Corporation

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