

螺紋車刀桿 系列

Thread Turning Toolholders Series

泛用鋼材 $\leq 50\text{HRC}$

不銹鋼

鋁合金 / 銅合金





鑄鐵

For general steel ($\leq 50\text{HRC}$), stainless steel, cast iron and aluminum/copper alloy machining.



產品選擇表 Product Selection Table

鎢鋼外螺紋車刀片 Carbide Thread Inserts- External

泛用型 Partial Profile	ER 右刀片 - 泛用型 55°  螺距 Pitch P.521 0.5~3.0	EL 左刀片 - 泛用型 55°  螺距 Pitch P.521 0.5~3.0	ER 右刀片 - 泛用型 60°  螺距 Pitch P.521 0.5~3.0	EL 左刀片 - 泛用型 60°  螺距 Pitch P.521 0.5~3.0
	全牙型 Full Profile	ER 右刀片 - ISO 規格 60°  螺距 Pitch P.522 0.35~3.00	EL 左刀片 - ISO 規格 60°  螺距 Pitch P.522 0.35~3.00	ER 右刀片 - UN 規格 60°  螺距 Tpi P.523 Tpi 40~8

鎢鋼內螺紋車刀片 Carbide Thread Inserts- Internal

泛用型 Partial Profile	IR 右刀片 - 泛用型 55°  螺距 Pitch P.524 0.5~3.0	IL 左刀片 - 泛用型 55°  螺距 Pitch P.524 0.5~3.0	IR 右刀片 - 泛用型 60°  螺距 Pitch P.524 0.5~3.0	IL 左刀片 - 泛用型 60°  螺距 Pitch P.524 0.5~3.0
	全牙型 Full Profile	IR 右刀片 - ISO 規格 60°  螺距 Pitch P.525 0.35~3.00	IL 左刀片 - ISO 規格 60°  螺距 Pitch P.525 0.35~3.00	IR 右刀片 - UN 規格 60°  螺距 Tpi P.526 Tpi 40~8

產品選擇表 Product Selection Table

外徑螺紋車刀桿 External Threading Toolholders



內徑螺紋車刀桿 Internal Threading Toolholders



螺紋牙型設計 Thread Profile

類型 Type	說明 Description
<p>泛用型 Partial Profile</p>	<p>可加工一定範圍的螺距，如一片刀片可加工螺距 0.5~1.5mm。 The same partial profile type can be used to cut threads with different pitch from 0.5mm to 1.5mm.</p>
<p>全牙型 Full Profile</p>	<p>可加工單一尺寸的螺距，加工牙型完整性佳、毛邊較少。 Each thread pitch of a particular standard requires a different insert. It gives you better dimensional accuracy, and a well finished thread with no burrs.</p>

※ 外螺紋右刀片、外螺紋左刀片、內螺紋右刀片、內螺紋左刀片，四種刀片不能共用。

External right hand threading insert, external left hand threading insert, internal right hand threading insert and internal left hand threading insert are separate.

螺紋車刀片編碼規範

Designation For Threading Inserts

11	E	R	A	60
1	2	3	4	5

1 刀片邊長 Insert Length

代號 2 碼 2 Code	A 尺寸 Size	圖 示 Diagram
11	11mm	
16	16mm	

2 外螺紋 / 內螺紋 External / Internal

代號 1 碼 1 Code	圖 示 Diagram
E	外螺紋 External
I	內螺紋 Internal

3 刀片方向 Hand of Insert

代號 1 碼 1 Code	說 明 Description	外螺紋 Thread External	內螺紋 Thread Internal
R	右刀片 Right Hand Insert		
L	左刀片 Left Hand Insert		

4 螺距 Thread Pitch

泛用型 Partial Profile			圖 示 Diagram
代號 Code	螺距 Pitch (mm)	牙 / 吋 Tpi (Inch)	
A	0.5 ~ 1.5	48 ~ 16	
AG	0.5 ~ 3.0	48 ~ 8	
G	1.75 ~ 3.0	14 ~ 8	
全牙型 Full Profile			※ Tpi(牙 / 吋) 英制換算成 公制公式： 25.4 ÷ Tpi = Pitch (mm) Ex. 36 Tpi → 25.4 ÷ 36 = 0.7mm
代號 Code	螺距 Pitch (mm)	牙 / 吋 Tpi (Inch)	
0.75	0.75	—	
36	—	36	
40	—	40	

5 螺紋牙型 Thread Profile

泛用型 Partial Profile	
代號 Code	說 明 Description
55	泛用型 55° Partial Profile 55°
60	泛用型 60° Partial Profile 60°
全牙型 Full Profile	
代號 Code	說 明 Description
ISO	ISO 規格 60° ISO Metric 60°
UN	UN 美製規格 60° UN Metric 60°

鎢鋼外螺紋車刀片 - 泛用型 - 55° / 60°

CARBIDE THREAD INSERTS- EXTERNAL- PARTIAL PROFILE- 55° / 60°

加工材質	P	鋼材 Alloy Steels	●		<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting - 不推薦 NO Recommend 							
	M	不銹鋼 Stainless Steels	●									
K	鑄鐵 Cast Iron	●										
N	鋁合金 Aluminum Alloys	-										
S	高溫合金 High-Temp Alloys	●										
H	調質鋼 Hardened Steels	-										
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch		尺寸 Dimension (mm)					螺紋 Thread
		CM2560			公制 (mm)	Tpi (牙/吋)	A	B	r	X	Y	
	11ERA55	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	11ELA55	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	16ERA55	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16ELA55	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16ERAG55	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16ELAG55	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16ERG55	●			1.75~3.0	14~8	16	9.52	0.17	1.2	1.7	
	16ELG55	●			1.75~3.0	14~8	16	9.52	0.17	1.2	1.7	

