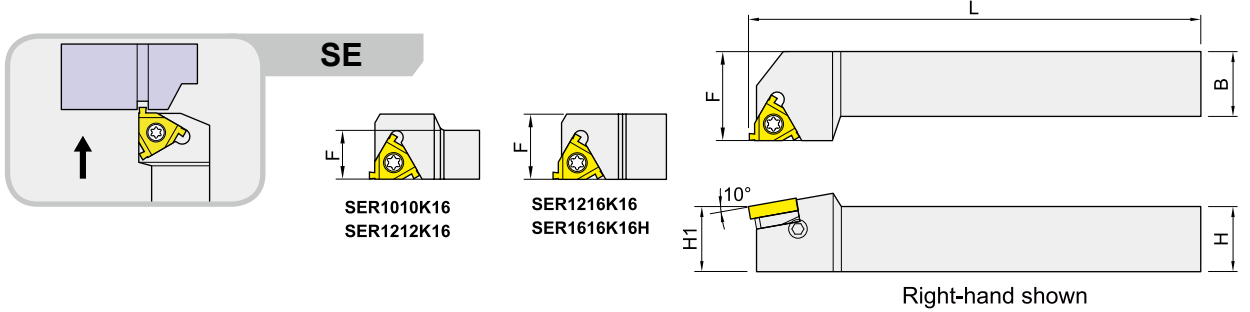


SE Shallow Grooving Tools (Laydown, Depth < 2.5mm)

SE 外徑淺切槽刀 (臥式, 切深 < 2.5mm)

External Tool Holder Specifications 外徑刀桿規格



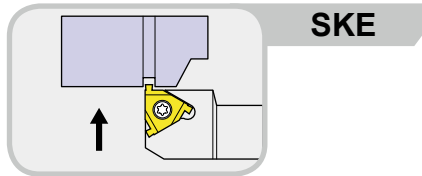
Insert Brand : Winstar

Order No.	Dimensions (mm)				Insert	Spare parts
	H(H1)	B	L	F		
ISE <sup>R/L</sup> 1216K16	12	16	125	16	TGL16ER or TGL16EL	①
ISE <sup>R/L</sup> 1010K16H	10	10	125	10		
ISE <sup>R/L</sup> 1212K16H	12	12	125	12		
ISE <sup>R/L</sup> 1616K16H	16	16	125	16		
ISE <sup>R/L</sup> 1616K16	16	16	125	20		②
ISE <sup>R/L</sup> 2020K16	20	20	125	25		
ISE <sup>R/L</sup> 2525M16	25	25	150	32		
ISE <sup>R/L</sup> 3232P16	32	32	170	40		

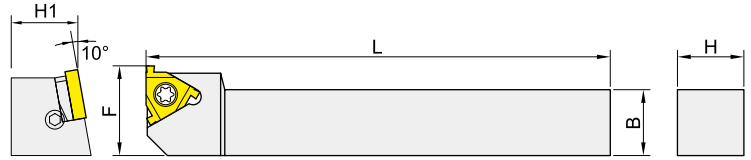
Spare parts	Screw	Shim	Screw	Wrench	Wrench
①	IMS3509A	-	-	-	ITK15
②	IMS3512A	IGXN16 or IGXE16	IHTM309	IPL25	ITK15

※ SER right hand tools shim is IGXE16, SEL left hand tools shim is IGXN16.

External Tool Holder Specifications 外徑刀桿規格



SKE



Right-hand shown

Insert Brand : Winstar

Order No.	Dimensions (mm)				Insert	Spare parts
	H(H1)	B	L	F		
ISKE <sup>R/L</sup> 1212K16	12	12	125	18	TGL16ER or TGL16EL	①
ISKE <sup>R/L</sup> 1616K16	16	16	125	22		②
ISKE <sup>R/L</sup> 2020K16	20	20	125	27		
ISKE <sup>R/L</sup> 2525M16	25	25	150	34		

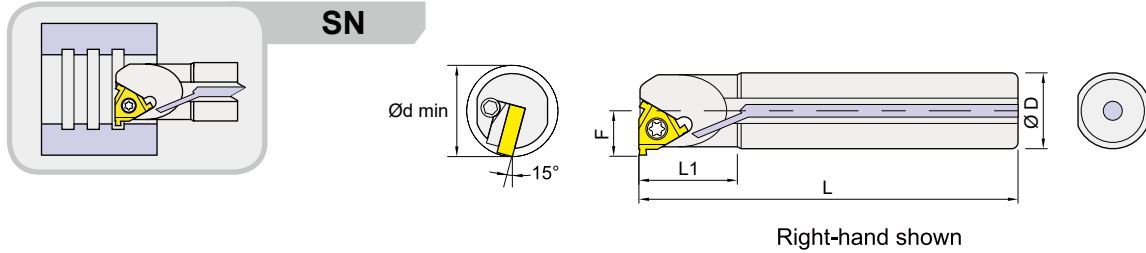
Spare parts	Screw	Shim	Screw	Wrench	Wrench
①	IMS3509A	-	-	-	ITK15
②	IMS3512A	IGXN16 or IGXE16	IHTM309	IPL25	ITK15

※ SKER right hand tools shim is IGXE16, SKEL left hand tools shim is IGXN16.

