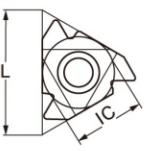


# 公、英、美制螺纹刀具 THREADING TOOLS

## 螺纹车刀刀片型号说明 Threading Insert Identification System

1、刀片尺寸 Insert Size	2、刀片型式 Insert Style	3、刀片类型 Type of Insert	4、螺纹旋向 RH/LH Insert
L(mm) D 06 5/32" 08 3/16" 11 1/4" 16 3/8" 22 1/2" 27 5/8"  	 <b>U</b>   <b>V</b>	<b>E</b> 外螺纹 External <b>N</b> 内螺纹 Internal   <b>E</b>   <b>N</b>  图片为右手刀片 Right Insert(see picture)	<b>R</b> 右手刀片 Right Hand Insert <b>L</b> 左手刀片 Left Hand Insert   <b>R</b>   <b>L</b>  图片为外螺纹刀片 External Insert(see picture)



5、螺距 Pitch	6、螺纹标准 Standard	7、齿数(对梳齿形M) No.of Teeth(for Multitooth Style)	8、梳齿的刀片型式 Insert Style of Multitooth
全形 Full Profile Pitch Range  mm TPI 0.5~6 48~4	<b>60</b> ---60° 通用型螺纹 Partial Profile 60° <b>55</b> ---55° 通用型螺纹 Partial Profile 55° <b>ISO</b> ---ISO 标准型螺纹 ISO Metric <b>UN</b> ---60° 美制统一标准型螺纹 American UN <b>UNJ</b> ---60° 美制航空航天螺纹 Aviation thread <b>W</b> ---55° 英国惠氏螺纹 Whitworth for BSW BSP <b>NPT</b> ---60° 美国标准锥管螺纹 NPT <b>NPTF</b> ---60° 美制干密封螺纹 NPTF <b>BSPT</b> ---55° 英制标准锥管螺纹 British Standard Pipe Thread <b>ACME</b> ---美制29° 梯形螺纹 American ACME <b>STACME</b> ---美制29° 短齿梯形螺纹 American Stub ACME <b>TR</b> ---30° 标准梯形螺纹 Trapeze DIN 103 <b>ABUT</b> ---美制锯齿形螺纹 American Buttress <b>RD</b> ---消防食品机械圆螺纹 Round DIN 405 <b>RD20400</b> ---消防及食品机械圆螺纹 Round DIN 20400 <b>APIRD</b> ---API 圆螺纹 API Round Casing & Tubing <b>BUT</b> ---API 偏梯扣螺纹 API Butress Casing	2 3 5 6 8	 <b>M</b>

# 公、英、美制螺纹刀具 THREADING TOOLS

## 如何选择并正确使用螺纹刀具需进行以下5个步骤:

How to choose and use threading cutters?

首先需要了解:加工外螺纹/内螺纹

You have to know firstly: machining internal & external threads

主轴旋转方向

turning direction of spindle

右旋螺纹/左旋螺纹

right hand & left hand

进给方向

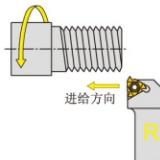
feed direction

## 第一步:选择旋转螺纹的加工方法和刀具式样(详见37页)

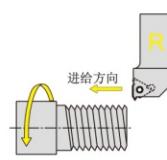
Firstly choosing machining ways & cutter styles of turning thread (see page37)

### 外螺纹(右旋螺纹) External (Right Hand)

铁屑向上排—刀杆正向安装  
主轴正转(M03)  
进给方向—向卡盘方向进给  
Scrap iron displaced upward  
—tool holders installed forward  
Spindle turned forward-M03  
Feed direction—feed towards chuck

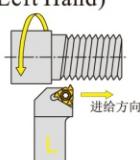


铁屑向下排—刀杆反向安装  
主轴正转(M03)  
进给方向—向卡盘方向进给  
Scrap iron displaced downward  
—tool holders installed backward  
Spindle turned forward-M03  
Feed direction—feed towards chuck

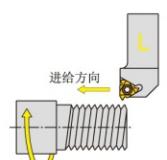


### 外螺纹(左旋螺纹) External (Left Hand)

铁屑向上排—刀杆正向安装  
主轴正转(M03)  
进给方向—向顶尖方向进给  
Scrap iron displaced upward  
—tool holders installed forward  
Spindle turned forward-M03  
Feed direction—feed towards center

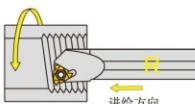


铁屑向上排—刀杆正向安装  
主轴正转(M04)  
进给方向—向卡盘方向进给  
Scrap iron displaced upward  
—tool holders installed forward  
Spindle turned forward-M03  
Feed direction—feed towards chuck

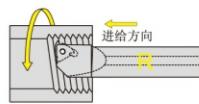


### 内螺纹(右旋螺纹) Internal (Right Hand)

铁屑向上排—刀杆正向安装  
主轴正转(M03)  
进给方向—向卡盘方向进给  
Scrap iron displaced upward  
—tool holders installed forward  
Spindle turned forward-M03  
Feed direction—feed towards chuck

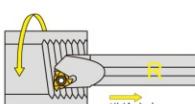


铁屑向下排—刀杆反向安装  
主轴反转(M03)  
进给方向—向卡盘方向进给  
Scrap iron displaced upward  
—tool holders installed forward  
Spindle turned backforward-M04  
Feed direction—feed towards chuck

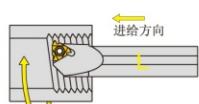


### 内螺纹(左旋螺纹) Internal (Left Hand)

铁屑向上排—刀杆正向安装  
主轴正转(M03)  
进给方向—向顶尖方向进给  
注:建议更换成带角度的垫片,改变刀具  
径向倾角,使其加工出的牙型角合格。  
Scrap iron displaced upward  
—tool holders installed forward  
Spindle turned backforward-M04  
Feed direction—feed towards chuck  
Note: it is good for machining perfect tooth by  
using parallel with reasonable angle and  
by changing the radial direction of cutters.



铁屑向上排—刀杆正向安装  
主轴反转(M04)  
进给方向—向卡盘方向进给  
Scrap iron displaced upward  
—tool holders installed forward  
Spindle turned backforward-M04  
Feed direction—feed towards chuck



# 公、英、美制螺纹刀具 THREADING TOOLS

## 第二步:挑选适合应用的刀片 Secondly choosing applicable inserts

刀片尺寸 Insert Dimension	目录编号 Model No.	材质代号 Material Type			
		DK110	DP220	DM315	DM215
11	11E...	●	●	●	●
16	16E...	●	●	●	●
22	22E...	●	●	●	●
	MTTR43...	●	●	●	●

## 第三步:选择材质与切削参数 Thirdly choosing suitable material and cutting parameter

DK110:适合加工有色金属, 推荐线速度Vc: (100~300) m/min

DP220:适合加工各种钢件, 推荐线速度Vc: (100~150) m/min

DM315:适合加工不锈钢, 推荐线速度Vc: (80~140) m/min, 也可加工钢件, 推荐线速度  
Vc: (120~180) m/min

DM215:适合加工不锈钢, 推荐线速度Vc: (60~120) m/min, 也可加工钢件, 推荐线速度  
Vc: (100~180) m/min

DK110 is the top choice for cast iron and non-ferrous metals (e.g. aluminum alloy), recommended Vc: 100~300m/min

DP220 is the top choice for various steel, recommended Vc: 100~150m/min

DM315 is the top choice for stainless steels as well as steel, recommended Vc:80~140m/min for stainless steel;

Vc:120~180m/min for steel

DM215 is the top choice for stainless steels as well as steel, recommended Vc:60~120m/min for stainless steel;

Vc:100~180m/min for steel

## 第四步:从样本选择适合的刀具 Fourthly choosing suitable cutters according to catalogue

所需资料:

Data required:

- |                    |   |
|--------------------|---|
| 1. 加工内螺纹还是外螺纹      | 1 Internal or external thread you need machining.           |
| 2. 螺纹底孔直径 (加工内螺纹时) | 2 Under port's diameter when you machining internal thread. |
| 3. 刀具样式 (详见第一步)    | 3 Cutter style (see the first step)                         |
| 4. 刀片规格            | 4 Inserts Specification                                     |
| 5. 刀杆规格            | 5 Tool holders Specification                                |

## 第五步:选择适合的刀垫 Finally choosing applicable anvil

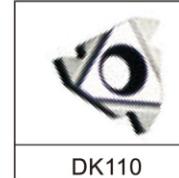
根据螺纹牙型大小, 螺距直径, 螺旋方法, 选择垫片。

Choosing applicable anvil according to thread tooth size, pitch diameter and screw ways.

# 公、英、美制螺纹刀具 THREADING TOOLS

## 刀片材质说明

Instruction for Insert Material

	Wear resistance	Toughness	
01	20	30	
P 钢 steels	DM 315	DM215	
M 不锈钢 stainless steel	DM 315	DM215	
K 铸铁 cast iron	DM 315	DM215	
N 有色金属 non-ferrous metals	DK110		
			

DP220(P30,M40)

Layer system:PVD TiN

DP220 钢件各种场合下的广泛应用，具有较好的韧性！推荐使用线速度Vc: 90~180m/min

DP220 is good at all application with perfect toughness. Recommended parameter Vc: 90~180m/min

DM315 (M25,P20)

Layer system:PVD TiAIN

DM315 钢件不锈钢通用材质，耐高温性能提升，适应更高转速的加工场合

加工不锈钢时推荐使用线速度Vc: 80~140m/min，加工钢件时推荐使用线速度Vc: 120~180m/min

DM315 apply to stainless steel and steel,thermostable,superior to high speed machining high speed. Recommended parameter Vc:80~140m/min for stainless steel; Vc:120~180m/min for steel

DM215(M25,P20)

Layer system:PVD TiAIN

DM215 不锈钢材质的首选，但是在钢件的中高速加工中也有比较优异的表现！也可以加工铸铁！

加工不锈钢时推荐使用线速度Vc: 60~120m/min，加工钢件时推荐使用线速度Vc: 100~ 80m/min

DM215 is the first choice in stainless steels, superior to other steels machining under medium and high speed. Recommended parameter Vc:60~120m/min for stainless steel; Vc:100~180m/min for steel

DK110(K15) 颗粒度: Grain size:0.6 μm 硬度: Hardness:HV1670

DK110 铝合金等有色金属材质的首选！推荐使用线速度Vc: 100~300m/min

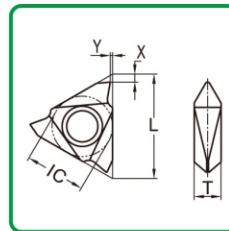
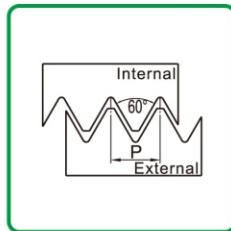
DK110 is the top choice in cast iron and non-ferrous metals (e.g. aluminum alloy) machining. Recommended parameter Vc:100~300m/min

# 公、英、美制螺纹刀具 THREADING TOOLS

## 60° 立装泛用型螺纹刀片 Partial Profile V-style Inserts



图片为右手刀片  
Right Insert(see picture)



型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (mm)		
	DM315 DM215			DM315 DM215		mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	Left Hand										
MTTR 436001	○	●	MTTL 436001		○	1.0~1.75	24-14			0.1	1.7	0.29
MTTR 436002	○	●	MTTL 436002		○	2.0~2.5	13-10	1/2"	.87	0.2	1.7	0.29
MTTR 436003	○	●	MTTL 436003		○	3.0~3.5	9-7			0.3	1.7	0.29
MTTR 436004	○	●	MTTL 436004		○	4.0~4.5	6-5			0.4	1.7	0.29

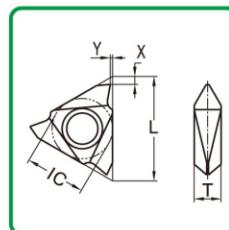
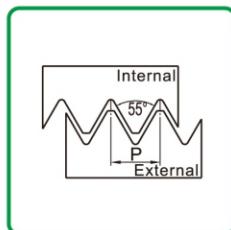
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: MTTR 436002 DM215 10片 Ordering example: MTTR 436002 DM215 10pcs

## 55° 立装泛用型螺纹刀片 Partial Profile V-style Inserts



图片为右手刀片  
Right Insert(see picture)



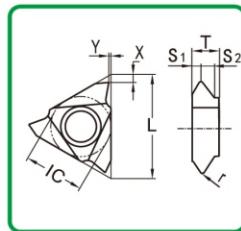
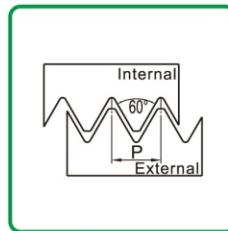
型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (mm)		
	DM315 DM215			DM315 DM215		mm	tpi	IC	L/inch	r	X	Y
	右旋螺纹 Right Hand	Left Hand										
MTTR 435501		○	MTTL 435501			1.0~1.75	24-14			0.1	1.7	0.29
MTTR 435502		○	MTTL 435502			2.0~2.5	13-10	1/2"	.87	0.2	1.7	0.29
MTTR 435503		○	MTTL 435503			3.0~3.5	9-7			0.3	1.7	0.29
MTTR 435504		○	MTTL 435504			4.0~4.5	6-5			0.4	1.7	0.29

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: MTTR 435502 DM215 10片 Ordering example: MTTR 435502 DM215 10pcs

# 公、英、美制螺纹刀具 THREADING TOOLS

## 👉 TTX 立装泛用型螺纹刀片 TTX Partial Profile V-style Inserts



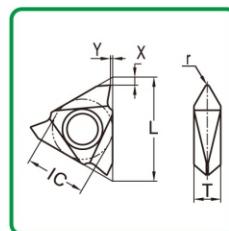
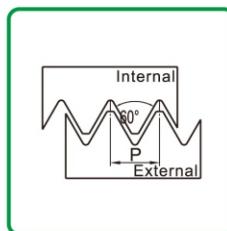
图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		尺寸 Dimensions (mm)					适用刀杆 tool holders 详见P45 SeeP45	
	DK110	PM125		左手刀片 Left Hand	DK110	PM125	mm	tpi	IC	L	T	S <sub>1</sub>	S <sub>2</sub>	
TTX32R60005	○	●	TTX32L60005	○	○	0.5~1.0	48~32	9.525	16	3.18	0.6	1.12	0.05	
TTX32R6001	○	●	TTX32L6001	○	○	1.0~2.0	28~14	9.525	16	3.18	1.1	1.62	0.1	KTT...-16
TTX32R5501	○	●	TTX32L5501	○	○	-	28~19	9.525	16	3.18	0.75	1.01	0.1	

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例:TTX32R6001 PM125 10片 Ordering example:TTX32R6001 PM125 10pcs

## 👉 TT 立装泛用型螺纹刀片 TT Partial Profile V-style Inserts



图片为右手刀片  
Right Insert(see picture)

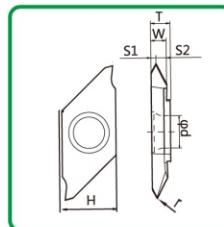
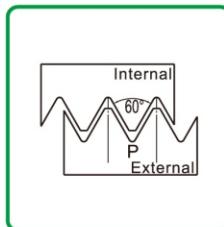
型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		尺寸 Dimensions (mm)					适用刀杆 tool holders 详见P45 SeeP45
	DK110	PM125		左手刀片 Left Hand	DK110	PM125	mm	tpi	IC	L	T	r	
TT32R6000	○	●	TT32L6000	○	○	0.5~1.0	48~32	9.525	3.18	1.7	0		
TT32R6001	○	●	TT32L6001	○	○	1.0~2.5	28~14	9.525	3.18	1.7	0.1		
TT32R6002	○	●	TT32L6002	○	○	1.5~2.5	16~10	9.525	3.18	1.7	0.2		
TT32R6003	○	●	TT32L6003	○	○	2.5	11~10	9.525	3.18	1.7	0.3		
TT32R5501	○	●	TT32L5501	○	○	-	28~10	9.525	3.18	1.7	0.1		
TT32R5502	○	●	TT32L5502	○	○	-	14~10	9.525	3.18	1.7	0.2		