加工材質	P	鋼材 Alloy Steels	●		<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting - 不推薦 NO Recommend 							
	M	不銹鋼 Stainless Steels	●									
K	鑄鐵 Cast Iron	●										
N	鋁合金 Aluminum Alloys	-										
S	高溫合金 High-Temp Alloys	●										
H	調質鋼 Hardened Steels	-										
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch		尺寸 Dimension (mm)					螺紋 Thread
		CM2560			公制 (mm)	Tpi (牙/吋)	A	B	r	X	Y	
	11ERA60	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	11ELA60	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	16ERA60	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16ELA60	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16ERAG60	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16ELAG60	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16ERG60	●			1.75~3.0	14~8	16	9.52	0.17	1.2	1.7	
	16ELG60	●			1.75~3.0	14~8	16	9.52	0.17	1.2	1.7	

→ 搭配刀桿 Holder P.528, 529

→ 切削條件表 Cutting Condition P.615

※ 25.4 ÷ Tpi (英制單位 Inch) = Pitch (公制單位 Metric)

鎢鋼外螺紋車刀片 - 全牙型 - ISO 規格 60°

CARBIDE THREAD INSERTS-EXTERNAL-FULL PROFILE-ISO METRIC 60°

加工材質	P	鋼材 Alloy Steels	●			<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting — 不推薦 NO Recommend 					
	M	不銹鋼 Stainless Steels	●								
K	鑄鐵 Cast Iron	●									
N	鋁合金 Aluminum Alloys	—									
S	高溫合金 High-Temp Alloys	●									
H	調質鋼 Hardened Steels	—									
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch 公制 (mm)	尺寸 Dimension (mm)					螺紋 Thread
		CM2560				A	B	r	X	Y	
	11ER035ISO	●			0.35	11	6.35	0.04	0.8	0.4	 公差 Tolerance Class 6g / 6H
	11EL035ISO	●			0.35	11	6.35	0.04	0.8	0.4	
	11ER040ISO	●			0.40	11	6.35	0.04	0.7	0.4	
	11ER045ISO	●			0.45	11	6.35	0.05	0.7	0.4	
	11ER050ISO	●			0.50	11	6.35	0.05	0.6	0.6	
	11EL050ISO	●			0.50	11	6.35	0.05	0.6	0.6	
	11ER060ISO	●			0.60	11	6.35	0.07	0.6	0.6	
	11ER070ISO	●			0.70	11	6.35	0.07	0.6	0.6	
	11ER075ISO	●			0.75	11	6.35	0.08	0.6	0.6	
	11EL075ISO	●			0.75	11	6.35	0.08	0.6	0.6	
	11ER080ISO	●			0.80	11	6.35	0.09	0.6	0.6	
	11ER100ISO	●			1.00	11	6.35	0.12	0.7	0.7	
	11EL100ISO	●			1.00	11	6.35	0.12	0.7	0.7	
	11ER125ISO	●			1.25	11	6.35	0.15	0.8	0.9	
	11ER150ISO	●			1.50	11	6.35	0.18	0.8	1.0	
	11EL150ISO	●			1.50	11	6.35	0.18	0.8	1.0	
	16ER075ISO	●			0.75	16	9.52	0.08	0.6	0.6	
	16EL075ISO	●			0.75	16	9.52	0.08	0.6	0.6	
	16ER080ISO	●			0.80	16	9.52	0.09	0.6	0.6	
	16EL080ISO	●			0.80	16	9.52	0.09	0.6	0.6	
	16ER100ISO	●			1.00	16	9.52	0.12	0.7	0.7	
	16EL100ISO	●			1.00	16	9.52	0.12	0.7	0.7	
	16ER125ISO	●			1.25	16	9.52	0.15	0.8	0.9	
	16EL125ISO	●			1.25	16	9.52	0.15	0.8	0.9	
	16ER150ISO	●			1.50	16	9.52	0.18	0.8	1.0	
	16EL150ISO	●			1.50	16	9.52	0.18	0.8	1.0	
	16ER175ISO	●			1.75	16	9.52	0.21	0.9	1.2	
	16EL175ISO	●			1.75	16	9.52	0.21	0.9	1.2	
	16ER200ISO	●			2.00	16	9.52	0.25	1.0	1.3	
	16EL200ISO	●			2.00	16	9.52	0.25	1.0	1.3	
16ER250ISO	●			2.50	16	9.52	0.31	1.1	1.5		
16EL250ISO	●			2.50	16	9.52	0.31	1.1	1.5		
16ER300ISO	●			3.00	16	9.52	0.38	1.2	1.6		
16EL300ISO	●			3.00	16	9.52	0.38	1.2	1.6		



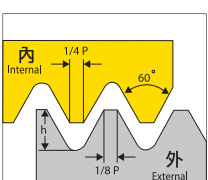
TURNING Thread Turning Toolholders

螺紋車刀桿

→ 搭配刀桿 Holder P.528, 529 → 切削條件表 Cutting Condition P.615

鎢鋼外螺紋車刀片 - 全牙型 - UN 規格 60°

CARBIDE THREAD INSERTS- EXTERNAL- FULL PROFILE- UN METRIC 60°

加工材質	P	鋼材 Alloy Steels	●			<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting - 不推薦 NO Recommend 					
	M	不銹鋼 Stainless Steels	●								
K	鑄鐵 Cast Iron	●									
N	鋁合金 Aluminum Alloys	-									
S	高溫合金 High-Temp Alloys	●									
H	調質鋼 Hardened Steels	-									
											