**SN Shallow Grooving Tools (Laydown, Depth < 2.5mm)**

SN 內徑 淺切槽刀 (臥式, 切深 < 2.5mm)

**Internal Tool Holder Specifications 內徑刀桿規格**



Right-hand shown

Insert Brand : Winstar

Order No.	Dimensions (mm)					Coolant	Insert	Spare parts
	D	L	L1	F	d min			
ISN <sup>R/L</sup> _0010K11S10	10	125	22	6.5	13		TGL11IR or TGL11IL	①
ISN <sup>R/L</sup> _0012M11S12	12	150	26	8	16			
ISN <sup>R/L</sup> _A0010K11S10	10	125	22	6.5	13	●		
ISN <sup>R/L</sup> _A0012M11S12	12	150	26	8	16	●		
ISN <sup>R/L</sup> _0016Q16	16	180	36	10	19		TGL16IR or TGL16IL	②
ISN <sup>R/L</sup> _0020R16	20	200	40	12	24			③
ISN <sup>R/L</sup> _0025R16	25	200	45	14.5	29			③
ISN <sup>R/L</sup> _0032S16	32	250	45	18.5	36			②
ISN <sup>R/L</sup> _A0016Q16	16	180	36	10	19	●		②
ISN <sup>R/L</sup> _A0020R16	20	200	40	12	24	●		③
ISN <sup>R/L</sup> _A0025R16	25	200	45	14.5	29	●	③	
ISN <sup>R/L</sup> _A0032S16	32	250	45	18.5	36	●	③	

Spare parts	Screw	Wrench	Shim	Screw	Wrench
①	IMS2507G	ITK08	-	-	-
②	IMS3509A	ITK15	-	-	-
③	IMS3512A	ITK15	IGXN16 or IGXE16	IHTM309	IPL25

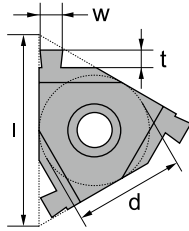
※ SNR right hand tools shim is IGXN16, SNL left hand tools shim is IGXE16.

**Recommended Cutting Conditions 建議切削數據**

Working Material	Vc (m/min)	fr (mm/rev)
Carbon Steel / Alloy Steel	50 ~ 200	0.02 ~ 0.10
Stainless Steel	50 ~ 200	0.02 ~ 0.10
Cast Iron	50 ~ 200	0.02 ~ 0.10
Aluminum Alloy	200 ~ 300	0.05 ~ 0.15
High Temperature Alloy	80 ~ 120	0.03 ~ 0.07

Turning

## Insert Designation 刀片型號



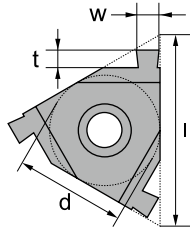
※ Same insert can be used for external right hand and internal left hand.

相同的刀片可以使用在外徑右手與內徑左手加工

Order No.	Designation	Dimensions (mm)				Working Material					
		d	l	w ±0.02	t	P	M	K	N	S	H
ITGL11ER0506025	TGL11ER050-CP6025	1/4	11	0.50	1.4	●	●	●		○	○
ITGL11 IL 0506025	TGL11 IL 050-CP6025	1/4	11	0.50	1.4	●	●	●		○	○
ITGL11ER0606025	TGL11ER060-CP6025	1/4	11	0.60	1.4	●	●	●		○	○
ITGL11 IL 0606025	TGL11 IL 060-CP6025	1/4	11	0.60	1.4	●	●	●		○	○
ITGL11ER0706025	TGL11ER070-CP6025	1/4	11	0.70	1.4	●	●	●		○	○
ITGL11 IL 0706025	TGL11 IL 070-CP6025	1/4	11	0.70	1.4	●	●	●		○	○
ITGL11ER0806025	TGL11ER080-CP6025	1/4	11	0.80	1.4	●	●	●		○	○
ITGL11 IL 0806025	TGL11 IL 080-CP6025	1/4	11	0.80	1.4	●	●	●		○	○
ITGL11ER1006025	TGL11ER100-CP6025	1/4	11	1.00	1.4	●	●	●		○	○
ITGL11 IL 1006025	TGL11 IL 100-CP6025	1/4	11	1.00	1.4	●	●	●		○	○
ITGL11ER1206025	TGL11ER120-CP6025	1/4	11	1.20	1.4	●	●	●		○	○
ITGL11 IL 1206025	TGL11 IL 120-CP6025	1/4	11	1.20	1.4	●	●	●		○	○
ITGL16ER0506025	TGL16ER050-CP6025	3/8	16	0.50	1.4	●	●	●		○	○
ITGL16 IL 0506025	TGL16 IL 050-CP6025	3/8	16	0.50	1.4	●	●	●		○	○
ITGL16ER1006025	TGL16ER100-CP6025	3/8	16	1.00	1.4	●	●	●		○	○
ITGL16 IL 1006025	TGL16 IL 100-CP6025	3/8	16	1.00	1.4	●	●	●		○	○
ITGL16ER1206025	TGL16ER120-CP6025	3/8	16	1.20	1.6	●	●	●		○	○
ITGL16 IL 1206025	TGL16 IL 120-CP6025	3/8	16	1.20	1.6	●	●	●		○	○
ITGL16ER1406025	TGL16ER140-CP6025	3/8	16	1.40	1.8	●	●	●		○	○
ITGL16 IL 1406025	TGL16 IL 140-CP6025	3/8	16	1.40	1.8	●	●	●		○	○
ITGL16ER1706025	TGL16ER170-CP6025	3/8	16	1.70	2.0	●	●	●		○	○
ITGL16 IL 1706025	TGL16 IL 170-CP6025	3/8	16	1.70	2.0	●	●	●		○	○
ITGL16ER1956025	TGL16ER195-CP6025	3/8	16	1.95	2.0	●	●	●		○	○
ITGL16 IL 1956025	TGL16 IL 195-CP6025	3/8	16	1.95	2.0	●	●	●		○	○
ITGL16ER2256025	TGL16ER225-CP6025	3/8	16	2.25	2.25	●	●	●		○	○
ITGL16 IL 2256025	TGL16 IL 225-CP6025	3/8	16	2.25	2.25	●	●	●		○	○