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例:TT32R6001 PM125 10片 Ordering example:TT32R6001 PM125 10pcs

# 公、英、美制螺纹刀具 THREADING TOOLS

## TKFT 立装泛用型螺纹刀片 TKFT Partial Profile V-style Inserts



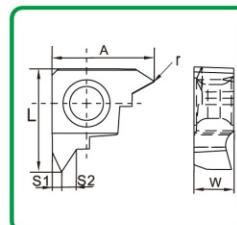
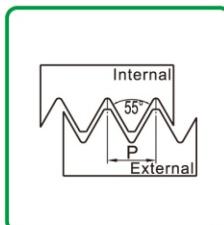
图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		尺寸 Dimensions (mm)					适用刀杆 tool holders 详见P99 SeeP99		
	DK110 PM125			左手刀片 Left Hand		DK110	PM125	mm	tpi	H	T	W	S1	S2	
	右手刀片 Right Hand	DK110	PM125	TKF12LA60005	○	○	-	28~19	8.7	3.0	2.5	0.4	2.1	0.05	KTKFR...-12
TKFT12RA60005	○	●	TKF12LB60005	○	○	0.5~1.0	48~32	8.7	3.0	2.5	2.1	0.4	0.05		
TKFT12RN6001	○	●	TKF12LN6001	○	○	1.0~2.0	28~14	8.7	3.0	2.5	1.25	1.25	0.1		
TKFT12RA55005	○	●	TKF12LA55005	○	○	-	28~19	8.7	3.0	2.5	0.8	1.7	0.05		
TKFT12RB55005	○	●	TKF12LB55005	○	○	0.5~1.0	48~32	8.7	3.0	2.5	1.7	0.8	0.05		

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: TKFT12RN6001 PM125 10片 Ordering example:TKFT12RN6001 PM125 10pcs

## GE 螺纹刀片 GE Threading Insert



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		尺寸 Dimensions (mm)					适用刀杆 tool holders 详见P96 SeeP96	
	DK110 PM125			左手刀片 Left Hand		DK110	PM125	mm	tpi	A	L	W	r	
	右手刀片 Right Hand	DK110	PM125	GEL6001-A	○	○	0.5~1.5	48~16	6.69	6.5	2.58	0.05		SIGE...A
GER6001-A	○	●	GEL5501-A	○	○	0.5~1.5	48~16	6.69	6.5	2.58	0.05			
GER5501-A	○	●	GEL6001-B	○	○	0.5~1.5	48~16	8.46	8.2	3.18	0.1			
GER6001-B	○	●	GEL6002-B	○	○	1.0~2.5	25~10	8.46	8.2	3.18	0.05			SIGE...B
GER6002-B	○	●	GEL5501-B	○	○	0.5~1.5	48~16	8.46	8.2	3.18	0.05			
GER5501-B	○	●	GEL2.0TR-B	○	○	2.0	-	8.46	8.2	3.18	0.1			
GER2.0TR-B	○	●	GEL3.0TR-B	○	○	3.0	-	8.46	8.2	3.18	0.1			SIGE...B
GER3.0TR-B	○	●	★ GEL4.0TR-B	○	○	4.0	-	8.46	8.2	3.18	0.2			
★ GER4.0TR-B	○	○	GEL3.0TR-C	○	○	3.0	-	5.8	11.5	4.0	0.1			SIGE...C
GER3.0TR-C	○	●	GEL4.0TR-C	○	○	4.0	-	5.8	11.5	4.0	0.2			
GER4.0TR-C	○	●	GEL4.0TR-D	○	○	4.0	-	6.8	16.5	5.0	0.2			
GER4.0TR-D	○	●	GEL5.0TR-D	○	○	5.0	-	6.8	16.5	5.0	0.2			SIGE...D
GER5.0TR-D	○	●	GEL6.0TR-D	○	○	6.0	-	6.8	16.5	5.0	0.2			

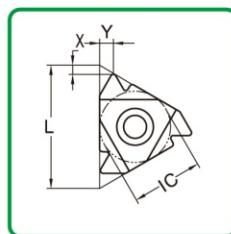
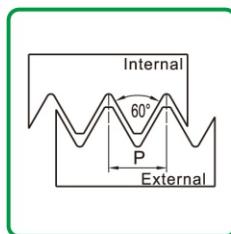
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: GER6001-APM125 10片 Ordering example:GER6001-APM125 10pcs

★ 建议该刀片只能用作精修梯形螺纹尺寸时使用

60° 泛用型螺纹刀片 Partial Profile 60° Threading Insert

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand												
11ERA60	○	●	●	11ELA60			○	0.5-1.5	48-16	1/4"	.43	.002	.029	.035
16ERA60	○	●	●	16ELA60			○	0.5-1.5	48-16			.002	.031	.035
16ERAG60	○	●	●	16ELAG60			○	0.5-3.0	48-8	3/8"	.63	.003	.047	.067
16ERG60	○	●	●	16ELG60			○	1.75-3.0	18-8			.011	.047	.067
22ERN60	○	●	●	22ELN60			○	3.5-5.0	7-5	1/2"	.87	.021	.067	.098
27ERQ60	○	●	●	27ELQ60			○	5.5-6.0	4.5-4		5/8"	.027		
27VERV60	○	●	●	27VELV60			○	6.0-10	4-2.5		1.06	.027		

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

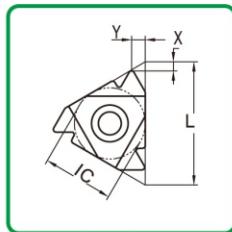
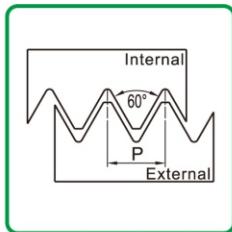
订货示例: 16ERAG60 DM215 10片 Ordering example: 16ERAG60 DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 60° 泛用型螺纹刀片 Partial Profile 60° Threading Insert

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110	DM315	DM215		DK110	DM315	DM215	mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand												
06NRA60				06NLA60				0.5-1.5	48-16	5/32"	.271	.002	.03	.031
08NRA60				08NLA60				0.5-1.5	48-16	3/16"	.325	.002	.03	.031
11NRA60	○	●	●	11NLA60			○	0.5-1.5	48-16	1/4"	.43	.002	.031	.035
16NRA60	○	●	●	16NLA60			○	0.5-1.5	48-16			.002	.031	.035
16NRAG60	○	●	●	16NLG60			○	0.5-3.0	48-8	3/8"	.63	.003	.047	.067
16NRG60	○	●	●	16NLG60			○	1.75-3.0	18-8			.008	.047	.067
22NRN60	○	●	●	22NLN60			○	3.5-5.0	7-5	1/2"	.87	.018	.067	.098
27NRQ60	○	●	●	27ELQ60			○	5.5-6.0	4.5-4	5/8"	1.06	.024		
27NVR60	○	●	●	27VELV60			○	6.0-10	4-2.5			.024		

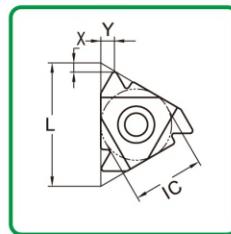
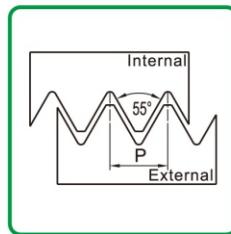
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NRAG60 DM215 10片 Ordering example: 16NRAG60 DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

 55° 泛用型螺纹刀片 Partial Profile 55° Threading Insert

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand												
11ERA55	○ ● ●			11ELA55			○	0.5-1.5	48-16	1/4"	.43	.003	.031	.035
16ERA55	○ ● ●			16ELA55			○	0.5-1.5	48-16			.003	.031	.035
16ERAG55	○ ● ●			16ELAG55			○	0.5-3.0	48-8	3/8"	.63	.004	.047	.067
16ERG55	○ ● ●			16ELG55			○	1.75-3.0	18-8			.011	.047	.067
22ERN55	○ ● ●			22ELN55			○	3.5-6.0	7-5	1/2"	.87	.021	.067	.098
27ERQ55	○ ● ●			27ELQ55			○	5.5-6.0	4.5-4			.027		
27VERV55	○ ● ●			27VELV55			○	6.0-9.0	4-2.5	5/8"	1.06	.027		

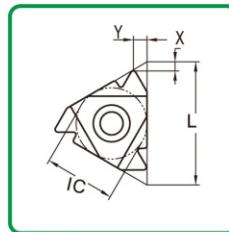
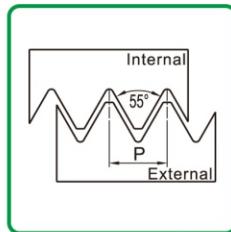
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16ERAG55 DM215 10片 Ordering example: 16ERAG55 DM215 10pcs

★27V刀片为立装型, 形状参考05页MTTR系列

 55° 泛用型螺纹刀片 Partial Profile 55° Threading Insert

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand												
06NRA55				06NLA55				0.5-1.5	48-16	5/32"	.271	.002	.03	.035
08NRA55				08NLA55				0.5-1.5	48-16	3/16"	.325	.002	.03	.035
11NRA55	○	●	●	11NLA55			○	0.5-1.5	48-16	1/4"	.43	.002	.031	.035
16NRA55	○	●	●	16NLA55			○	0.5-1.5	48-16			.002	.031	.035
16NRAG55	○	●	●	16NLAG55			○	0.5-3.0	48-8	3/8"	.63	.003	.047	.067
16NRG55	○	●	●	16NLG55			○	1.75-3.0	18-8			.008	.047	.067
22NRN55	○	●	●	22NLN55			○	3.5-6.0	7-5	1/2"	.87	.018	.067	.098
27NRQ55	○	●	●	27NLQ55			○	5.5-6.0	4.5-4			.024		
27VNRV55	○	●	●	27VNLV55			○	6.0-9.0	4-2.5	5/8"	1.06	.024		

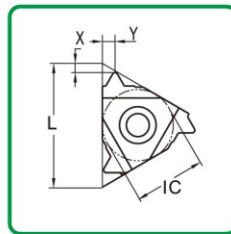
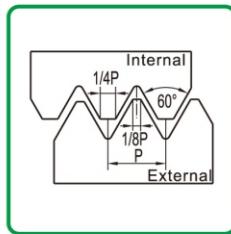
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NRAG55 DM215 10片 Ordering example: 16NRAG55 DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

ISO标准型螺纹刀片 ISO Metric

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	Left Hand												
11ER0.50 ISO				11EL0.50 ISO				0.50				.002	.024	.016
11ER0.75 ISO	●	●	●	11EL0.75 ISO			○	0.75				.003	.024	.024
11ER1.00 ISO	●	●	●	11EL1.00 ISO			○	1.00				.004	.027	.027
11ER1.25 ISO	●	●	●	11EL1.25 ISO			○	1.25		1/4"	.43	.005	.031	.035
11ER1.50 ISO	●	●	●	11EL1.50 ISO			○	1.50				.007	.031	.039
11ER1.75 ISO	●	●	●	11EL1.75 ISO			○	1.75				.009	.035	.047
11ER2.00 ISO	●	●	●	11EL2.00 ISO			○	2.00				.010	.039	.051
16ER0.50 ISO	○	○	○	16EL0.50 ISO				0.50				.002	.024	.016
16ER0.75 ISO	●	●	●	16EL0.75 ISO			○	0.75				.003	.024	.024
16ER1.00 ISO	●	●	●	16EL1.00 ISO			●	1.00				.004	.027	.027
16ER1.25 ISO	●	●	●	16EL1.25 ISO			●	1.25				.005	.031	.035
16ER1.50 ISO	●	●	●	16EL1.50 ISO			●	1.50				.007	.031	.039
16ER1.75 ISO	●	●	●	16EL1.75 ISO			●	1.75		3/8"	.63	.009	.035	.047
16ER2.00 ISO	●	●	●	16EL2.00 ISO			●	2.00				.010	.039	.051
16ER2.50 ISO	●	●	●	16EL2.50 ISO			●	2.50				.012	.043	.059
16ER3.00 ISO	●	●	●	16EL3.00 ISO			●	3.00				.014	.047	.063
16ER3.50 ISO	○	○	○	16EL3.50 ISO				3.50				.015	.047	.063
22ER3.00 ISO	○	○	○	22EL3.00 ISO				3.00				.014	.047	.063
22ER3.50 ISO	○	●	●	22EL3.50 ISO			○	3.50				.015	.063	.09
22ER4.00 ISO	○	●	●	22EL4.00 ISO			●	4.00				.015	.063	.09
22ER4.50 ISO	○	●	●	22EL4.50 ISO			○	4.50		1/2"	.87	.016	.067	.094
22ER5.00 ISO	○	●	●	22EL5.00 ISO			●	5.00				.016	.067	.098
22ER5.50 ISO			○	22EL5.50 ISO				5.50				.016	.067	.098
22ER6.00 ISO	●	●		22EL6.00 ISO				6.00				.020	.067	.098
27ER5.50 ISO			○	27EL5.50 ISO				5.50				.016		
27ER6.00 ISO			●	27EL6.00 ISO				6.00				.020		
27VER6.00 ISO			○	27VEL6.00 ISO				6.00		5/8"	1.06	.020		
27VER8.00 ISO			●	27VEL8.00 ISO				8.00				.045		
27VER10.0 ISO			○	27VEL10.0 ISO				10.0				.056		

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

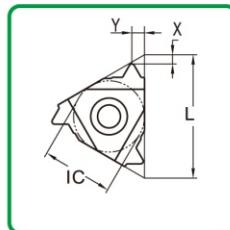
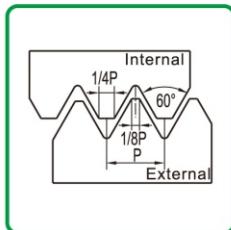
订货示例: 16ER1.50ISO DM215 10片 Ordering example: 16ER1.50ISO DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 ISO标准型螺纹刀片 ISO Metric

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围		刀片尺寸		尺寸			
	DK110 DM315 DM215				DK110 DM315 DM215			Pitch		Insert Size		Dimensions (inch)			
	右手刀片 Right Hand	左手刀片 Left Hand	mm		IC	L/inch	r	X	Y						
11NR0.50 ISO				11NL0.50 ISO			0.50					.002	.024	.016	
11NR0.75 ISO	○	○	●	11NL0.75 ISO		○	0.75					.003	.024	.024	
11NR1.00 ISO	○	●	●	11NL1.00 ISO		○	1.00					.004	.024	.027	
11NR1.25 ISO	○	●	●	11NL1.25 ISO		○	1.25		1/4"	.43		.005	.031	.035	
11NR1.50 ISO	○	●	●	11NL1.50 ISO		○	1.50					.006	.031	.039	
11NR1.75 ISO	○	●	●	11NL1.75 ISO		○	1.75					.007	.035	.047	
11NR2.00 ISO	○	●	●	11NL2.00 ISO		○	2.00					.009	.039	.051	
16NR0.50 ISO				16NL0.50 ISO			0.50					.002	.024	.016	
16NR0.75 ISO	○	●	●	16NL0.75 ISO		○	0.75					.003	.024	.024	
16NR1.00 ISO	●	●	●	16NL1.00 ISO		●	1.00					.004	.024	.027	
16NR1.25 ISO	●	●	●	16NL1.25 ISO		●	1.25					.005	.031	.035	
16NR1.50 ISO	●	●	●	16NL1.50 ISO		●	1.50		3/8"	.63		.006	.031	.039	
16NR1.75 ISO	●	●	●	16NL1.75 ISO		●	1.75					.007	.035	.047	
16NR2.00 ISO	●	●	●	16NL2.00 ISO		●	2.00					.009	.039	.051	
16NR2.50 ISO	●	●	●	16NL2.50 ISO		●	2.50					.011	.043	.059	
16NR3.00 ISO	●	●	●	16NL3.00 ISO		●	3.00					.012	.043	.059	
16NR3.50 ISO	○	○	○	16NL3.50 ISO			3.50					.014	.043	.059	
22NR3.00 ISO	○	○	○	22NL3.00 ISO			3.00					.012	.043	.059	
22NR3.50 ISO	○	●	●	22NL3.50 ISO		○	3.50					.014	.063	.09	
22NR4.00 ISO	○	●	●	22NL4.00 ISO		●	4.00					.015	.063	.09	
22NR4.50 ISO	○	●	●	22NL4.50 ISO		○	4.50		1/2"	.87		.015	.063	.094	
22NR5.00 ISO	○	●	●	22NL5.00 ISO		●	5.00					.016	.063	.094	
22NR5.50 ISO			○	22NL5.50 ISO			5.50					.016	.063	.094	
22NR6.00 ISO		●	●	22NL6.00 ISO			6.00					.018	.063	.094	
27NR5.50 ISO			○	27NL5.50 ISO			5.50					.016			
27NR6.00 ISO		●	●	27NL6.00 ISO			6.00					.020			
27VNR6.00 ISO			○	27VNL6.00 ISO			6.00		5/8"	1.06		.020			
27VNR8.00 ISO		●	●	27VNL8.00 ISO			8.00					.045			
27VNR10.0 ISO			○	27VNL10.0 ISO			10.0					.056			