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch	尺寸 Dimension (mm)					螺紋 Thread
		CM2560			Tpi (牙/吋)	A	B	r	X	Y	
	11ER32UN	●			32	11	6.35	0.09	0.6	0.6	 <p>公差 Tolerance Class 2A / 2B</p>
	11ER28UN	●			28	11	6.35	0.10	0.6	0.7	
	11EL28UN	●			28	11	6.35	0.10	0.6	0.7	
	11ER18UN	●			18	11	6.35	0.17	0.8	1.0	
	11ER16UN	●			16	11	6.35	0.18	0.9	1.1	
	16ER40UN	●			40	16	9.52	0.06	0.6	0.6	
	16EL40UN	●			40	16	9.52	0.06	0.6	0.6	
	16ER36UN	●			36	16	9.52	0.07	0.6	0.6	
	16EL36UN	●			36	16	9.52	0.07	0.6	0.6	
	16ER32UN	●			32	16	9.52	0.09	0.6	0.6	
	16EL32UN	●			32	16	9.52	0.09	0.6	0.6	
	16ER28UN	●			28	16	9.52	0.10	0.6	0.7	
	16EL28UN	●			28	16	9.52	0.10	0.6	0.7	
	16ER26UN	●			26	16	9.52	0.11	0.7	0.8	
	16EL26UN	●			26	16	9.52	0.11	0.7	0.8	
	16ER24UN	●			24	16	9.52	0.12	0.7	0.8	
	16EL24UN	●			24	16	9.52	0.12	0.7	0.8	
	16ER20UN	●			20	16	9.52	0.15	0.8	0.9	
	16EL20UN	●			20	16	9.52	0.15	0.8	0.9	
	16ER18UN	●			18	16	9.52	0.17	0.8	1.0	
	16EL18UN	●			18	16	9.52	0.17	0.8	1.0	
	16ER16UN	●			16	16	9.52	0.18	0.9	1.1	
	16EL16UN	●			16	16	9.52	0.18	0.9	1.1	
	16ER14UN	●			14	16	9.52	0.22	1.0	1.2	
	16EL14UN	●			14	16	9.52	0.22	1.0	1.2	
	16ER13UN	●			13	16	9.52	0.24	1.0	1.3	
	16EL13UN	●			13	16	9.52	0.24	1.0	1.3	
	16ER12UN	●			12	16	9.52	0.26	1.1	1.4	
	16EL12UN	●			12	16	9.52	0.26	1.1	1.4	
	16ER115UN	●			11.5	16	9.52	0.27	1.1	1.5	
	16EL115UN	●			11.5	16	9.52	0.27	1.1	1.5	
	16ER11UN	●			11	16	9.52	0.28	1.1	1.5	
16EL11UN	●			11	16	9.52	0.28	1.1	1.5		
16ER10UN	●			10	16	9.52	0.32	1.1	1.5		
16EL10UN	●			10	16	9.52	0.32	1.1	1.5		
16ER9UN	●			9	16	9.52	0.36	1.2	1.7		
16EL9UN	●			9	16	9.52	0.36	1.2	1.7		
16ER8UN	●			8	16	9.52	0.41	1.2	1.6		
16EL8UN	●			8	16	9.52	0.41	1.2	1.6		

TURNING

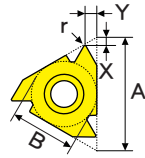
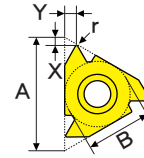

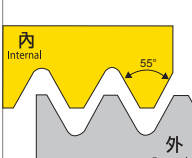
Thread Turning Toolholders

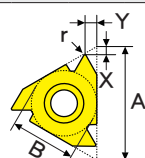
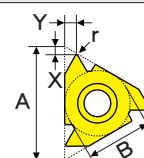

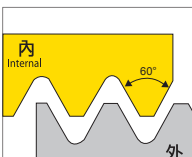
螺紋車刀桿

→ 搭配刀桿 Holder P.528, 529 → 切削條件表 Cutting Condition P.616

鎢鋼內螺紋車刀片 - 泛用型 - 55° / 60°

CARBIDE THREAD INSERTS-INTERNAL-PARTIAL PROFILE-55° / 60°

加工材質	P	鋼材 Alloy Steels	●		<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting - 不推薦 NO Recommend 							
	M	不銹鋼 Stainless Steels	●									
K	鑄鐵 Cast Iron	●										
N	鋁合金 Aluminum Alloys	-										
S	高溫合金 High-Temp Alloys	●										
H	調質鋼 Hardened Steels	-										
		 右車刀片 Right Hand		 左車刀片 Left Hand								
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch		尺寸 Dimension (mm)					螺紋 Thread
		CM2560			公制 (mm)	Tpi (牙/吋)	A	B	r	X	Y	
	11IRA55	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	11ILA55	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	16IRA55	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16ILA55	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16IRAG55	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16ILAG55	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16IRG55	●			1.75~3.0	14~8	16	9.52	0.12	1.2	1.7	
	16ILG55	●			1.75~3.0	14~8	16	9.52	0.12	1.2	1.7	