※ To choose CP10(uncoating) for **N** material machining.

## Insert Designation 刀片型號



※ Same insert can be used for internal right hand and external left hand.

相同的刀片可以使用在內徑右手與外徑左手加工

Order No.	Designation	Dimensions (mm)				Working Material					
		d	l	w ±0.02	t	P	M	K	N	S	H
ITGL111R0506025	TGL111R050-CP6025	1/4	11	0.50	1.4	●	●	●		○	○
ITGL11EL0506025	TGL11EL050-CP6025	1/4	11	0.50	1.4	●	●	●		○	○
ITGL111R0606025	TGL111R060-CP6025	1/4	11	0.60	1.4	●	●	●		○	○
ITGL11EL0606025	TGL11EL060-CP6025	1/4	11	0.60	1.4	●	●	●		○	○
ITGL111R0706025	TGL111R070-CP6025	1/4	11	0.70	1.4	●	●	●		○	○
ITGL11EL0706025	TGL11EL070-CP6025	1/4	11	0.70	1.4	●	●	●		○	○
ITGL111R0806025	TGL111R080-CP6025	1/4	11	0.80	1.4	●	●	●		○	○
ITGL11EL0806025	TGL11EL080-CP6025	1/4	11	0.80	1.4	●	●	●		○	○
ITGL111R1006025	TGL111R100-CP6025	1/4	11	1.00	1.4	●	●	●		○	○
ITGL11EL1006025	TGL11EL100-CP6025	1/4	11	1.00	1.4	●	●	●		○	○
ITGL111R1206025	TGL111R120-CP6025	1/4	11	1.20	1.4	●	●	●		○	○
ITGL11EL1206025	TGL11EL120-CP6025	1/4	11	1.20	1.4	●	●	●		○	○
ITGL161R0506025	TGL161R050-CP6025	3/8	16	0.50	1.4	●	●	●		○	○
ITGL16EL0506025	TGL16EL050-CP6025	3/8	16	0.50	1.4	●	●	●		○	○
ITGL161R1006025	TGL161R100-CP6025	3/8	16	1.00	1.4	●	●	●		○	○
ITGL16EL1006025	TGL16EL100-CP6025	3/8	16	1.00	1.4	●	●	●		○	○
ITGL161R1206025	TGL161R120-CP6025	3/8	16	1.20	1.6	●	●	●		○	○
ITGL16EL1206025	TGL16EL120-CP6025	3/8	16	1.20	1.6	●	●	●		○	○
ITGL161R1406025	TGL161R140-CP6025	3/8	16	1.40	1.8	●	●	●		○	○
ITGL16EL1406025	TGL16EL140-CP6025	3/8	16	1.40	1.8	●	●	●		○	○
ITGL161R1706025	TGL161R170-CP6025	3/8	16	1.70	2.0	●	●	●		○	○
ITGL16EL1706025	TGL16EL170-CP6025	3/8	16	1.70	2.0	●	●	●		○	○
ITGL161R1956025	TGL161R195-CP6025	3/8	16	1.95	2.0	●	●	●		○	○
ITGL16EL1956025	TGL16EL195-CP6025	3/8	16	1.95	2.0	●	●	●		○	○
ITGL161R2256025	TGL161R225-CP6025	3/8	16	2.25	2.25	●	●	●		○	○
ITGL16EL2256025	TGL16EL225-CP6025	3/8	16	2.25	2.25	●	●	●		○	○

※ To choose CP10(uncoating) for **N** material machining.