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

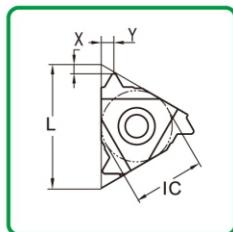
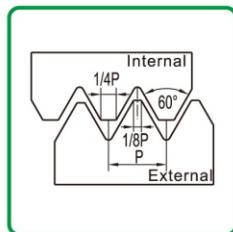
订货示例: 16NR1.50ISO DM215 10片 Ordering example: 16NR1.50ISO DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 UN-60° 美制统一标准型螺纹刀片 60° American UN NC NF NEF NS

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围		刀片尺寸		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			Pitch		Insert Size				
	右手刀片 Right Hand	左手刀片 Left Hand	mm	tpi	IC	L/inch	r	X	Y					
11ER32UN	○ ○	○ ○	11EL32UN		0.794	32				.003	.024	.024		
11ER28UN	○ ○ ○	○ ○ ○	11EL28UN		0.907	28				.003	.024	.027		
11ER24UN	○ ○ ○	● ●	11EL24UN	○ ○	1.058	24				.004	.027	.031		
11ER20UN	○ ○ ○	● ●	11EL20UN	○ ○	1.270	20				.004	.031	.035		
11ER18UN	○ ○ ○	● ●	11EL18UN	○ ○	1.411	18	1/4"	.43		.005	.035	.039		
11ER16UN	○ ○ ○	● ●	11EL16UN	○ ○	1.588	16				.006	.039	.043		
11ER14UN	○ ○ ○	● ●	11EL14UN	○ ○	1.814	14				.007	.043	.047		
11ER12UN	○ ○ ○	● ●	11EL12UN	○ ○	2.117	12				.008	.043	.055		
16ER32UN	○ ○ ○	○ ○ ○	16EL32UN		0.794	32				.003	.024	.024		
16ER28UN	○ ○ ○	● ●	16EL28UN		0.907	28				.003	.024	.027		
16ER24UN	○ ○ ○	● ●	16EL24UN	○ ○	1.058	24				.004	.027	.031		
16ER20UN	○ ○ ○	● ●	16EL20UN	○ ○	1.270	20				.004	.031	.035		
16ER18UN	○ ○ ○	● ●	16EL18UN	○ ○	1.411	18				.005	.035	.039		
16ER16UN	○ ○ ○	● ●	16EL16UN	○ ○	1.588	16	3/8"	.63		.006	.039	.043		
16ER14UN	○ ○ ○	● ●	16EL14UN	○ ○	1.814	14				.007	.043	.047		
16ER12UN	○ ○ ○	● ●	16EL12UN	○ ○	2.117	12				.008	.043	.055		
16ER11UN			16EL11UN		2.309	11				.010	.043	.055		
16ER10UN	○ ○ ○	○ ○ ○	16EL10UN		2.540	10				.012	.043	.059		
16ER9UN			16EL9UN		2.822	9				.013	.047	.059		
16ER8UN	○ ○ ○	● ●	16EL8UN	○ ○	3.175	8				.013	.047	.063		
22ER7UN	○ ○ ○	● ●	22EL7UN	○ ○ ○	3.629	7				.014	.047	.063		
22ER6UN	○ ○ ○	● ●	22EL6UN	○ ○ ○	4.233	6				.015	.047	.063		
22ER5UN	○ ○ ○	● ●	22EL5UN	○ ○ ○	5.080	5	1/2"	.87		.016	.057	.073		
22ER4.5UN	○ ○ ○	● ●	22EL4.5UN		5.644	4.5				.017	.057	.073		
22ER4UN	○ ○ ○	● ●	22EL4UN		6.350	4				.020	.057	.073		
27ER4.5UN	○ ○ ○	● ●	27EL4.5UN		5.644	4.5				.017				
27ER4UN	○ ○ ○	● ●	27EL4UN		6.350	4				.020				
27VER4UN	○ ○ ○	● ●	27VEL4UN		6.350	4	5/8"	1.06		.020				
27VER3UN	○ ○ ○	● ●	27VEL3UN		8.466	3				.048				

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

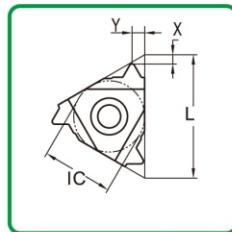
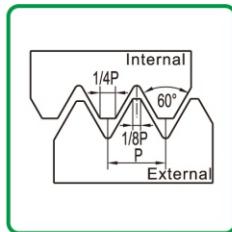
订货示例: 16ER14UN DM215 10片 Ordering example: 16ER14UN DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 UN-60° 美制统一标准型螺纹刀片 60° American UN NC NF NEF NS

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand												
11NR32UN		○	○	11NL32UN			○	0.794	32			.003	.024	.024
11NR28UN	○	○	○	11NL28UN			○	0.907	28			.003	.024	.024
11NR24UN	○	○	●	11NL24UN			○	1.058	24			.003	.027	.031
11NR20UN	○	○	●	11NL20UN			○	1.270	20			.004	.031	.035
11NR18UN	○	○	●	11NL18UN			○	1.411	18	1/4"	.43	.006	.031	.039
11NR16UN	○	○	●	11NL16UN			○	1.588	16			.008	.035	.043
11NR14UN	○	○	●	11NL14UN			○	1.814	14			.009	.035	.047
11NR12UN	○	○	●	11NL12UN			○	2.117	12			.010	.043	.055
16NR32UN				16NL32UN				0.794	32			.003	.024	.024
16NR28UN				16NL28UN				0.907	28			.003	.024	.024
16NR24UN				16NL24UN				1.058	24			.003	.027	.031
16NR20UN	○	○	●	16NL20UN			○	1.270	20			.004	.031	.035
16NR18UN	○	○	●	16NL18UN			○	1.411	18			.005	.031	.039
16NR16UN	○	○	●	16NL16UN			○	1.588	16	3/8"	.63	.006	.035	.043
16NR14UN	○	○	●	16NL14UN			○	1.814	14			.007	.035	.047
16NR12UN	○	○	●	16NL12UN			○	2.117	12			.007	.043	.055
16NR11UN				16NL11UN				2.309	11			.009	.043	.055
16NR10UN	○	○	●	16NL10UN			○	2.540	10			.011	.043	.059
16NR9UN				16NL9UN				2.822	9			.011	.043	.059
16NR8UN	○	○	●	16NL8UN			○	3.175	8			.012	.043	.059
22NR7UN	○	●		22NL7UN			○	3.629	7			.014	.047	.065
22NR6UN	○	●		22NL6UN			○	4.233	6			.014	.047	.065
22NR5UN	○	●		22NL5UN			○	5.080	5	1/2"	.87	.015	.057	.072
22NR4.5UN	○	●		22NL4.5UN				5.644	4.5			.016	.057	.072
22NR4UN	○	●		22NL4UN				6.350	4			.017	.057	.072
27NR4.5UN	○	●		27NL4.5UN				5.644	4.5			.017		
27NR4UN	○	●		27NL4UN				6.350	4			.020		
27VNR4UN	○	●		27VNL4UN				6.350	4	5/8"	1.06	.020		
27VNR3UN	○	●		27VNL3UN				8.466	3			.046		

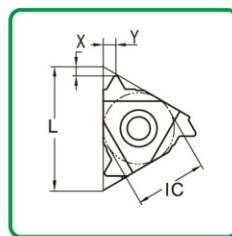
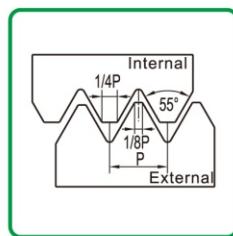
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR14UN DM215 10片 Ordering example: 16NR14UN DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

 W-55° 英国惠氏螺纹刀片 55° Whitworth Full Profile

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围		刀片尺寸		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			Pitch	Insert Size					
	右手刀片 Right Hand	Left Hand	mm	tpi	IC	L/inch	r	X	Y					
11ER28W		○ ●	11EL28W			0.907	28				.003	.024	.027	
11ER26W			11EL26W			0.977	26				.003	.024	.027	
11ER24W	○	●	11EL24W			1.058	24				.003	.024	.027	
11ER20W	○	●	11EL20W			1.27	20				.004	.031	.035	
11ER19W	○	●	11EL19W			1.337	19		1/4"	.43	.006	.031	.039	
11ER18W	○	●	11EL18W			1.411	18				.008	.031	.039	
11ER16W	○	●	11EL16W			1.588	16				.009	.035	.043	
11ER14W	○	●	11EL14W			1.814	14				.010	.039	.047	
16ER28W	○	●	16EL28W			0.907	13				.003	.024	.027	
16ER26W			16EL26W			0.977	26				.003	.024	.027	
16ER24W	○	●	16EL24W			1.058	24				.003	.024	.027	
16ER20W	○	●	16EL20W			1.27	20				.004	.031	.035	
16ER19W	○	●	16EL19W		○	1.337	19				.006	.031	.039	
16ER18W	○	●	16EL18W			1.411	18				.008	.031	.039	
16ER16W	○	●	16EL16W			1.588	16				.009	.035	.043	
16ER14W	○	●	16EL14W		○	1.814	14		3/8"	.63	.010	.039	.047	
16ER12W	○	●	16EL12W			2.117	12				.011	.043	.055	
16ER11W	○	●	16EL11W		○	2.309	11				.012	.043	.059	
16ER10W	○	●	16EL10W			2.54	10				.013	.043	.059	
16ER9W	○	●	16EL9W		○	2.822	9				.014	.047	.067	
16ER8W	○	●	16EL8W			3.175	8				.014	.047	.059	
16ER7W	○	●	16EL7W			3.629	7				.014	.047	.059	
22ER7W	○	●	22EL7W			3.629	7				.015	.063	.088	
22ER6W	○	●	22EL6W			4.233	6				.016	.063	.088	
22ER5W	○	●	22EL5W			5.08	5		1/2"	.87	.016	.063	.088	
22ER4.5W	○	●	22EL4.5W			5.644	4.5				.017	.071	.091	
22ER4W	○	●	22EL4W			6.35	4				.020	.071	.091	
27ER4.5W	○	●	27EL4.5W			5.644	4.5				.017			
27ER4W	○	●	27EL4W			6.350	4				.020			
27VER4W	○	●	27VEL4W			6.350	4		5/8"	1.06	.020			
27VER3W	○	●	27VEL3W			8.466	3				.048			
27VER2.5W	○	●	27VEL2.5W			10.16	2.5				.056			

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

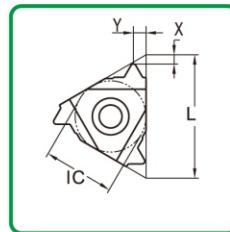
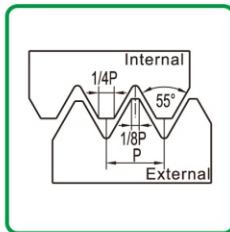
订货示例: 16ER14W DM215 10片 Ordering example: 16ER14W DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 W-55° 英国惠氏螺纹刀片 55° Whitworth Full Profile

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	Left Hand												
11NR28W		○	●	11NL28W				0.907	28			.003	.031	.035
11NR26W				11NL26W				0.977	26			.003	.031	.035
11NR24W		○	○	11NL24W				1.058	24			.003	.031	.035
11NR20W		○	○	11NL20W				1.27	20			.004	.031	.035
11NR19W		○	●	11NL19W		○		1.337	19	1/4"	.43	.006	.031	.035
11NR18W		○	○	11NL18W				1.411	18			.007	.031	.035
11NR16W		○	○	11NL16W				1.588	16			.008	.035	.039
11NR14W		○	●	11NL14W		○		1.814	14			.009	.035	.039
16NR28W				16NL28W				0.907	13			.003	.031	.035
16NR26W				16NL26W				0.977	26			.003	.031	.035
16NR24W				16NL24W				1.058	24			.004	.031	.035
16NR20W		○	●	16NL20W				1.27	20			.006	.031	.035
16NR19W		○	●	16NL19W		○		1.337	19			.006	.031	.035
16NR18W				16NL18W				1.411	18			.008	.031	.035
16NR16W		○	●	16NL16W				1.588	16			.009	.035	.039
16NR14W		○	●	16NL14W		○		1.814	14	3/8"	.63	.009	.035	.039
16NR12W		○	●	16NL12W				2.117	12			.010	.039	.047
16NR11W		○	●	16NL11W		○		2.309	11			.011	.039	.055
16NR10W		○	●	16NL10W				2.54	10			.012	.043	.059
16NR9W		○	●	16NL9W		○		2.822	9			.013	.043	.059
16NR8W		○	●	16NL8W				3.175	8			.013	.047	.059
16NR7W		○	●	16NL7W				3.629	7			.013	.047	.059
22NR7W		○	●	22NL7W				3.629	7			.014	.063	.088
22NR6W		○	●	22NL6W				4.233	6			.014	.063	.088
22NR5W		○	●	22NL5W				5.08	5	1/2"	.87	.015	.063	.088
22NR4.5W		○	●	22NL4.5W				5.644	4.5			.016	.072	.091
22NR4W		○	●	22NL4W				6.35	4			.018	.072	.091
27NR4.5W		○	●	27NL4.5W				5.644	4.5			.017		
27NR4W		○	●	27NL4W				6.350	4			.020		
27VNL4W		○	●	27VNL4W				6.350	4	5/8"	1.06	.020		
27VNL3W		○	●	27VNL3W				8.466	3			.048		
27VNL2.5W		○	●	27VNL2.5W				10.16	2.5			.056		

●常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR14W DM215 10片 Ordering example: 16NR14W DM215 10pcs

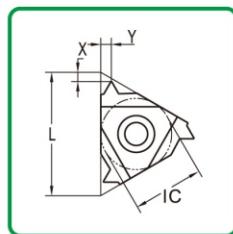
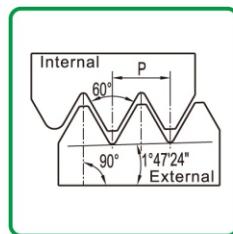
★ 27V刀片为立装型, 形状参考05页MTTR系列

60° NPT 美国标准锥管螺纹刀片 NPT

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)



型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215			DK110 DM315 DM215		mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand										
11ER27NPT	<input type="radio"/>	<input checked="" type="radio"/>	11EL27NPT			0.941	27			.003	.031	.027
11ER18NPT	<input type="radio"/>	<input checked="" type="radio"/>	11EL18NPT			1.411	18	1/4"	.43	.004	.039	.031
11ER14NPT	<input type="radio"/>	<input checked="" type="radio"/>	11EL14NPT			1.814	14			.006	.047	.035
16ER27NPT	<input type="radio"/>	<input checked="" type="radio"/>	16EL27NPT		<input type="radio"/>	0.941	27			.003	.031	.027
16ER18NPT	<input type="radio"/>	<input checked="" type="radio"/>	16EL18NPT		<input type="radio"/>	1.411	18			.004	.039	.031
16ER14NPT	<input type="radio"/>	<input checked="" type="radio"/>	16EL14NPT		<input type="radio"/>	1.814	14	3/8"	.63	.006	.047	.035
16ER11.5NPT	<input type="radio"/>	<input checked="" type="radio"/>	16EL11.5NPT		<input type="radio"/>	2.209	11.5			.008	.059	.043
16ER8NPT	<input type="radio"/>	<input checked="" type="radio"/>	16EL8NPT		<input type="radio"/>	3.175	8			.010	.071	.051