加工材質	P	鋼材 Alloy Steels	●		<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting - 不推薦 NO Recommend 							
	M	不銹鋼 Stainless Steels	●									
K	鑄鐵 Cast Iron	●										
N	鋁合金 Aluminum Alloys	-										
S	高溫合金 High-Temp Alloys	●										
H	調質鋼 Hardened Steels	-										
		 右車刀片 Right Hand		 左車刀片 Left Hand								
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch		尺寸 Dimension (mm)					螺紋 Thread
		CM2560			公制 (mm)	Tpi (牙/吋)	A	B	r	X	Y	
	11IRA60	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	11ILA60	●			0.5~1.5	48~16	11	6.35	0.05	0.8	0.9	
	16IRA60	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16ILA60	●			0.5~1.5	48~16	16	9.52	0.05	0.8	0.9	
	16IRAG60	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16ILAG60	●			0.5~3.0	48~8	16	9.52	0.05	1.2	1.7	
	16IRG60	●			1.75~3.0	14~8	16	9.52	0.12	1.2	1.7	
	16ILG60	●			1.75~3.0	14~8	16	9.52	0.12	1.2	1.7	

→ 搭配刀桿 Holder P.530

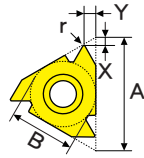
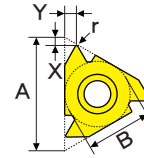

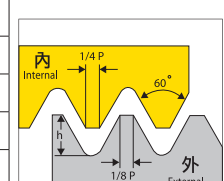
→ 切削條件表 Cutting Condition P.615

TURNING Thread Turning Toolholders

螺紋車刀桿

鎢鋼內螺紋車刀片 - 全牙型 - ISO 規格 60°

CARBIDE THREAD INSERTS-INTERNAL-FULL PROFILE-ISO METRIC 60°

加工材質	P	鋼材 Alloy Steels	●		<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting - 不推薦 NO Recommend 						
	M	不銹鋼 Stainless Steels	●								
K	鑄鐵 Cast Iron	●									
N	鋁合金 Aluminum Alloys	-									
S	高溫合金 High-Temp Alloys	●									
H	調質鋼 Hardened Steels	-									
					 右車刀片 Right Hand	 左車刀片 Left Hand					
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch	尺寸 Dimension (mm)					螺紋 Thread
		CM2560			公制 (mm)	A	B	r	X	Y	
	11R035ISO	●			0.35	11	6.35	0.02	0.8	0.3	 公差 Tolerance Class 6g / 6H
	11L035ISO	●			0.35	11	6.35	0.02	0.8	0.3	
	11R040ISO	●			0.40	11	6.35	0.02	0.8	0.4	
	11R050ISO	●			0.50	11	6.35	0.03	0.6	0.6	
	11L050ISO	●			0.50	11	6.35	0.03	0.6	0.6	
	11R070ISO	●			0.70	11	6.35	0.04	0.6	0.6	
	11R075ISO	●			0.75	11	6.35	0.04	0.6	0.6	
	11L075ISO	●			0.75	11	6.35	0.04	0.6	0.6	
	11R080ISO	●			0.80	11	6.35	0.04	0.6	0.6	
	11R100ISO	●			1.00	11	6.35	0.05	0.6	0.7	
	11L100ISO	●			1.00	11	6.35	0.05	0.6	0.7	
	11R125ISO	●			1.25	11	6.35	0.07	0.8	0.8	
	11L125ISO	●			1.25	11	6.35	0.07	0.8	0.8	
	11R150ISO	●			1.50	11	6.35	0.08	0.8	1.0	
	11L150ISO	●			1.50	11	6.35	0.08	0.8	1.0	
	16R075ISO	●			0.75	16	9.52	0.04	0.6	0.6	
	16L075ISO	●			0.75	16	9.52	0.04	0.6	0.6	
	16R080ISO	●			0.80	16	9.52	0.04	0.6	0.6	
	16L080ISO	●			0.80	16	9.52	0.04	0.6	0.6	
	16R100ISO	●			1.00	16	9.52	0.05	0.6	0.7	
	16L100ISO	●			1.00	16	9.52	0.05	0.6	0.7	
	16R125ISO	●			1.25	16	9.52	0.07	0.8	0.9	
	16L125ISO	●			1.25	16	9.52	0.07	0.8	0.9	
	16R150ISO	●			1.50	16	9.52	0.10	0.8	1.0	
	16L150ISO	●			1.50	16	9.52	0.10	0.8	1.0	
	16R175ISO	●			1.75	16	9.52	0.12	0.9	1.2	
	16L175ISO	●			1.75	16	9.52	0.12	0.9	1.2	
	16R200ISO	●			2.00	16	9.52	0.13	1.0	1.3	
	16L200ISO	●			2.00	16	9.52	0.13	1.0	1.3	
	16R250ISO	●			2.50	16	9.52	0.15	1.1	1.5	
16L250ISO	●			2.50	16	9.52	0.15	1.1	1.5		
16R300ISO	●			3.00	16	9.52	0.18	1.1	1.5		
16L300ISO	●			3.00	16	9.52	0.18	1.1	1.5		

→ 搭配刀桿 Holder P.530

→ 切削條件表 Cutting Condition P.615

鎢鋼內螺紋車刀片 - 全牙型 - UN 規格 60°

CARBIDE THREAD INSERTS-INTERNAL-FULL PROFILE-UN METRIC 60°

加工材質	P	鋼材 Alloy Steels	●			<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting - 不推薦 NO Recommend 					
	M	不銹鋼 Stainless Steels	●								
K	鑄鐵 Cast Iron	●									
N	鋁合金 Aluminum Alloys	-									
S	高溫合金 High-Temp Alloys	●									
H	調質鋼 Hardened Steels	-									
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch	尺寸 Dimension (mm)					螺紋 Thread
		CM2560			Tpi (牙/吋)	A	B	r	X	Y	
	11IR32UN	●			32	11	6.35	0.04	0.6	0.6	<p>公差 Tolerance Class 2A / 2B</p>
	11IL32UN	●			32	11	6.35	0.04	0.6	0.6	
	11IR28UN	●			28	11	6.35	0.04	0.6	0.7	
	11IL28UN	●			28	11	6.35	0.04	0.6	0.7	
	11IR24UN	●			24	11	6.35	0.05	0.7	0.8	
	11IL24UN	●			24	11	6.35	0.05	0.7	0.8	
	11IR20UN	●			20	11	6.35	0.06	0.8	0.9	
	11IL20UN	●			20	11	6.35	0.06	0.8	0.9	
	11IR18UN	●			18	11	6.35	0.07	0.8	1.0	
	11IL18UN	●			18	11	6.35	0.07	0.8	1.0	
	11IR16UN	●			16	11	6.35	0.09	0.9	1.1	
	11IL16UN	●			16	11	6.35	0.09	0.9	1.1	

→ 搭配刀桿 Holder

P.530

→ 切削條件表 Cutting Condition

P.616

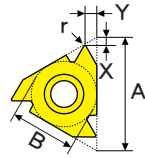
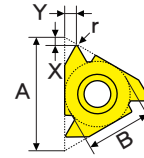

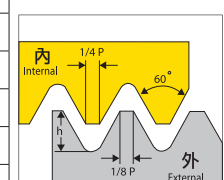
TURNING

Thread Turning Toolholders

螺紋車刀桿

鎢鋼內螺紋車刀片 - 全牙型 - UN 規格 60°

CARBIDE THREAD INSERTS-INTERNAL-FULL PROFILE-UN METRIC 60°

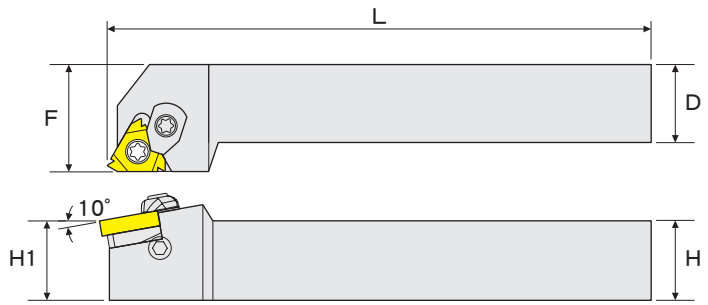
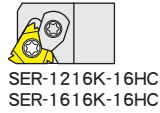
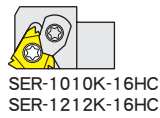
加工材質	P	鋼材 Alloy Steels	●		<ul style="list-style-type: none"> ● 第一推薦 / ○ 第二推薦：連續加工 Continuous Cutting ● 第一推薦 / ○ 第二推薦：一般加工 General Cutting ✦ 第一推薦 / ✧ 第二推薦：斷續加工 Interrupted Cutting — 不推薦 NO Recommend 						
	M	不銹鋼 Stainless Steels	●								
K	鑄鐵 Cast Iron	●									
N	鋁合金 Aluminum Alloys	—									
S	高溫合金 High-Temp Alloys	●									
H	調質鋼 Hardened Steels	—									
					 右車刀片 Right Hand	 左車刀片 Left Hand					
刀片 Insert	訂購編號 Order No.	材質碼 Grade			螺距 Pitch	尺寸 Dimension (mm)					螺紋 Thread
		CM2560			Tpi (牙/吋)	A	B	r	X	Y	
	16IR40UN	●			40	16	9.52	0.03	0.6	0.6	 公差 Tolerance Class 2A / 2B
	16IL40UN	●			40	16	9.52	0.03	0.6	0.6	
	16IR36UN	●			36	16	9.52	0.03	0.6	0.6	
	16IL36UN	●			36	16	9.52	0.03	0.6	0.6	
	16IR32UN	●			32	16	9.52	0.04	0.6	0.6	
	16IL32UN	●			32	16	9.52	0.04	0.6	0.6	
	16IR28UN	●			28	16	9.52	0.04	0.6	0.7	
	16IL28UN	●			28	16	9.52	0.04	0.6	0.7	
	16IR26UN	●			26	16	9.52	0.04	0.7	0.8	
	16IL26UN	●			26	16	9.52	0.04	0.7	0.8	
	16IR24UN	●			24	16	9.52	0.05	0.7	0.8	
	16IL24UN	●			24	16	9.52	0.05	0.7	0.8	
	16IR20UN	●			20	16	9.52	0.06	0.8	0.9	
	16IL20UN	●			20	16	9.52	0.06	0.8	0.9	
	16IR18UN	●			18	16	9.52	0.07	0.8	1.0	
	16IL18UN	●			18	16	9.52	0.07	0.8	1.0	
	16IR16UN	●			16	16	9.52	0.09	0.9	1.1	
	16IL16UN	●			16	16	9.52	0.09	0.9	1.1	
	16IR14UN	●			14	16	9.52	0.10	0.9	1.2	
	16IL14UN	●			14	16	9.52	0.10	0.9	1.2	
	16IR13UN	●			13	16	9.52	0.11	1.0	1.3	
	16IL13UN	●			13	16	9.52	0.11	1.0	1.3	
	16IR12UN	●			12	16	9.52	0.12	1.1	1.4	
	16IL12UN	●			12	16	9.52	0.12	1.1	1.4	
	16IR115UN	●			11.5	16	9.52	0.13	1.1	1.5	
	16IL115UN	●			11.5	16	9.52	0.13	1.1	1.5	
	16IR11UN	●			11	16	9.52	0.14	1.1	1.5	
	16IL11UN	●			11	16	9.52	0.14	1.1	1.5	
	16IR10UN	●			10	16	9.52	0.15	1.1	1.5	
	16IL10UN	●			10	16	9.52	0.15	1.1	1.5	
16IR9UN	●			9	16	9.52	0.17	1.2	1.7		
16IL9UN	●			9	16	9.52	0.17	1.2	1.7		
16IR8UN	●			8	16	9.52	0.19	1.1	1.5		
16IL8UN	●			8	16	9.52	0.19	1.1	1.5		