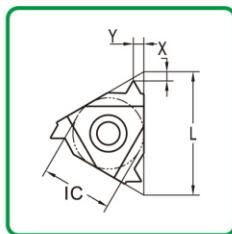
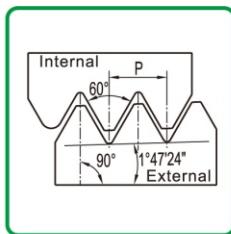
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16ER14NPT DM215 10片 Ordering example: 16ER14NPT DM215 10pcs

# 公、英、美制螺纹刀具 THREADING TOOLS

 60° NPT 美国标准锥管螺纹刀片 NPT

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

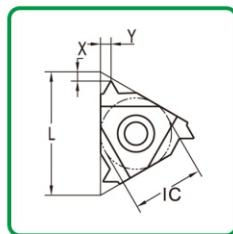
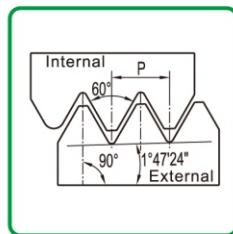
型 号 Ordering Code	材 质			型 号 Ordering Code	材 质			加工螺距范围		刀片尺寸		尺寸			
	Material Code				Material Code			Pitch		Insert Size		Dimensions (inch)			
	DK110	DM315	DM215		左手刀片 Left Hand	DK110	DM315	DM215	mm	tpi	IC	L/inch	r	X	Y
11NR27NPT	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	11NL27NPT	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	0.941	27	<input type="radio"/>	<input type="radio"/>	.003	.039	.031	
11NR18NPT	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	11NL18NPT	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	1.411	18	<input type="radio"/>	<input checked="" type="radio"/>	.004	.039	.031	
11NR14NPT	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	11NL14NPT	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	1.814	14	<input type="radio"/>	<input type="radio"/>	.006	.039	.031	
16NR27NPT	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	16NL27NPT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	0.941	27	<input type="radio"/>	<input type="radio"/>	.003	.039	.031	
16NR18NPT	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	16NL18NPT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1.411	18	<input type="radio"/>	<input type="radio"/>	.004	.039	.031	
16NR14NPT	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	16NL14NPT	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	1.814	14	<input type="radio"/>	<input type="radio"/>	.005	.039	.031	
16NR11.5NPT	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	16NL11.5NPT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2.209	11.5	<input type="radio"/>	<input type="radio"/>	.007	.052	.049	
16NR8NPT	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	16NL8NPT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3.175	8	<input type="radio"/>	<input type="radio"/>	.009	.071	.051	

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR14NPT DM215 10片 Ordering example: 16NR14NPT DM215 10pcs

 60° NPTF 美国干密封圆锥管螺纹刀片 NPTF

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围		刀片尺寸		尺寸				
						Pitch		Insert Size		Dimensions (inch)				
	DK110	DM315	DM215	左手刀片 Left Hand	DK110	DM315	DM215	mm	tpi	IC	L/inch	r	X	Y
11ER27NPTF	<input type="radio"/>	<input type="radio"/>		11EL27NPTF				0.941	27			.003	.039	.031
11ER18NPTF	<input type="radio"/>	<input type="radio"/>		11EL18NPTF				1.411	18	1/4"	.43	.004	.039	.031
11ER14NPTF	<input type="radio"/>	<input type="radio"/>		11EL14NPTF				1.814	14			.005	.039	.031
16ER27NPTF	<input type="radio"/>	<input type="radio"/>		16EL27NPTF				0.941	27			.003	.039	.031
16ER18NPTF	<input type="radio"/>	<input type="radio"/>		16EL18NPTF				1.411	18			.004	.039	.031
16ER14NPTF	<input type="radio"/>	<input type="radio"/>		16EL14NPTF				1.814	14	3/8"	.63	.005	.039	.031
16ER11.5NPTF	<input type="radio"/>	<input type="radio"/>		16EL11.5NPTF				2.209	11.5			.007	.052	.049
16ER8NPTF	<input type="radio"/>	<input type="radio"/>		16EL8NPTF				3.175	8			.009	.071	.051

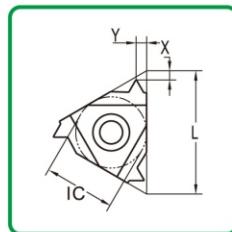
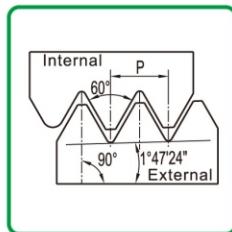
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16ER14NPTF DM215 10片 Ordering example: 16ER14NPTF DM215 10pcs

# 公、英、美制螺纹刀具 THREADING TOOLS

 60° NPTF 美国干密封圆锥管螺纹刀片 NPTF

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

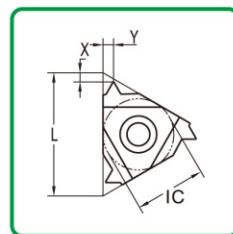
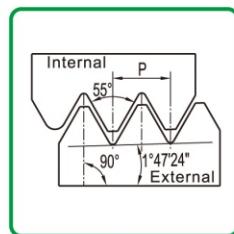
型 号 Ordering Code	材 质 Material Code		型 号 Ordering Code	材 质 Material Code		加工螺距范围 Pitch		刀 片 尺 寸 Insert Size		尺 寸 Dimensions (inch)				
	DK110 DM315 DM215			左手刀片 Left Hand		DK110 DM315 DM215		mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand													
11NR27NPTF		○		11NL27NPTF				0.941	27			.003	.039	.031
11NR18NPTF		○		11NL18NPTF				1.411	18	1/4"	.43	.004	.039	.031
11NR14NPTF		○	○	11NL14NPTF				1.814	14			.005	.039	.031
16NR27NPTF		○	○	16NL27NPTF				0.941	27			.003	.039	.031
16NR18NPTF		○	○	16NL18NPTF				1.411	18			.003	.039	.031
16NR14NPTF		○	○	16NL14NPTF				1.814	14	3/8"	.63	.004	.039	.031
16NR11.5NPTF		○	○	16NL11.5NPTF				2.209	11.5			.006	.052	.049
16NR8NPTF		○	○	16NL8NPTF				3.175	8			.008	.071	.051

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR14NPTF DM215 10片 Ordering example: 16NR14NPTF DM215 10pcs

 BSPT-55° 英国标准锥管螺纹刀片 BSPT

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围		刀片尺寸		尺寸				
						Pitch		Insert Size		Dimensions (inch)				
	DK110	DM315	DM215	Left Hand	DK110	DM315	DM215	mm	tpi	IC	L/inch	r	X	Y
11ER28BSPT		○	●	11EL28BSPT				0.907	28			.003	.031	.035
11ER19BSPT		○	●	11EL19BSPT				1.337	19	1/4"	.43	.004	.037	.039
11ER14BSPT		○	●	11EL14BSPT				1.814	14			.006	.047	.039
16ER28BSPT		○	●	16EL28BSPT				0.907	28			.003	.031	.035
16ER19BSPT		○	●	16EL19BSPT			○	1.337	19	3/8"	.63	.004	.037	.039
16ER14BSPT		○	●	16EL14BSPT			○	1.814	14			.006	.047	.039
16ER11BSPT		○	●	16EL11BSPT			○	2.309	11			.007	.059	.041

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16ER14BSPT DM215 10片 Ordering example: 16ER14BSPT DM215 10pcs

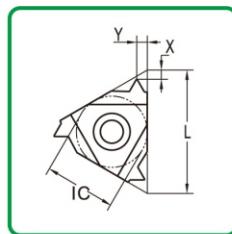
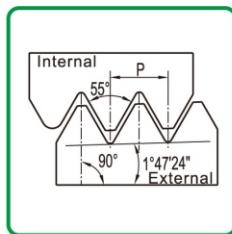
# 公、英、美制螺纹刀具 THREADING TOOLS

 BSPT-55° 英国标准锥管螺纹刀片 BSPT

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)



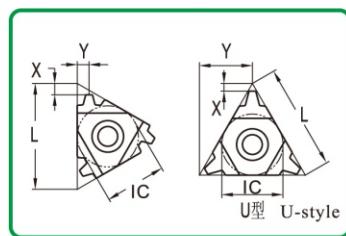
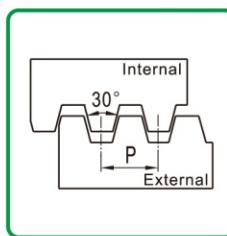
型 号 Ordering Code	材 质 Material Code			型 号 Ordering Code	材 质 Material Code			加工螺距范围		刀片尺寸		尺 寸			
	DK110 DM315 DM215				DK110 DM315 DM215			Pitch		Insert Size		Dimensions (inch)			
	右手刀片 Right Hand	Left Hand			mm	tpi	IC	L/inch	r	X	Y				
11NR28BSPT		○	●	11NL28BSPT		○	0.907	28			.003	.031	.035		
11NR19BSPT		○	●	11NL19BSPT		○	1.337	19	1/4"	.43	.004	.037	.039		
11NR14BSPT		○	●	11NL14BSPT		○	1.814	14			.006	.047	.039		
16NR28BSPT				16NL28BSPT			0.907	28			.003	.031	.035		
16NR19BSPT		○	●	16NL19BSPT			1.337	19			.004	.037	.039		
16NR14BSPT		○	●	16NL14BSPT		○	1.814	14	3/8"	.63	.005	.047	.039		
16NR11BSPT		○	●	16NL11BSPT		○	2.309	11			.006	.059	.041		

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR14BSPT DM215 10片 Ordering example: 16NR14BSPT DM215 10pcs

TR-30° 梯形螺纹 Trapez DIN 103

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)			
	DK110 DM315 DM215			DK110 DM315 DM215		mm	tpi	IC	L/inch	r	X	Y	
	右手刀片 Right Hand	左手刀片 Left Hand											
16ER1.5TR	○	●	16EL1.5TL		○	1.50				.003	.041	.039	
16ER2.0TR	○	●	16EL2.0TL		○	2.00		3/8"	.63	.004	.051	.043	
16ER3.0TR	○	●	16EL3.0TL		○	3.00				.006	.059	.051	
22ER4.0TR	○	●	22EL4.0TL		○	4.00				.008	.075	.067	
22ER5.0TR	○	●	22EL5.0TL		○	5.00				.009	.098	.083	
22ER6.0TR	○	●	22EL6.0TL		○	6.00		1/2"	.87	.011	.101	.099	
* 22ER7.0TR	○	●	* 22EL7.0TL			7.00				.012	.095	.54	
27ER6.0TR	○	●	27EL6.0TL		○	6.00				.011			
27ER7.0TR	○	●	27EL7.0TL			7.00				.012			
27VER6.0TR	○	●	27VEL6.0TR		○	6.00				.008			
27VER7.0TR	○	●	27VEL7.0TR		○	7.00		5/8"	1.06	.009			
27VER8.0TR	○	●	27VEL8.0TR		○	8.00				.011			
27VER9.0TR	○	○	27VEL9.0TR			9.00				.012			
27VER10TR	○	○	27VEL10TR		○	10.0				.013			
27VER12TR			27VEL12TR			12.0				.014			

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16ER3.0TR DM215 10片 Ordering example: 16ER3.0TR DM215 10pcs

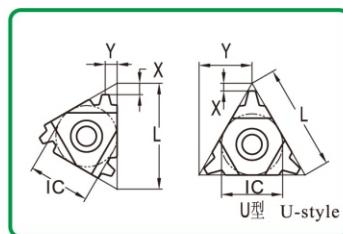
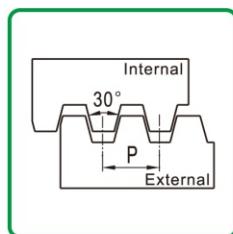
★:该产品为U型样式 The insert is U style.

★ 27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 TR-30° 梯形螺纹 Trapez DIN 103

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand												
16NR1.5TR		○	●	16NL1.5TL			○	1.50				.003	.041	.039
16NR2.0TR		○	●	16NL2.0TL			○	2.00		3/8"	.63	.004	.051	.043
16NR3.0TR		○	●	16NL3.0TL			○	3.00				.006	.059	.051
22NR4.0TR		○	●	22NL4.0TL			○	4.00				.008	.075	.067
22NR5.0TR		○	●	22NL5.0TL			○	5.00				.009	.098	.083
22NR6.0TR		○	●	22NL6.0TL			○	6.00		1/2"	.87	.010	.101	.099
* 22NR7.0TR		○	●	* 22NL7.0TL				7.00				.011	.095	.54
27NR6.0TR		○	●	27NL6.0TL			○	6.00				.011		
27NR7.0TR		○	●	27NL7.0TL			○	7.00		5/8"	1.06	.009		
27VNR8.0TR		○	●	27VNL8.0TR			○	8.00				.011		
27VNR9.0TR		○	○	27VNL9.0TR				9.00				.012		
27VNR10TR		○	○	27VNL10TR			○	10.0				.013		
27VNR12TR				27VNL12TR				12.0				.014		

●常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

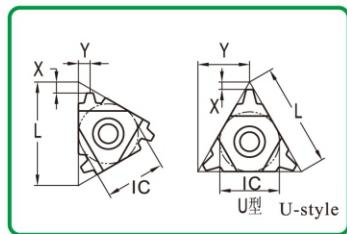
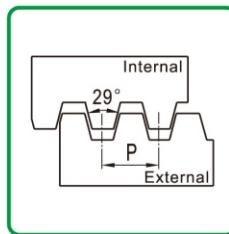
订货示例: 16NR3.0TR DM215 10片 Ordering example: 16NR3.0TR DM215 10pcs

★:该产品为U型样式 The insert is U-style.

★ 27V刀片为立装型, 形状参考05页MTTR系列

 ACME-29° 美制ACME梯形螺纹刀片 American ACME

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围		刀片尺寸		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			Pitch	Insert Size		L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand	mm	tpi	IC	L/inch								
16ER16ACME	○	●	16EL16ACME				1.588	16				.003	.043	.039
16ER14ACME	○	●	16EL14ACME				1.814	14				.004	.043	.039
16ER12ACME	○	●	16EL12ACME				2.117	12	3/8"	.63		.006	.047	.043
16ER10ACME	○	●	16EL10ACME		○		2.540	10				.008	.055	.051
16ER8ACME	○	●	16EL8ACME		○		3.175	8				.009	.059	.055
22ER6ACME	○	●	22EL6ACME		○		4.233	6				.011	.083	.071
22ER5ACME	○	●	22EL5ACME				5.080	5	1/2"	.87		.016	.09	.079
22ER4ACME	○	●	22EL4ACME				6.350	4				.021	.112	.092
27ER4ACME	○	●	27EL4ACME				6.350	4		5/8"	1.06	.021		
27VER3ACME	○	●	27VEL3ACME				8.466	3				.026		

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

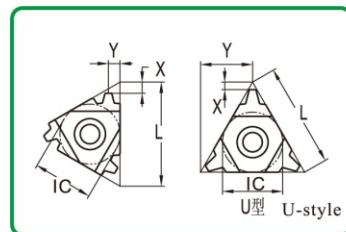
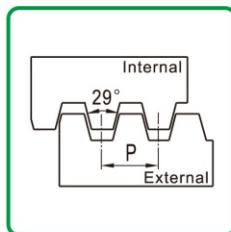
订货示例: 16ER12ACME DM215 10片 Ordering example: 16ER12ACME DM215 10pcs

★27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 ACME-29° 美制ACME梯形螺纹刀片 American ACME

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型 号 Ordering Code	材 质			型 号 Ordering Code	材 质			加工螺距范围		刀片尺寸		尺 寸			
	Material Code				Material Code			Pitch		Insert Size		Dimensions (inch)			
	DK110	DM315	DM215		左手刀片 Left Hand	DK110	DM315	DM215	mm	tpi	IC	L/inch	r	X	Y
16NR16ACME		○	●	16NL16ACME				1.588	16			.003	.043	.039	
16NR14ACME		○	●	16NL14ACME				1.814	14			.004	.043	.039	
16NR12ACME		○	●	16NL12ACME			○	2.117	12	3/8"	.63	.006	.047	.043	
16NR10ACME		○	●	16NL10ACME			○	2.540	10			.007	.055	.051	
16NR8ACME		○	●	16NL8ACME			○	3.175	8			.008	.059	.055	
22NR6ACME		○	●	22NL6ACME			○	4.233	6			.010	.083	.071	
22NR5ACME		○	●	22NL5ACME				5.080	5	1/2"	.87	.014	.09	.079	
22NR4ACME		○	●	22NL4ACME				6.350	4			.019	.112	.092	
27NR4ACME		○	●	27NL4ACME				6.350	4	5/8"	1.06	.021			
27VNR3ACME		○	●	27VNL3ACME				8.466	3			.026			

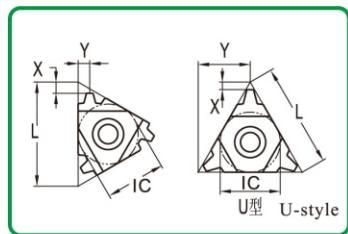
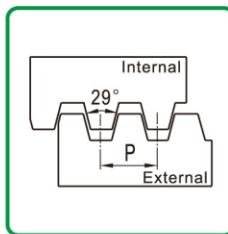
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR12ACME DM215 10片 Ordering example: 16NR12ACME DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

STACME-29° 美制短齿梯形螺纹刀片 Stub ACME

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	左手刀片 Left Hand												
16ER16STACME	<input type="radio"/>	<input type="radio"/>		16EL16STACME				1.588	16			.003	.039	.039
16ER14STACME	<input type="radio"/>	<input type="radio"/>		16EL14STACME				1.814	14			.004	.039	.039
16ER12STACME	<input type="radio"/>	<input type="radio"/>		16EL12STACME				2.117	12			.006	.051	.047
16ER10STACME	<input type="radio"/>	<input type="radio"/>		16EL10STACME				2.540	10	3/8"	.63	.008	.051	.047
16ER8STACME	<input type="radio"/>	<input checked="" type="radio"/>		16EL8STACME				3.175	8			.009	.059	.055
16ER6STACME	<input type="radio"/>	<input checked="" type="radio"/>		16EL6STACME				4.233	6			.011	.059	.055
22ER6STACME	<input type="radio"/>	<input type="radio"/>		22EL6STACME				4.233	6			.011	.059	.055
22ER5STACME	<input type="radio"/>	<input checked="" type="radio"/>		22EL5STACME				5.080	5	1/2"	.87	.016	.090	.083
22ER4STACME	<input type="radio"/>	<input checked="" type="radio"/>		22EL4STACME				6.350	4			.021	.099	.087
27ER4STACME	<input type="radio"/>	<input checked="" type="radio"/>		27EL4STACME				6.350	4	5/8"	1.06	.021		
27VER3STACME	<input type="radio"/>	<input checked="" type="radio"/>		27VEL3STACME				8.466	3			.026		

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

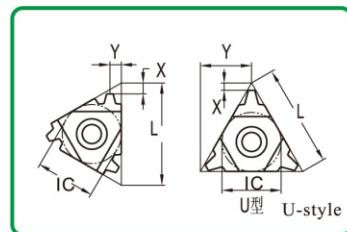
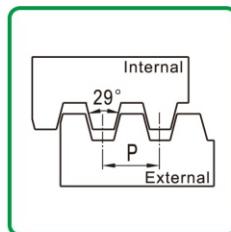
订货示例: 16ER12STACME DM215 10片 Ordering example: 16ER12STACME DM215 10pcs

★ 27V刀片为立装型, 形状参考05页MTTR系列

# 公、英、美制螺纹刀具 THREADING TOOLS

 STACME-29° 美制短齿梯形螺纹刀片 Stub ACME

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围		刀片尺寸		尺寸 Dimensions (inch)			
	DK110 DM315 DM215				DK110 DM315 DM215			Pitch		Insert Size					
	右手刀片 Right Hand	左手刀片 Left Hand	mm		IC	L/inch	r	X	Y						
16NR16STACME	<input type="radio"/>	<input type="radio"/>	16NL16STACME				1.588	16				.003	.039	.039	
16NR14STACME	<input type="radio"/>	<input type="radio"/>	16NL14STACME				1.814	14				.004	.039	.039	
16NR12STACME	<input type="radio"/>	<input type="radio"/>	16NL12STACME				2.117	12				.006	.051	.047	
16NR10STACME	<input type="radio"/>	<input type="radio"/>	16NL10STACME				2.540	10				.007	.051	.047	
16NR8STACME	<input type="radio"/>	<input checked="" type="radio"/>	16NL8STACME				3.175	8				.008	.059	.055	
16NR6STACME	<input type="radio"/>	<input checked="" type="radio"/>	16NL6STACME				4.233	6				.009	.059	.055	
22NR6STACME	<input type="radio"/>	<input type="radio"/>	22NL6STACME				4.233	6				.009	.059	.055	
22NR5STACME	<input type="radio"/>	<input checked="" type="radio"/>	22NL5STACME				5.080	5				.014	.090	.083	
22NR4STACME	<input type="radio"/>	<input checked="" type="radio"/>	22NL4STACME				6.350	4				.019	.099	.087	
27NR4STACME	<input type="radio"/>	<input checked="" type="radio"/>	27NL4STACME				6.350	4				.021			
27VNR3STACME	<input type="radio"/>	<input checked="" type="radio"/>	27VNL3STACME				8.466	3				.026			

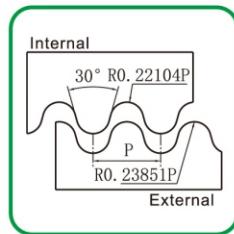
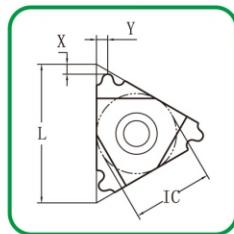
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR12STACME DM215 10片 Ordering example: 16NR12STACME DM215 10pcs

★27V刀片为立装型, 形状参考05页MTTR系列

## RD圆螺纹 30° DIN405

### 外螺纹 External



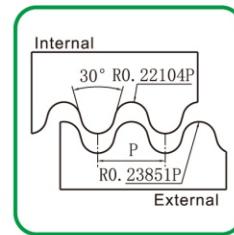
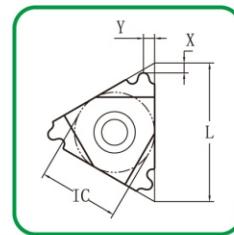
图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)				
	DK110 DM315 DM215			左手刀片 Left Hand		DK110 DM315 DM215		mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	●	○	●	○	●	○	●	○	●	.024	.051	.055	
16ER10RD		○	●	16EL10RD				2.54	10			.024	.051	.055
16ER 8RD		○	●	16EL 8RD				3.175	8	3/8"	.63	.030	.059	.063
16ER 6RD		○	●	16EL 6RD				4.23	6			.040	.067	.059
22ER 6RD		○	●	22EL 6RD				4.23	6			.040	.067	.059
22ER 5RD		○	○	22EL 5RD				5.08	5	2/1"	.87	.048	.078	.066
22ER 4RD		○	●	22EL 4RD				6.35	4			.059	.092	.087

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16ER8RD DM215 10片 Ordering example: 16ER8RD DM215 10pcs

### 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)				
	DK110 DM315 DM215			左手刀片 Left Hand		DK110 DM315 DM215		mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	●	○	●	○	●	○	●	○	●	.022	.051	.055	
16NR10RD		○	●	16NL10RD				2.54	10			.022	.051	.055
16NR 8RD		○	●	16NL 8RD				3.175	8	3/8"	.63	.028	.059	.063
16NR 6RD		○	●	16NL 6RD				4.23	6			.037	.067	.059
22NR 6RD		○	●	22NL 6RD				4.23	6			.037	.067	.059
22NR 5RD		○	○	22NL 5RD				5.08	5	2/1"	.87	.048	.078	.066
22NR 4RD		○	●	22NL 4RD				6.35	4			.055	.092	.087

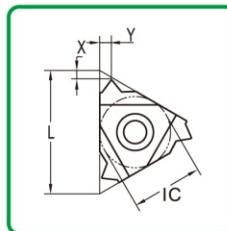
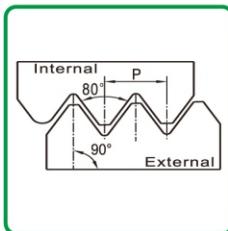
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR8RD DM215 10片 Ordering example: 16NR8RD DM215 10pcs

# 公、英、美制螺纹刀具 THREADING TOOLS

## PG螺纹刀片 PG DIN40430

### 外螺纹 External



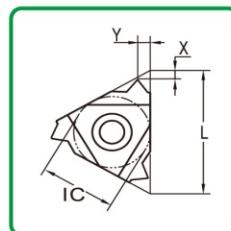
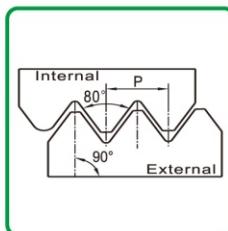
图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	Left Hand												
11ER20PG		○	●	11EL20PG				1.27	20				.031	.035
11ER18PG		○	●	11EL18PG				1.41	18	1/4"	.43		.031	.039
11ER16PG		○	●	11EL16PG				1.59	16				.035	.043
16ER20PG		○	●	16EL20PG				1.27	20				.031	.035
16ER18PG		○	●	16EL18PG				1.41	18	3/8"	.63		.031	.039
16ER16PG		○	●	16EL16PG				1.59	16				.035	.043

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR8RD DM215 10片 Ordering example: 16NR8RD DM215 10pcs

### 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

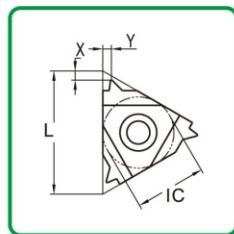
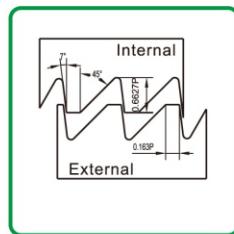
型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	Left Hand												
11NR20PG		○	●	11NL20PG				1.27	20				.030	.034
11NR18PG		○	●	11NL18PG				1.41	18	1/4"	.43		.030	.038
11NR16PG		○	●	11NL16PG				1.59	16				.033	.041
16NR20PG		○	●	16NL20PG				1.27	20				.031	.035
16NR18PG		○	●	16NL18PG				1.41	18	3/8"	.63		.031	.039
16NR16PG		○	●	16NL16PG				1.59	16				.035	.043

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16NR8RD DM215 10片 Ordering example: 16NR8RD DM215 10pcs

 ABUT美制锯齿形螺纹刀片 American Buttress

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	Left Hand												
11ER20ABUT		<input type="radio"/>	<input type="radio"/>	11EL20ABUT				1.270	20	1/4"	.43	.003	.031	.035
11ER16ABUT		<input type="radio"/>	<input type="radio"/>	11EL16ABUT				1.588	16			.003	.031	.034
16ER20ABUT		<input type="radio"/>	<input type="radio"/>	16EL20ABUT				1.270	20			.004	.031	.034
16ER16ABUT		<input type="radio"/>	<input type="radio"/>	16EL16ABUT				1.588	16			.005	.031	.034
16ER12ABUT		<input type="radio"/>	<input type="radio"/>	16EL12ABUT				2.117	12	3/8"	.63	.007	.039	.041
16ER10ABUT		<input type="radio"/>	<input type="radio"/>	16EL10ABUT				2.540	10			.008	.043	.047
22ER8ABUT		<input type="radio"/>	<input type="radio"/>	22EL8ABUT				3.175	8	1/2"	.87	.010	.047	.052
22ER6ABUT		<input type="radio"/>	<input type="radio"/>	22EL6ABUT				4.233	6			.012	.063	.059

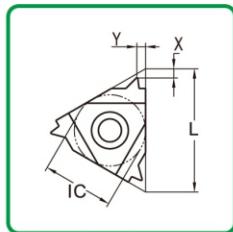
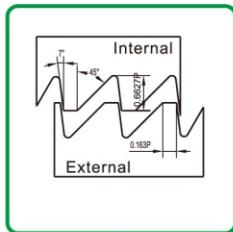
●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

订货示例: 16ER12ABUT DM215 10片 Ordering example: 16ER12ABUT DM215 10pcs

# 公、英、美制螺纹刀具 THREADING TOOLS

 ABUT美制锯齿形螺纹刀片 American Buttress

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

型号 Ordering Code	材质 Material Code			型号 Ordering Code	材质 Material Code			加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)		
	DK110 DM315 DM215				DK110 DM315 DM215			mm	tpi	IC	L/inch	r	X	Y
	右手刀片 Right Hand	Left Hand												
11NR20ABUT		<input type="radio"/>	<input type="radio"/>	11NL20ABUT				1.270	20	1/4"	.43	.003	.031	.035
11NR16ABUT		<input type="radio"/>	<input type="radio"/>	11NL16ABUT				1.588	16			.003	.031	.034
16NR20ABUT				16NL20ABUT				1.270	20			.004	.031	.034
16NR16ABUT		<input type="radio"/>	<input type="radio"/>	16NL16ABUT				1.588	16	3/8"	.63	.005	.031	.034
16NR12ABUT		<input type="radio"/>	<input type="radio"/>	16NL12ABUT				2.117	12			.007	.039	.041
16NR10ABUT		<input type="radio"/>	<input type="radio"/>	16NL10ABUT				2.540	10			.008	.043	.047
22NR8ABUT		<input type="radio"/>	<input type="radio"/>	22NL8ABUT				3.175	8	1/2"	.87	.010	.047	.052
22NR6ABUT		<input type="radio"/>	<input type="radio"/>	22NL6ABUT				4.233	6			.012	.063	.059

●:常备库存(主推) Stock standard(main) ○:一般库存 Stock standard

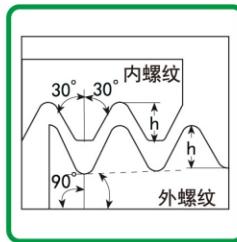
订货示例: 16NR12ABUT DM215 10片 Ordering example: 16NR12ABUT DM215 10pcs

60° -API石油管用螺纹刀片 Insert for API Oil Pipe

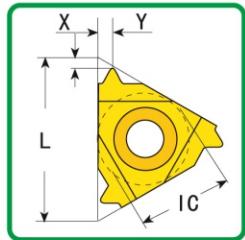
## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)



标准 美制API螺纹 SPEC. 7:1990  
公差等级标准 美制API螺纹



外螺纹刀片

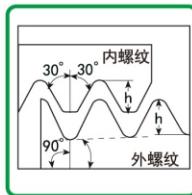
型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)			
	右手刀片 Right Hand			左手刀片 Left Hand		DK110 DM315 DM215	mm	tpi	IC	L/inch	r	X	Y
	○	●	○	●	○	16ER10APIRD		2.540	10	3/8"	.63	.004	.043
16ER08APIRD	○	●	○	●	○	16EL08APIRD		3.175	8	.63	.005	.047	.063

●常备库存(主推) Stock standard(main) ○:一般库存 Stock standard  
订货示例: 16ER10APIRD DM215 10片 Ordering example: 16ER10APIRD DM215 10pcs

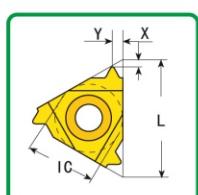
## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)