→ 搭配刀桿 Holder P.530

→ 切削條件表 Cutting Condition P.616

外徑螺紋車刀桿

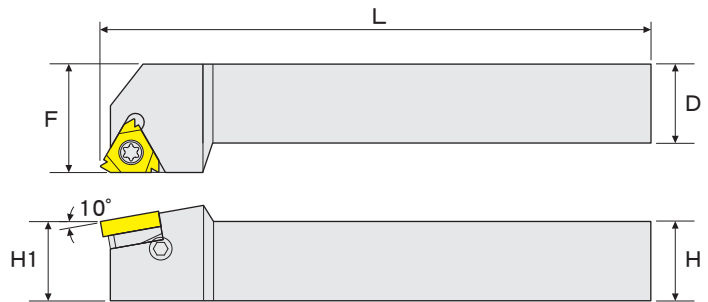
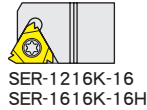
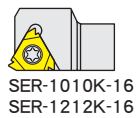
EXTERNAL THREADING TOOLHOLDERS



右車刀桿圖示 Right-Hand Shown

鋼材柄訂購編號 Order No. (Steel Shank)	尺寸 Dimension (mm)				搭配刀片 Insert		配件 Spare Parts
	H1 / H	F	L	D	切槽加工 Grooving	螺紋加工 Threading	
SE ^{R/L} -1010K-16HC	10	10	125	10	TGL16ER.. TGL16EL..	16ER.. 16EL..	①
SE ^{R/L} -1212K-16HC	12	12	125	12			
SE ^{R/L} -1216K-16HC	12	16	125	16			
SE ^{R/L} -1616K-16HC	16	16	125	16			
SE ^{R/L} -1616K-16CL	16	20	125	16			②
SE ^{R/L} -2020K-16CL	20	25	125	20			
SE ^{R/L} -2525M-16CL	25	32	150	25			
SE ^{R/L} -3232P-16CL	32	40	170	32			

配件 Spare Parts	Screw	Shim	Screw	Wrench	Clamp	Wrench
①	MS3509A	—	—	—	—	ETF15
②	MS3512A	GXN16 / GXE16	HTM309	PL25	MC35-3V	ETF15



右車刀桿圖示 Right-Hand Shown

鋼材柄訂購編號 Order No. (Steel Shank)	尺寸 Dimension (mm)				搭配刀片 Insert		配件 Spare Parts
	H1 / H	F	L	D	切槽加工 Grooving	螺紋加工 Threading	
SE ^{R/L} -1216K-16	12	16	125	16	TGL16ER.. TGL16EL..	16ER.. 16EL..	①
SE ^{R/L} -1010K-16H	10	10	125	10			
SE ^{R/L} -1212K-16H	12	12	125	12			
SE ^{R/L} -1616K-16H	16	16	125	16			
SE ^{R/L} -1616K-16	16	20	125	16			②
SE ^{R/L} -2020K-16	20	25	125	20			
SE ^{R/L} -2525M-16	25	32	150	25			
SE ^{R/L} -3232P-16	32	40	170	32			

配件 Spare Parts	Screw	Shim	Screw	Wrench	Wrench
①	MS3509A	—	—	—	ETF15
②	MS3512A	GXN16 / GXE16	HTM309	PL25	ETF15

※ SER 刀桿搭配 GXE 墊片；SEL 刀桿搭配 GXN 墊片。

→ 搭配刀片
Insert

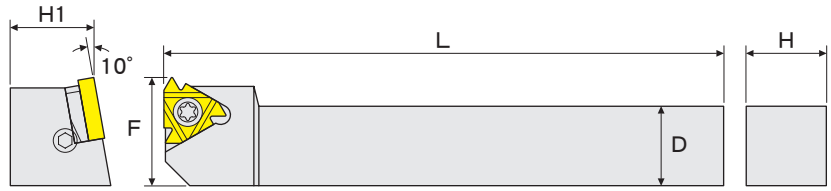
P.521-523

→ 切削條件表
Cutting Condition

P.615, 616

外徑螺紋車刀桿

EXTERNAL THREADING TOOLHOLDERS



右車刀桿圖示 Right-Hand Shown

鋼材柄訂購編號 Order No. (Steel Shank)	尺寸 Dimension (mm)				搭配刀片 Insert		配 件 Spare Parts
	H1 / H	F	L	D	切槽加工 Grooving	螺紋加工 Threading	
SKE ^{R/L} -1212K-16	12	18	125	12	TGL16ER.. TGL16EL..	16ER.. 16EL..	①
SKE ^{R/L} -1616K-16	16	22	125	16			②
SKE ^{R/L} -2020K-16	20	27	125	20			
SKE ^{R/L} -2525M-16	25	34	150	25			

配 件 Spare Parts	Screw 	Shim 	Screw 	Wrench 	Wrench
①	MS3509A	—	—	—	ETF15
②	MS3512A	GXN16 / GXE16	HTM309	PL25	ETF15

※ SKER 刀桿搭配 GXE 墊片；SKEL 刀桿搭配 GXN 墊片。SKER right hand tools shim is GXE | SKEL left hand tools shim is GXN.