标准 美制API螺纹 SPEC. 7:1990  
公差等级标准 美制API螺纹



内螺纹刀片

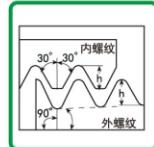
型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)			
	右手刀片 Right Hand			左手刀片 Left Hand		DK110 DM315 DM215	mm	tpi	IC	L/inch	r	X	Y
	○	●	○	●	○	16NR10APIRD		2.540	10	3/8"	.63	.004	.043
16NR08APIRD	○	●	○	●	○	16NL08APIRD		3.175	8	.63	.005	.047	.063

●常备库存(主推) Stock standard(main) ○:一般库存 Stock standard  
订货示例: 16NR10APIRD DM215 10片 Ordering example: 16NR10APIRD DM215 10pcs

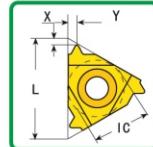
## 公、英、美制螺纹刀具 THREADING TOOLS

 美制API螺纹刀片 API

## 外螺纹 External

图片为右手刀片  
Right Insert(see picture)

标准 美制API螺纹 SPEC. 7:1990

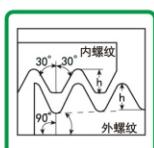


$\alpha = \arctg(IPF/24)$

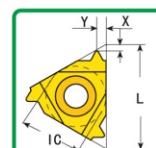
外螺纹刀片

刀片尺寸 Insert size	螺距 Thread	螺纹 Taper	锥度 Taper	刀片型号 Ordering Code	材质 Material Code			螺纹尺寸 Size	尺寸规格 Dimension (mm)		
					DK110	DM315	DM215		hmin	X	Y
1/2"	22	4	V-0.038R	2	22ER4API382	<input type="radio"/>	<input checked="" type="radio"/>	NC23-NC50	3.09	2.1	2.8
		4	V-0.038R	3	22ER4API383	<input type="radio"/>	<input type="radio"/>	NC56-NC77	3.08	2.1	2.8
		4	V-0.050	2	22ER4API502	<input type="radio"/>	<input type="radio"/>	6-5/8"REG	3.75	2.0	2.9
		4	V-0.050	3	22ER4API503	<input type="radio"/>	<input type="radio"/>	5-1/2", 7-5/8", 8-5/8"REG	3.74	2.0	2.9
		5	V-0.040	3	22ER5API403	<input type="radio"/>	<input type="radio"/>	2-3/8"~4-1/2"REG	2.99	1.8	2.6
		6	V-0.055	1.5	22ER6API551	<input type="radio"/>	<input type="radio"/>	NC10-NC16	1.41	2.6	2.0
5/8"	27	4	V-0.038R	2	27ER4API382	<input type="radio"/>	<input type="radio"/>	NC23-NC50	3.09	2.1	2.8
		4	V-0.038R	3	27ER4API383	<input type="radio"/>	<input type="radio"/>	NC56-NC77	3.08	2.1	2.8
		4	V-0.050	2	27ER4API502	<input type="radio"/>	<input type="radio"/>	6-5/8"REG	3.75	2.1	3.1
		4	V-0.050	3	27ER4API503	<input type="radio"/>	<input type="radio"/>	5-1/2", 7-5/8", 8-5/8"REG	3.74	2.1	3.1
		5	V-0.040	3	27ER5API403	<input type="radio"/>	<input type="radio"/>	2-3/8"~4-1/2"REG	2.99	1.9	2.7

## 内螺纹 Internal

图片为右手刀片  
Right Insert(see picture)

标准 美制API螺纹 SPEC. 7:1990



$\alpha = \arctg(IPF/24)$

内螺纹刀片

刀片尺寸 Insert size	螺距 Thread	螺纹 Taper	锥度 Taper	刀片型号 Ordering Code	材质 Material Code			螺纹尺寸 Size	尺寸规格 Dimension (mm)		
					DK110	DM315	DM215		hmin	X	Y
1/2"	22	4	V-0.038R	2	22IR4API382	<input type="radio"/>	<input checked="" type="radio"/>	NC23-NC50	3.09	2.1	2.8
		4	V-0.038R	3	22IR4API383	<input type="radio"/>	<input type="radio"/>	NC56-NC77	3.08	2.1	2.8
		4	V-0.050	2	22IR4API502	<input type="radio"/>	<input type="radio"/>	6-5/8"REG	3.75	2.0	2.9
		4	V-0.050	3	22IR4API503	<input type="radio"/>	<input type="radio"/>	5-1/2", 7-5/8", 8-5/8"REG	3.74	2.0	2.9
		5	V-0.040	3	22IR5API403	<input type="radio"/>	<input type="radio"/>	2-3/8"~4-1/2"REG	2.99	1.8	2.6
		6	V-0.055	1.5	22IR6API551	<input type="radio"/>	<input type="radio"/>	NC10-NC16	1.41	2.6	2.0
5/8"	27	4	V-0.038R	2	27IR4API382	<input type="radio"/>	<input type="radio"/>	NC23-NC50	3.09	2.1	2.8
		4	V-0.038R	3	27IR4API383	<input type="radio"/>	<input type="radio"/>	NC56-NC77	3.08	2.1	2.8
		4	V-0.050	2	27IR4API502	<input type="radio"/>	<input type="radio"/>	6-5/8"REG	3.75	2.1	3.1
		4	V-0.050	3	27IR4API503	<input type="radio"/>	<input type="radio"/>	5-1/2", 7-5/8", 8-5/8"REG	3.74	2.1	3.1
		5	V-0.040	3	27IR5API403	<input type="radio"/>	<input type="radio"/>	2-3/8"~4-1/2"REG	2.99	1.9	2.7

## 👉 美制VAM螺纹刀片 VAM

### 外螺纹 External



图片为右手刀片  
Right Insert(see picture)



$$\alpha = \arctg(IFF/24)$$



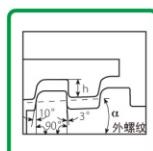
标准 STD. 5B:1979

刀片尺寸 Insert size	螺距 tpi	锥度 IPF	刀片型号 Ordering Code	材质 Material Code			螺纹尺寸 Size	尺寸规格 Dimension (mm)		
				DK110	DM315	DM215		hmin	X	Y
3/8 16	8	0.75	16ER8VAM***	○	○		2-3/8", 2-7/8"	0.97	1.7	1.8
1/2 22	6	0.75	22ER6VAM***	○	○		3-1/2"	0.97	2.4	2.4
	5	0.75	22ER5VAM***	○	○		5"~9-5/8"	1.54	2.4	2.7

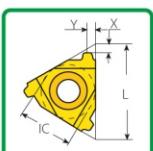
### 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)



$$\alpha = \arctg(IFF/24)$$



标准 STD. 5B:1979

刀片尺寸 Insert size	螺距 tpi	锥度 IPF	刀片型号 Ordering Code	材质 Material Code			螺纹尺寸 Size	尺寸规格 Dimension (mm)		
				DK110	DM315	DM215		hmin	X	Y
3/8 16	8	0.75	16NR8VAM***	○	○		2-3/8", 2-7/8"	0.97	1.7	1.8
1/2 22	6	0.75	22NR6VAM***	○	○		3-1/2"	0.97	2.4	2.4
	5	0.75	22NR5VAM***	○	○		5"~9-5/8"	1.54	2.4	2.7

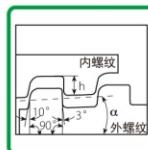
# 公、英、美制螺纹刀具 THREADING TOOLS

 美制EL石油套管螺纹刀片 EL

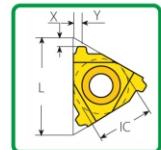
## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)



标准 美制API螺纹 STD. 5B:1979



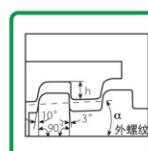
$$\alpha = \arctg (IPF/24)$$

刀片尺寸 Insert size	螺距 Lmm	锥度 IPF	刀片型号 Ordering Code	材质 Material Code		螺纹尺寸 Size	尺寸规格 Dimension (mm)		
							hmin	X	Y
1/2	22	6	RH	DK110 DM315 DM215		5"~7-5/8"	1.39	1.8	1.9
			22NR6EL***	○	○				
		5	1.25	22NR5EL**		8-5/8"~10-3/4"	1.91	2.2	2.4
				○	○				

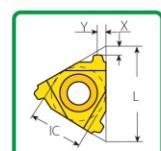
## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)



标准 美制API螺纹 STD. 5B:1979



$$\alpha = \arctg (IPF/24)$$

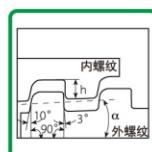
刀片尺寸 Insert size	螺距 Lmm	锥度 IPF	刀片型号 Ordering Code	材质 Material Code		螺纹尺寸 Size	尺寸规格 Dimension (mm)		
							hmin	X	Y
1/2	22	6	RH	DK110 DM315 DM215		5"~7-5/8"	1.39	1.8	1.9
			22NR6EL***	○	○				
		5	1.25	22NR5EL**		8-5/8"~10-3/4"	1.91	2.2	2.4
				○	○				

## API锯齿套螺纹刀片

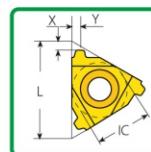
### 外螺纹 External



图片为右手刀片  
Right Insert(see picture)



标准 STD. 5B:1979



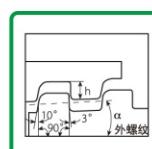
$$\alpha = \arctg (IPF/24)$$

刀片尺寸 Insert size			螺距 tpi	锥度 IPF	刀片型号 Ordering Code	材质 Material Code		螺纹尺寸 Size	尺寸规格 Dimension (mm)		
IC	Lmm				RH	DK110	DM315	DM215			
1/2"	22	5	0.75		22ER5BUT75***	<input type="radio"/>	<input type="radio"/>		4-1/2"~13-3/8"	1.55	3.1
		5	1		22ER5BUT1***	<input type="radio"/>	<input type="radio"/>		16"~20"	1.55	3.1

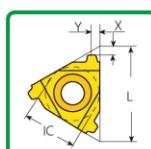
### 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)



标准 STD. 5B:1979



$$\alpha = \arctg (IPF/24)$$

刀片尺寸 Insert size			螺距 tpi	锥度 IPF	刀片型号 Ordering Code	材质 Material Code		螺纹尺寸 Size	尺寸规格 Dimension (mm)		
IC	Lmm				RH	DK110	DM315	DM215			
1/2"	22	5	0.75		22IR5BUT75***	<input type="radio"/>	<input type="radio"/>		4-1/2"~13-3/8"	1.55	3.1
		5	1		22IR5BUT1***	<input type="radio"/>	<input type="radio"/>		16"~20"	1.55	3.1

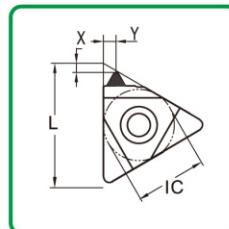
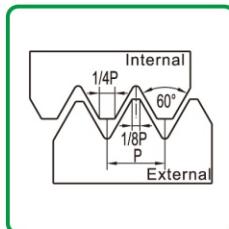
## 公、英、美制螺纹刀具 THREADING TOOLS

PCD/PCBN螺纹刀片 PCD/PCBN

## 外螺纹 External



图片为右手刀片  
Right Insert(see picture)

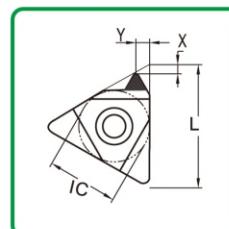
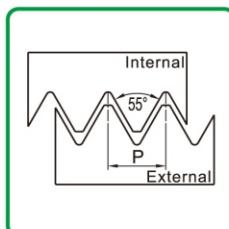


型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)							
	CB20			PC20		CB20		PC20		mm	tpi	IC	L/inch	r	X	Y	
	右手刀片 Right Hand			左手刀片 Left Hand													
11ERA60F			11ELA60F			0.5-1.5	48-16	1/4"	.43	.003	.031	.035					
11ERA55F			11ELA55F			0.5-1.5	48-16			.003	.031	.035					
16ERAG60F	●	●	16ELAG60F	●	●	1.0-2.5	24-10	3/8"	.63	.004	.047	.067					
16ERAG55F	●	●	16ELAG55F	●	●	1.0-2.5	24-10			.004	.047	.067					
22ERN60F	○	○	22ELN60F	○	○	3.0-5.0	8-5	1/2"	.87	.021	.067	.098					
22ERN55F	○	○	22ELN55F	○	○	3.0-5.0	8-5			.021	.067	.098					

## 内螺纹 Internal



图片为右手刀片  
Right Insert(see picture)

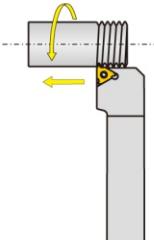
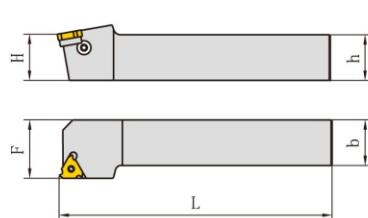


型号 Ordering Code	材质 Material Code		型号 Ordering Code	材质 Material Code		加工螺距范围 Pitch		刀片尺寸 Insert Size		尺寸 Dimensions (inch)							
	CB20			PC20		CB20		PC20		mm	tpi	IC	L/inch	r	X	Y	
	右手刀片 Right Hand			左手刀片 Left Hand													
11NRA60F			11NLA60F			0.5-1.5	48-16	1/4"	.43	.003	.031	.035					
11NRA55F			11NLA55F			0.5-1.5	48-16	1/4"	.43	.003	.031	.035					
16NRAG60F	●	●	16NLG60F	●	●	0.5-3.0	48-8	3/8"	.63	.004	.047	.067					
16NRAG55F	●	●	16NLG55F	●	●	0.5-3.0	48-8	3/8"	.63	.004	.047	.067					
22NRN60F	○	○	22NLN60F	○	○	3.5-6.0	7-5	1/2"	.87	.021	.067	.098					
22NRN55F	○	○	22NLN55F	○	○	3.5-6.0	7-5	1/2"	.87	.021	.067	.098					

★ CB20为立方氮化硼刀片 (PCBN)，适用于精加工高硬度钢

★ PC20为金刚石刀片 (PCD)，适用于精加工有色金属

## 外螺纹车刀杆 (偏头) Threading Tool Holders



图片为右手刀具  
Right Cutting Tools(see picture)

注意: 右手刀具(R)配右手刀片(R), 左手刀具(L)配左手刀片(L)  
Note:right tools match with right inserts;left tools match with left inserts.

型号 Ordering Code		尺寸 Dimensions(mm)					刀片 Insert		刀片螺钉 Insert Screw	扳手 Torx Key	刀垫 Anvil	侧面螺钉 Anvil Screw	扳手 Hex Wrench
右刀 Right Hand	左刀 Left Hand	h	b	H	F	L	右 Right	左 Left					
SER1212F16	SEL1212F16	12	12	12	16	80	16ER..	16EL..	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SER1616H16	SEL1616H16	16	16	16	20	100	16ER..	16EL..	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SER2020K16	SEL2020K16	20	20	20	25	125	16ER..	16EL..	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SER2525M16	SEL2525M16	25	25	25	32	150	16ER..	16EL..	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SER3225P16	SEL3225P16	32	25	32	32	170	16ER..	16EL..	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SER3232P16	SEL3232P16	32	32	32	40	170	16ER..	16EL..	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SER2020K22	SEL2020K22	20	20	20	27	125	22ER..	22EL..	L60M4.5x14	T-20	EGM-22	MQ040080	S2.5
SER2525M22	SEL2525M22	25	25	25	32	150	22ER..	22EL..	L60M4.5x14	T-20	EGM-22	MQ040080	S2.5
SER3225P22	SEL3225P22	32	25	32	32	170	22ER..	22EL..	L60M4.5x14	T-20	EGM-22	MQ040080	S2.5
SER3232P22	SEL3232P22	32	32	32	40	170	22ER..	22EL..	L60M4.5x14	T-20	EGM-22	MQ040080	S2.5
SER4040R22	SEL4040R22	40	40	40	50	200	22ER..	22EL..	L60M4.5x14	T-20	EGM-22	MQ040080	S2.5

订货示例: SER2020K16 1件 Ordering example: SER2020K16 1pc

## 梯形螺纹专用刀垫 (外) Shims for trapezoidal threading inserts (External)



订货型号 EGM-22T

Ordering code: EGM-22T

★ 梯形螺纹刀垫 EGM-22T 适用于 22ER6.0TR、22ER5.0TR、22ER4ACME、22ER4STACME

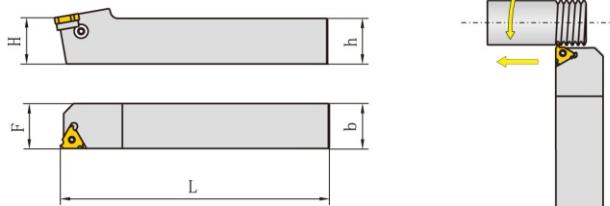
The shim EGM-22T apply to 22ER6.0TR, 22ER5.0TR, 22ER4ACME, 22ER4STACME

★ 刀垫需单独订购

Shim EGM-22T must be ordered separately

# 公、英、美制螺纹刀具 THREADING TOOLS

外螺纹车刀杆 (直头) Threading Tool Holders (b=F)



图片为右手刀具  
Right Cutting Tools(see picture)

注意: 右手刀具(R)配右手刀片(R), 左手刀具(L)配左手刀片(L)  
Note:right tools match with right inserts;left tools match with left inserts.