→ 搭配刀片
Insert

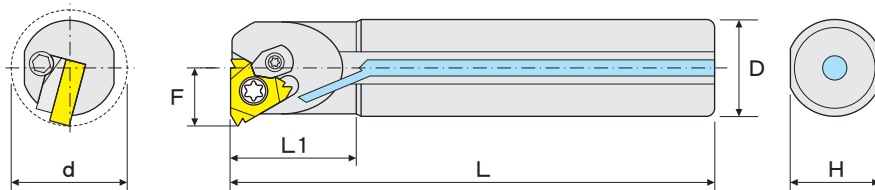
P.521~523

→ 切削條件表
Cutting Condition

P.615, 616

內徑螺紋車刀桿

INTERNAL THREADING TOOLHOLDERS



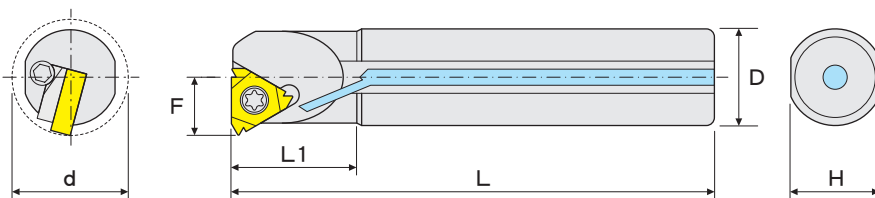
右車刀桿圖示 Right-Hand Shown

鋼材柄訂購編號 Order No. (Steel Shank)		尺寸 Dimension (mm)				最小車徑 d	搭配刀片 Insert		配件 Spare Parts
無出水孔 Non-coolant	出水孔 Coolant	F	L1	L	D		切槽加工 Grooving	螺紋加工 Threading	
SN ^R / _L -0020R-16CL	SN ^R / _L -A0020R-16CL	12.0	40	200	20	24	TGL16IR.. TGL16IL..	16IR.. 16IL..	①
SN ^R / _L -0025R-16CL	SN ^R / _L -A0025R-16CL	14.5	45	200	25	29			
SN ^R / _L -0032S-16CL	SN ^R / _L -A0032S-16CL	18.5	45	250	32	36			

配件 Spare Parts	Screw	Shim	Screw	Wrench	Clamp	Wrench
①	MS3512A	GXN16 / GXE16	HTM309	PL25	MC35-3V	ETF15

※ SNR 刀桿搭配 GXN 墊片；SNL 刀桿搭配 GXE 墊片。SNR right hand tools shim is GXN | SNL left hand tools shim is GXE.

→ 搭配刀片 Insert [P.524-527](#) → 切削條件表 Cutting Condition [P.615, 616](#)



右車刀桿圖示 Right-Hand Shown

鋼材柄訂購編號 Order No. (Steel Shank)		尺寸 Dimension (mm)				最小車徑 d	搭配刀片 Insert		配件 Spare Parts
無出水孔 Non-coolant	出水孔 Coolant	F	L1	L	D		切槽加工 Grooving	螺紋加工 Threading	
SN ^R / _L -0010K-11-S10	SN ^R / _L -A0010K-11-S10	6.5	22	125	10	13	TGL11IR.. TGL11IL..	11IR.. 11IL..	①
SN ^R / _L -0012M-11-S12	SN ^R / _L -A0012M-11-S12	8.0	26	150	12	16			
SN ^R / _L -0016Q-16	SN ^R / _L -A0016Q-16	10.0	36	180	16	19	TGL16IR.. TGL16IL..	16IR.. 16IL..	②
SN ^R / _L -0020R-16	SN ^R / _L -A0020R-16	12.0	40	200	20	24			
SN ^R / _L -0025R-16	SN ^R / _L -A0025R-16	14.5	45	200	25	29			
SN ^R / _L -0032S-16	SN ^R / _L -A0032S-16	18.5	45	250	32	36			

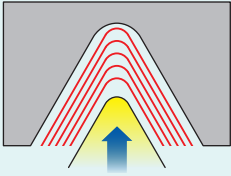
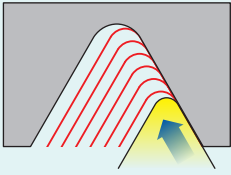
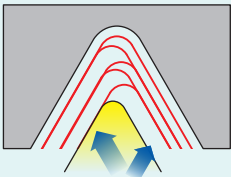
配件 Spare Parts	Screw	Wrench	Shim	Screw	Wrench
①	MS2507G	ETF08	—	—	—
②	MS3509A	ETF15	—	—	—
③	MS3512A	ETF15	GXN16 / GXE16	HTM309	PL25

※ SNR 刀桿搭配 GXN 墊片；SNL 刀桿搭配 GXE 墊片。SNR right hand tools shim is GXN | SNL left hand tools shim is GXE.