型号 Ordering Code		尺寸 Dimensions(mm)					刀片 Insert		刀片螺钉	扳手	刀垫	侧面螺钉	扳手
右刀 Right Hand	左刀 Left Hand	h	b	H	F	L	右 Right	左 Left					
SER1010K11-A	SEL1010K11-A	10	10	10	10	125	11ER..	11EL..	L60M2.5x6	T-08	-	-	-
SER1212K11-A	SEL1212K11-A	12	12	12	12	125	11ER..	11EL..	L60M2.5x6	T-08	-	-	-
SER1616K11-A	SEL1616K11-A	16	16	16	16	125	11ER..	11EL..	L60M2.5x6	T-08	-	-	-
SER1616H16-A	SEL1616H16-A	16	16	16	16	100	16ER..	16EL..	L60M3.5x12	T-15	EGL-16	MQ030080	T10
SER2020K16-A	SEL2020K16-A	20	20	20	20	125	16ER..	16EL..	L60M3.5x12	T-15	EGL-16	MQ030080	T10
SER2525M16-A	SEL2525M16-A	25	25	25	25	150	16ER..	16EL..	L60M3.5x12	T-15	EGL-16	MQ030080	T10
SER3225P16-A	SEL3225P16-A	32	25	32	25	170	16ER..	16EL..	L60M3.5x12	T-15	EGL-16	MQ030080	T10
SER3232P16-A	SEL3232P16-A	32	32	32	32	170	16ER..	16EL..	L60M3.5x12	T-15	EGL-16	MQ030080	T10
SER2525M22-A	SEL2525M22-A	25	25	25	25	150	22ER..	22EL..	L60M4.5x14	T-20	EGL-22	MQ040080	S2.5
SER3225P22-A	SEL3225P22-A	32	25	32	25	170	22ER..	22EL..	L60M4.5x14	T-20	EGL-22	MQ040080	S2.5
SER3232P22-A	SEL3232P22-A	32	32	32	32	170	22ER..	22EL..	L60M4.5x14	T-20	EGL-22	MQ040080	S2.5
SER4040R22-A	SEL4040R22-A	40	40	40	40	200	22ER..	22EL..	L60M4.5x14	T-20	EGL-22	MQ040080	S2.5

订货示例: SER2020K16-A 1件 Ordering example: SER2020K16-A 1pc

梯形螺纹专用刀垫 (外)

Shims for trapezoidal threading inserts (External)



订货型号 EGM-22T

Ordering code: EGM-22T

★ 梯形螺纹刀垫 EGM-22T 适用于 22ER6.0TR、22ER5.0TR、22ER4ACME、22ER4STACME

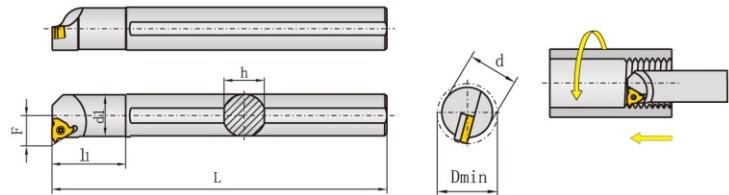
The shim EGM-22T apply to 22ER6.0TR, 22ER5.0TR, 22ER4ACME, 22ER4STACME

★ 刀垫需单独订购

Shim EGM-22T must be ordered separately

# 公、英、美制螺纹刀具 THREADING TOOLS

## 内螺纹车刀杆 Threading Tool Holders



图片为右手刀具  
Right Cutting Tools(see picture)

注意：右手刀具(R)配右手刀片(R)，左手刀具(L)配左手刀片(L)  
Note:right tools match with right inserts;left tools match with left inserts.

型号 Ordering Code		尺寸 Dimensions(mm)							刀片 Insert		刀片螺钉	扳手	刀垫	侧面螺钉	扳手
右刀 Right Hand	左刀 Left Hand	d1	d	F	L	h	l1	Dmin	右 Right	左 Left	Insert Screw	Torx Key	Anvil	Anvil Screw	Hex Wrench
SNR0010H11	SNL0010H11	10	10	7.4	100	9	12	12	11NR..	11NL..	L60M2.5x6	T-08	-	-	-
SNR0012K11	SNL0012K11	12	12	8.4	125	11	15	15	11NR..	11NL..	L60M2.5x6	T-08	-	-	-
SNR0013M11	SNL0013M11	13	16	8.9	150	15	25	15	11NR..	11NL..	L60M2.5x6	T-08	-	-	-
SNR0013M16	SNL0013M16	13	16	10.2	150	15	25	16	16NR..	16NL..	L60M3.5x8	T-15	-	-	-
SNR0016M16	SNL0016M16	15	16	11.7	150	15	25	19	16NR..	16NL..	L60M3.5x8	T-15	-	-	-
SNR0020Q16	SNL0020Q16	19	20	13.7	180	18	24	24	16NR..	16NL..	L60M3.5x12	T-15	NGM-16	MQ030080	T10
SNR0025R16	SNL0025R16	24	25	16.2	200	23	29	29	16NR..	16NL..	L60M3.5x12	T-15	NGM-16	MQ030080	T10
SNR0032S16	SNL0032S16	31	32	19.7	250	30	36	36	16NR..	16NL..	L60M3.5x12	T-15	NGM-16	MQ030080	T10
SNR0040T16	SNL0040T16	38	40	23.7	300	37	44	44	16NR..	16NL..	L60M3.5x12	T-15	NGM-16	MQ030080	T10
SNR0050U16	SNL0050U16	47	50	28.7	350	46	54	54	16NR..	16NL..	L60M3.5x12	T-15	NGM-16	MQ030080	T10
SNR0020Q22	SNL0020Q22	19	20	15.6	180	18	24	24	22NR..	22NL..	L60M4.5x14	T-20	NGM-22	MQ040080	S2.5
SNR0025R22	SNL0025R22	24	25	18.1	200	23	29	29	22NR..	22NL..	L60M4.5x14	T-20	NGM-22	MQ040080	S2.5
SNR0032S22	SNL0032S22	31	32	21.6	250	30	38	38	22NR..	22NL..	L60M4.5x14	T-20	NGM-22	MQ040080	S2.5
SNR0040T22	SNL0040T22	38	40	25.6	300	37	46	46	22NR..	22NL..	L60M4.5x14	T-20	NGM-22	MQ040080	S2.5
SNR0050U22	SNL0050U22	47	50	30.6	350	46	56	56	22NR..	22NL..	L60M4.5x14	T-20	NGM-22	MQ040080	S2.5

订货示例: SNR0020Q16 1件 Ordering example: SNR0020Q16 1pc

## 梯形螺纹专用刀垫 (内) Shims for trapezoidal threading inserts (Internal)



订货型号NGM-22T

Ordering code: NGM-22T

★ 梯形螺纹刀垫NGM-22T适用于22NR6.0TR、22NR5.0TR、22NR4ACME、22NR4STACME

The shim NGM-22T apply to 22NR6.0TR, 22NR5.0TR, 22NR4ACME, 22NR4STACME

★ 刀垫需单独订购

Shim NGM-22T must be ordered separately

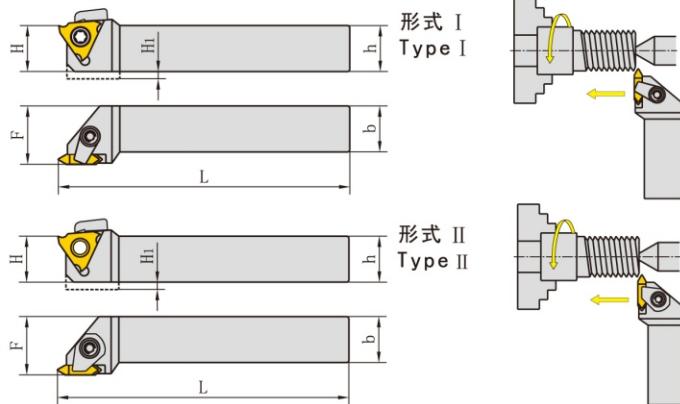
# 公、英、美制螺纹刀具 THREADING TOOLS

## 外螺纹车刀杆(立装型) Threading Tool Holders (V-Style)



图片为右手刀具

Right Cutting Tools(see picture)



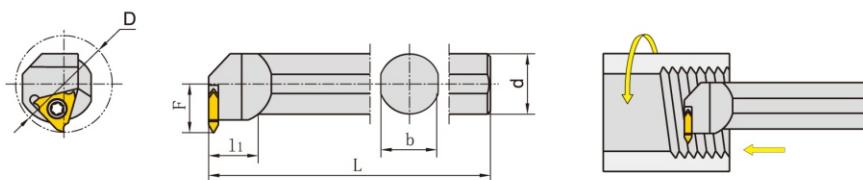
注意: 右手刀具(R)配右手刀片(R), 左手刀具(L)配左手刀片(L)

Note:right tools match with right inserts;left tools match with left inserts.

型号 Ordering Code		尺寸 Dimensions(mm)						刀片 Insert		形式 Type	刀片螺钉 Insert Screw	扳手 Torx Key	压板 Clamp	压板螺钉 Clamp Screw	扳手 Hex Wrench
左刀 Left Hand	右刀 Right Hand	h	b	H	F	L	H1	左 Left	右 Right						
MTHL1616H43	MTHR1616H43	16	16	16	20	100	3	MTTL43..	MTTR43..	I	L60M4.5x12	T-20	HL1814	ML0620	S4
MTHL2020K43	MTHR2020K43	20	20	20	25	125	-	MTTL43..	MTTR43..		L60M4.5x12	T-20	HL1814	ML0620	S4
MTHL2525M43	MTHR2525M43	25	25	25	32	150	-	MTTL43..	MTTR43..	I	L60M4.5x12	T-20	HL1814	ML0620	S4
MTHL3225P43	MTHR3225P43	32	25	32	32	170	-	MTTL43..	MTTR43..		L60M4.5x12	T-20	HL1814	ML0620	S4
MTHL3232P43	MTHR3232P43	32	32	32	40	170	-	MTTL43..	MTTR43..		L60M4.5x12	T-20	HL1814	ML0620	S4
WTHL2020K43	WTHR2020K43	20	20	20	25	125	-	MTTL43..	MTTR43..	II	L60M4.5x12	T-20	DLM4	MS0625	S4
WTHL2525M43	WTHR2525M43	25	25	25	32	150	-	MTTL43..	MTTR43..		L60M4.5x12	T-20	DLM4	MS0625	S4

订货示例: MTHR2020K43 1件 Ordering example: MTHR2020K43 1pc

## 内螺纹车刀杆(立装型) Threading Tool Holders (V-Style)



图片为右手刀具

Right Cutting Tools(see picture)

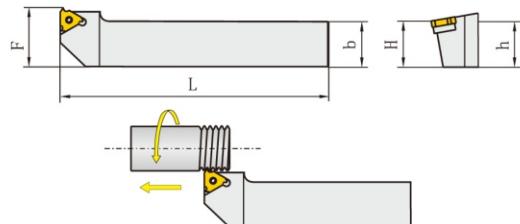
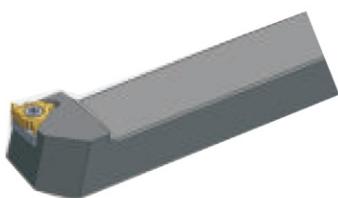
注意: 右手刀具(R)配右手刀片(R), 左手刀具(L)配左手刀片(L)

Note:right tools match with right inserts;left tools match with left inserts.

型号 Ordering Code		尺寸 Dimensions(mm)						刀片 Insert		刀片螺钉 Insert Screw	扳手 Torx Key	压板 Clamp	压板螺钉 Clamp Screw	扳手 Hex Wrench
左刀 Left Hand	右刀 Right Hand	b	l1	d	F	L	Dmin	左 Left	右 Right					
STVEL3525T43	STVER3525T43	23	20	25	17.5	220	35	MTTL43..	MTTR43..	L60M4.5x12	T-20	-	-	-
STVEL4532T43	STVER4532T43	30	30	32	22.5	250	45	MTTL43..	MTTR43..	L60M4.5x12	T-20	-	-	-
STVEL5240T43	STVER5240T43	38	38	40	25	300	52	MTTL43..	MTTR43..	L60M4.5x12	T-20	-	-	-

订货示例: STVER3525T43 1件 Ordering example: STVER3525T43 1pc

## 外螺纹刀杆(排刀型) Threading Tool Holders



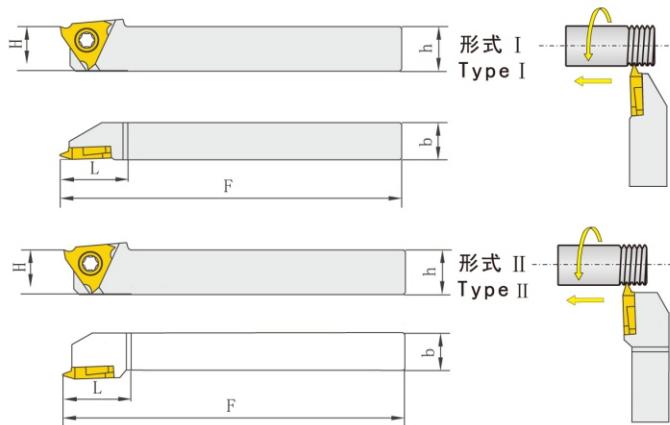
图片为左手刀具  
Right Cutting Tools(see picture)

型号 Ordering Code	尺寸 Dimensions(mm)					刀片 Insert	刀片螺钉 Insert Screw	扳手 Torx Key	刀垫 Anvil	侧面螺钉 Anvil Screw	扳手 Hex Wrench
	左刀杆 Left Hand	h	b	H	F	L	右 Right				
SEL1010K11-A90	10	10	10	10	125	11ER*****	L60M2.5x6	T-08	-	-	-
SEL1212K11-A90	12	12	12	12	125	11ER*****	L60M2.5x6	T-08	-	-	-
SEL1616K11-A90	16	16	16	16	125	11ER*****	L60M2.5x6	T-08	-	-	-
SEL1616H16-A90	16	16	16	16	100	16ER*****	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SEL2020K16-A90	20	20	20	20	125	16ER*****	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SEL2525M16-A90	25	25	25	25	150	16ER*****	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SEL3225P16-A90	32	25	32	25	170	16ER*****	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SEL3232P16-A90	32	32	32	32	170	16ER*****	L60M3.5x12	T-15	EGM-16	MQ030080	T10
SEL2525M22-A90	25	25	25	25	150	22ER*****	L60M4.5x14	T-20	EGM-22	MQ040080	S2.5
SEL3232P22-A90	32	32	32	32	170	22ER*****	L60M4.5x14	T-20	EGM-22	MQ040080	S2.5

订货示例: SER2020K16-A 1件 Ordering example: SER2020K16-A 1pc

# 公、英、美制螺纹刀具 THREADING TOOLS

## TT/TTX型螺纹刀杆 Threading Tool Holders

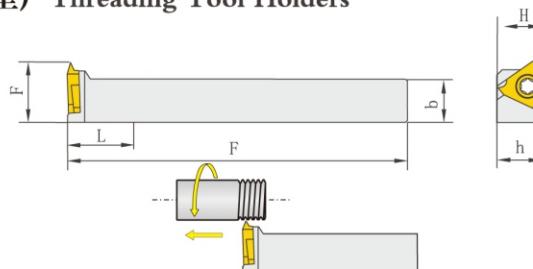


图片为右手刀具  
Right Cutting Tools(see picture)

注意：右手刀具(R)配右手刀片(R)，左手刀具(L)配左手刀片(L)  
Note: right tools match with right inserts; left tools match with left inserts.