→ 搭配刀片 Insert [P.524-527](#) → 切削條件表 Cutting Condition [P.615, 616](#)

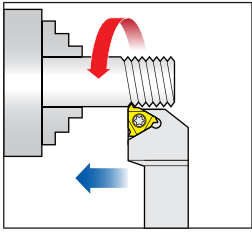
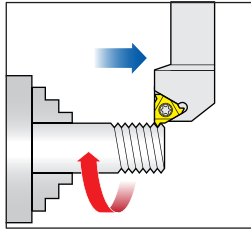
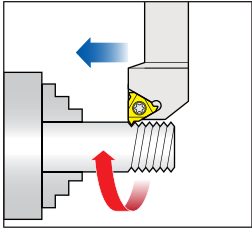
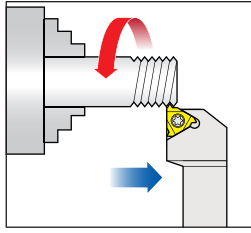
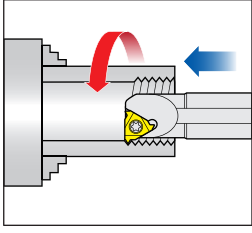
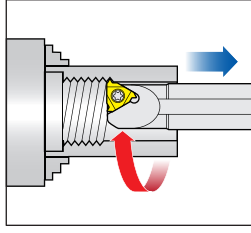
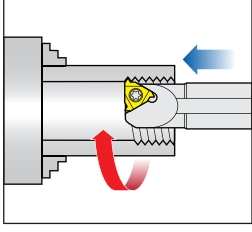
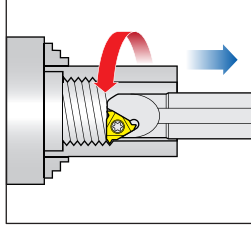
螺紋車削進刀方式

Thread Turning Infeed Methods

螺紋車削 進刀方式 Infeed Methods	特色 Features	
	優點 Advantages	缺點 Disadvantages
 <p>徑向式進刀 Radial Infeed</p>	<ul style="list-style-type: none"> • 最容易使用 (螺紋的標準程序) 。 Easiest to use. (Standard programme for threading) • 應用廣泛 (切削條件易更改) 。 Wide application. (Cutting conditions easy to change.) • 徑向式進刀是最簡單、快速的加工方式。 Radial infeed is the simplest and quickest method. • 適合螺距小於 1.5mm(16Tpi) 加工。 For pitches of less than 1.5mm(16Tpi). • 適合切屑較短的材質。 For material with short chips. • 適合硬質材質的加工。 For work with hardened material. • 切削刃左右兩側磨損均勻。 Uniform wear of the right and left sides of the cutting edge. 	<ul style="list-style-type: none"> • 後段加工切削刃接觸工件面積大而產生震動。 Subject to vibration in the later passes due to long cutting edge in contact with workpiece. • 切屑控制困難。 Difficult chip control. • 無法使用在大螺距的螺紋加工。 Ineffective for large pitch threading. • R 角加工負荷大。 Heavy load on the nose radius.
 <p>側向進刀 Flank Infeed</p>	<ul style="list-style-type: none"> • 工序容易使用 (螺紋的半標準程序) 。 Relatively easy to use. (Semi-standard program for threading.) • 適合大螺距和容易加工材質之應用。 Suitable for large pitch threads or materials that peel easily. • 降低切削阻力。 Reduced cutting force. • 良好排屑。 Good chip discharge. 	<ul style="list-style-type: none"> • 刀片右側磨損較大。 Large flank wear of the right side of a cutting edge. • 加工深度不易修改 (需要重新編程) 。 Relatively difficult to change cutting depth. (Re-programming necessary)
 <p>改進式側向進刀 Flank Infeed(Modified)</p>	<ul style="list-style-type: none"> • 防止切削刃右側磨損。 Preventing flank wear on the right side of the cutting edge. • 適合大螺距和容易加工材質之應用。 Suitable for large pitch threads or materials that peel easily. • 降低切削阻力。 Reduced cutting force. • 良好排屑。 Good chip discharge. 	<ul style="list-style-type: none"> • 加工工序複雜。 Complex machining programming. • 加工深度不易修改 (需要重新編程) 。 Difficult to change cutting depth. (NC programming necessary)
 <p>交替式進刀 Incremental Infeed</p>	<ul style="list-style-type: none"> • 適合大螺距和容易加工材質之應用。 Good for large pitch or materials that peel easily. • 切削刃左右兩側磨損均勻。 Uniform wear of the right and left • 降低切削阻力。 Reduced cutting force. 	<ul style="list-style-type: none"> • 加工工序複雜。 Complex machining programming. • 加工深度不易修改 (需要重新編程) 。 Difficult to change cutting depth. (NC programming necessary) • 排屑控制困難。 Chips control is difficult.

螺紋車削進刀圖示

Thread Turning Methods

螺紋 Thread	刀具進給方向 Thread Methods	
外螺紋 - 右螺紋 External- Right Hand Thread	 <p data-bbox="651 629 756 685">右車刀桿 Right Hand</p>	 <p data-bbox="1142 629 1248 685">左車刀桿 Left Hand</p>
外螺紋 - 左螺紋 External- Left Hand Thread	 <p data-bbox="651 1008 756 1064">左車刀桿 Left Hand</p>	 <p data-bbox="1142 1008 1248 1064">右車刀桿 Right Hand</p>
內螺紋 - 右螺紋 Internal- Right Hand Thread	 <p data-bbox="651 1386 756 1442">右車刀桿 Right Hand</p>	 <p data-bbox="1142 1386 1248 1442">左車刀桿 Left Hand</p>
內螺紋 - 左螺紋 Internal- Left Hand Thread	 <p data-bbox="651 1765 756 1821">左車刀桿 Left Hand</p>	 <p data-bbox="1142 1765 1248 1821">右車刀桿 Right Hand</p>