右刀杆	左刀杆	尺寸Dimensions(mm)					形式	刀片	刀片螺钉	扳手
Right Hand	Left Hand	h	b	F	L	H	Type	Insert	Insert Screw	Torx Key
KTTR1010K-16F	KTTL1010K-16F	10	10	125	20	10				L60M4X8 T-15
KTTR1212K-16F	KTTL1212K-16F	12	12	125	25	12	I	TT ****		L60M4X8 T-15
KTTR1616M-16F	KTTL1616M-16F	16	16	150	30	16				L60M4X8 T-15
KTTR2020K-16F	KTTL2020K-16F	20	20	125	20	20		TTX ****		L60M4X8 T-15
KTTR2020K-16	KTTL2020K-16	20	20	125	20	20	II			L60M4X8 T-15
KTTR2520M-16	KTTL2525M-16	25	25	150	30	25				L60M4X8 T-15

## TT型螺纹刀杆(排刀型) Threading Tool Holders



图片为左手刀具  
Right Cutting Tools(see picture)

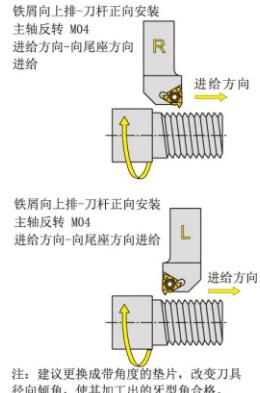
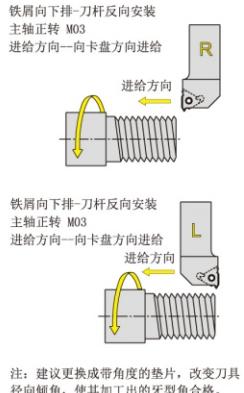
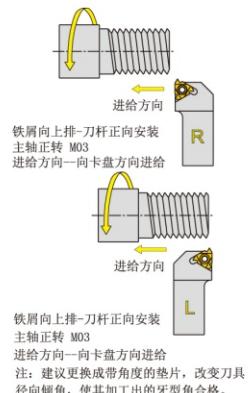
左刀杆	尺寸Dimensions(mm)					刀片	刀片螺钉	扳手
Left Hand	h	b	F	L	h	Insert	Insert Screw	Torx Key
KTTL1010K-16F-A90	10	10	125	20	4.8	TT32R ****	L60M4X8	T-15
KTTL1212K-16F-A90	12	12	125	25	6.2		L60M4X8	T-15
KTTL1616M-16F-A90	16	16	150	30	7		L60M4X8	T-15
KTTL2020K-16F-A90	20	20	125	20	8.5	TTX32R ****	L60M4X8	T-15

# 公、英、美制螺纹刀具 THREADING TOOLS

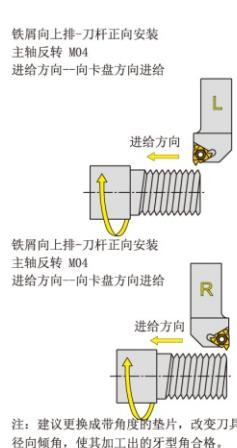
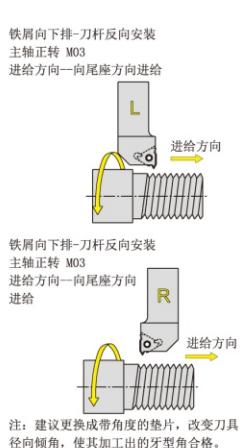
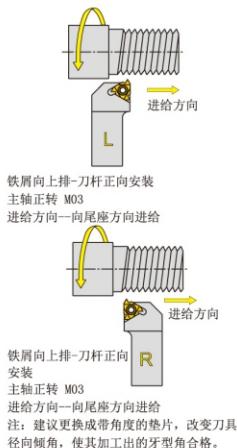
## 应用资料 Application Data

### 螺纹车削加工方案对照表 Comparison Table of Threading Cutting Machining

#### 外螺纹——右旋螺纹 External-Right Hand

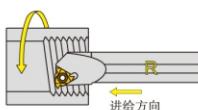


#### 外螺纹——左旋螺纹 External-Left Hand

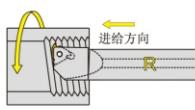


#### 内螺纹——右旋螺纹 Internal-Right Hand

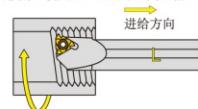
铁屑向上排-刀杆正向安装  
主轴正转 M03  
进给方向—向卡盘方向进给



铁屑向下排-刀杆反向安装  
主轴正转 M03  
进给方向—向卡盘方向进给

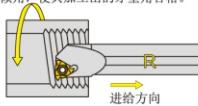


铁屑向上排-刀杆正向安装  
主轴反转 M04  
进给方向—向尾座方向进给  
注：建议更换成带角度的垫片，改变刀具径向倾角，使其加工出的牙型角合格。

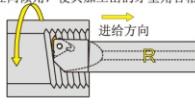


#### 内螺纹——左旋螺纹 Internal-Left Hand

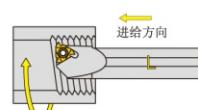
铁屑向上排-刀杆正向安装  
主轴正转 M03  
进给方向—向尾座方向进给  
注：建议更换成带角度的垫片，改变刀具径向倾角，使其加工出的牙型角合格。



铁屑向下排-刀杆反向安装  
主轴正转 M03  
进给方向—向尾座方向进给  
注：建议更换成带角度的垫片，改变刀具径向倾角，使其加工出的牙型角合格。

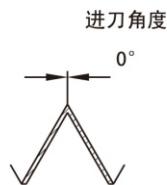


铁屑向上排-刀杆正向安装  
主轴反转 M04  
进给方向—向卡盘方向进给



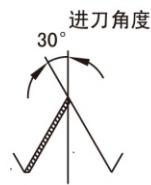
# 公、英、美制螺纹刀具 THREADING TOOLS

## 应用资料 Application Data



优点：

刀片全部刀刃对螺纹牙形两侧同时切削，防止刀刃崩刀。



优点：

利用刀片侧刃进给切削，使切屑容易排出切削区域，这就减少刀片后沿形成毛刺的问题，为了避免由于刀片后沿摩擦而降低表面光洁度、崩刀或齿侧面过度的磨损，横向进刀的角度应小于螺纹齿形角 $3^\circ$ ~ $5^\circ$ 。这是一种齿侧面修正类型。



优点：

刀片同时切削螺纹牙形两侧，防止像 $0^\circ$ 进刀时容易发生的崩刀。虽然也会形成排屑沟槽，但是由于切屑厚度不平均有利于排屑，犹如齿侧进刀这是比较好的进刀方法，尤其是使用有断屑槽的刀片时。



优点：

由于两侧切削刃平均使用，提高了刀片的寿命。  
注：采用这种进刀方法对一些机床可能需要特殊的编程技术。

缺点：

排屑困难。在切削高强度材料时容易崩刀。产生毛刺的可能性增大。  
由于在精车螺纹时整个切削刃全部切入，容易会引起振刀。

缺点：

刀片可能有拖曳或擦的现象而使刃口崩刀。在切削软而粘性的金属，如低碳钢，铝和不锈钢时，会破坏表面光洁度。

缺点：

和径向对中进刀的缺点相同，但是在降低切削力方面比较明显，同时排屑的问题也得到解决。

缺点：

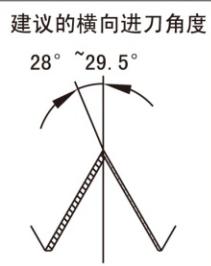
在传统机床上加工困难。

## 应用资料 Application Data

### ■ 机床编程

现代CNC控制的刀片在横向进刀角度 $28^\circ - 29.5^\circ$ 时性能最好，当然也可使用 $20^\circ - 30^\circ$ 的进刀角度。同时，重要的是要保持每一刀的最小切削深度为0.005英寸(0.13mm)。为了更稳定的控制切屑，建议进刀深度保持在0.005-0.010英寸(0.13-0.25mm)之间的一个恒定的数值。

横向进刀角度

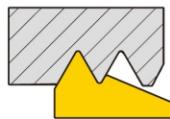


修正齿侧进刀

### ■ 最后一刀

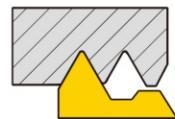
某些CNC控制的机床要求最后一刀为 $0^\circ$ 的进刀速度。切削大部分碳钢和合金钢工件时，最后一刀的切削深度可以为0.005英寸(0.13mm)，以形成合格的表面光洁度。对某些材料可采用进刀深度为0.001-0.003英寸(0.02-0.25mm)的来回式走刀以提高表面光洁度。

### 全牙形刀片



全牙形和泛螺距牙形比较

### 泛螺距刀片



-螺纹尺寸是按照已制定的螺纹标准确定。

-由于螺纹外径和底径同时加工，因此可以得到同心度的螺纹。

-由于最后一刀加工出准确的螺纹牙形，减少额外的操作或去毛刺操作，因此降低加工成本。

-同一刀片可以加工规定范围内的不同螺距的螺纹。

-对非标螺纹的加工有较大的柔性。

# 公、英、美制螺纹刀具 THREADING TOOLS

## 应用资料 Application Data

### 走刀次数和进刀量

走刀次数和进刀量对于螺纹切削工序具有决定性影响。在大多数现代机床上，应在螺纹切削周期中给定总螺纹深度和第一次或最后一次切深。

为了提高螺纹切削质量，应使用下面推荐的进刀量。对于多齿刀片，坚持使用进刀量推荐值是极为重要的。

可作为初始值的推荐值。合适的走刀次数必须通过实验来决定。

-为优化刀具寿命，工件直径应不超过螺纹的最大直径0.14mm

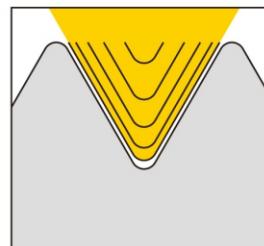
-应避免进刀量低于0.05mm

-对于奥氏不锈钢，进刀量应避免低于0.08mm

### 两种进一步提高切削质量的方法

#### ① 连续递减 - 可获得不变的切屑面积

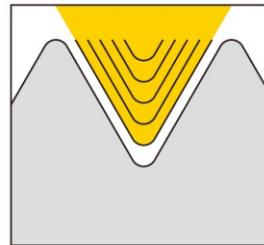
这包括相对较大的初始值（0.2-0.35mm），并且与螺纹牙形的具体深度有关。此值会逐渐降低且以0.02-0.09mm的进给进行精加工。最后一次走刀可以是不进刀的空走刀，这是用于消除切削过程中的反弹。这种走刀方式是现代CNC机床上最常用的方法。



切屑面积 + 跳跃走刀

#### ② 恒定的进刀量 - 可获得最佳的切屑控制和长的刀具寿命。

在新型机床上正变得越来越通用的加工方法。通过固定螺纹切削周期中的某一个参数，而使切屑厚度恒定，进而可以形成最佳切屑。初始值大约为0.18-0.12mm，实际值应由上一次走刀（至少应为0.08mm）的具体值确定。



恒定的走刀量

### 用于部分牙形刀片（V形 55° 和 60°）的切削参数

使用部分牙形刀片进行螺纹切削时，可使用推荐的走刀次数。但是，当使用具有小螺距的刀片时，每次走刀量不能超过最大推荐值。

**注意！**  
当螺纹要求小公差时，最后一次走刀可不进刀（空走刀）。对于硬材料，则需要相应增加走刀次数。当螺纹切削加工淬硬材料（例如奥氏体不锈钢）时，进刀量应不得超过0.08mm。

## 应用资料 Application Data

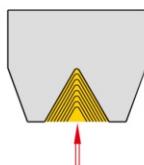
### 进刀方式的选择

共有三种不同类型的进刀方式

- (1) 径向进刀
- (2) 改进式侧向进刀
- (3) 交替式进刀

### ■ 径向进刀

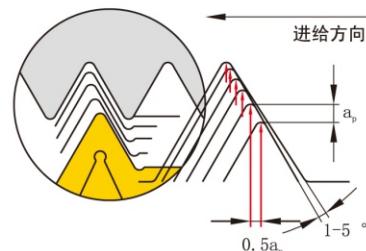
许多机床上最常用也只能使用的方法。可获得软的断屑和使刀片磨损更均匀。适合于小螺距。当用于疏齿距时具有振动风险和较差的切屑控制。加工硬化材料（例如奥氏体不锈钢）的首选。



推荐使用表中给定的径向进给。

### ■ 改进式侧向进刀

对于  $60^{\circ}$  牙形角的螺纹切削，轴向进刀量可以简单地按  $0.5x$  径向进刀量来计算。对于  $55^{\circ}$  的牙形角，则应以  $0.42x$  径向进刀量进行计算。这便可得到一个比螺纹的牙形角小  $5^{\circ}$  的进刀角。



### ■ 交替式进刀

主要用于切削大牙形时。此方法可获得均匀的刀片磨损和长刀具寿命。



需要在 CNC 机床上进行特定编程。

### ■ 如何控制切屑

当排屑通畅时，可获得良好的表面质量。当排屑不通畅和发生振动时，适合于粗牙螺纹和内螺纹。为避免表面粗糙度或由于后缘的摩擦而导致过度的后刀面磨损，应使进刀角保持为  $3\sim5^{\circ}$ ，且比螺旋角要小。

实际上，由机床、工件材料、刀片槽型和螺距共同决定了进刀方式的选择。

# 公、英、美制螺纹刀具 THREADING TOOLS

## 应用资料 Application Data

### ■ 公式

按公式以连续递减方式计算每次走刀量

$$\Delta_{apx} = \frac{a_p}{\sqrt{nap-1}} \times \sqrt{\eta}$$

$\Delta_{ap}$  径向进给

$\times$  实际走刀 (从 1 到 nap 的系列值)

$a_p$  螺纹总深度

nap 走刀次数

$\eta$  第一次走刀 = 0.3

第二次走刀 = 1

第三次及更多走刀 = X-1

示例:

工况:

计算:

结果:

外螺纹切削

螺距: 1.5mm

$a_p$  : 0.94mm

nap: 6次走刀

$$\Delta_{ap}1 = \frac{0.94}{\sqrt{5}} \times \sqrt{0.3} = 0.23$$

第一次走刀, 进刀量  
=0.23mm

$$\Delta_{ap}2 = \frac{0.94}{\sqrt{5}} \times \sqrt{1} = 0.42$$

第二次走刀, 进刀量  
0.42-0.23=0.19mm

$$\Delta_{ap}3 = \frac{0.94}{\sqrt{5}} \times \sqrt{2} = 0.59$$

第三次走刀, 进刀量  
0.59-0.42=0.17mm

$$\Delta_{ap}4 = \frac{0.94}{\sqrt{5}} \times \sqrt{3} = 0.73$$

第四次走刀, 进刀量  
0.73-0.59=0.14mm

$$\Delta_{ap}5 = \frac{0.94}{\sqrt{5}} \times \sqrt{4} = 0.84$$

第五次走刀, 进刀量  
0.84-0.73=0.11mm

$$\Delta_{ap}6 = \frac{0.94}{\sqrt{5}} \times \sqrt{5} = 0.94$$

第六次走刀, 进刀量  
0.94-0.84=0.1mm