

CONTENTS

General product information

Please refer to general catalog - E004 - E007 / E010 - E042 / E053, E054.

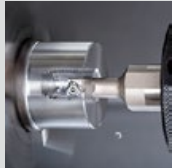
Added products



TungTurn-Jet

Expansion with high-pressure internal coolant external threading tool holder

[View](#)



0.157-0.197in_3corners

Expansion of insert & tool holder for small diameter internal threading

[View](#)

TUNGTHREAD

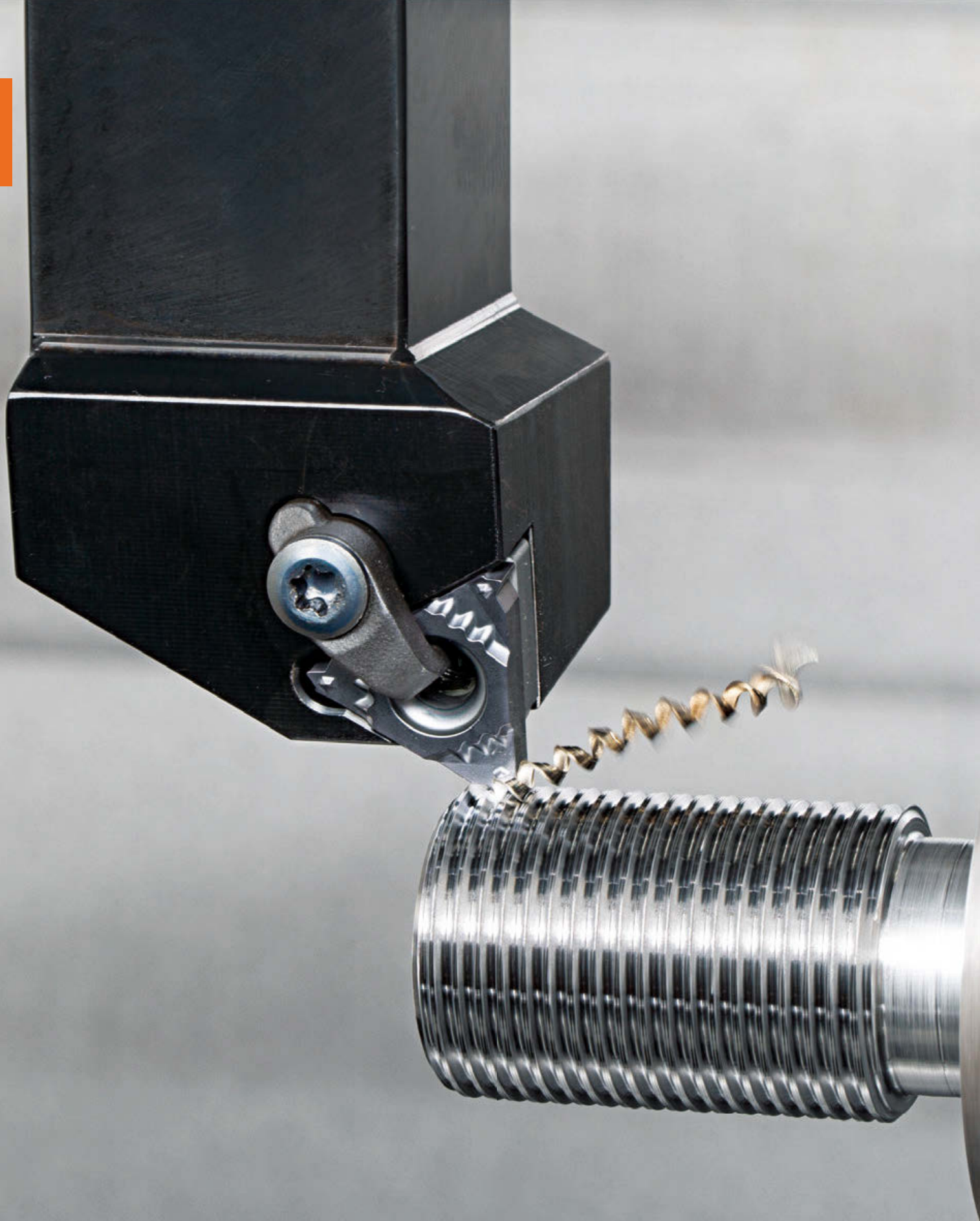
www.tungaloy.com/us

Tungaloy Report No. 375S1-US

Expansion with high pressure internal coolant external threading tool holder



INDUSTRY 4.0
FEED the SPEED!



ACCELERATED MACHINING



Expansion internal coolant tool holder



For more information

- Optimized two streams of high-pressure coolant jets to maximize productivity
- Applicable direct connection with tube free



Improvement of chip control

P Alloy steel:
External threading

Tool holder : SER2525X16-CHP-MC
 Insert : 16ER15ISO AH725
 Cutting speed : $V_c = 490$ sfm
 Pitch : $P = 0.059''$
 Infeed method : Radial infeed (6 pass)

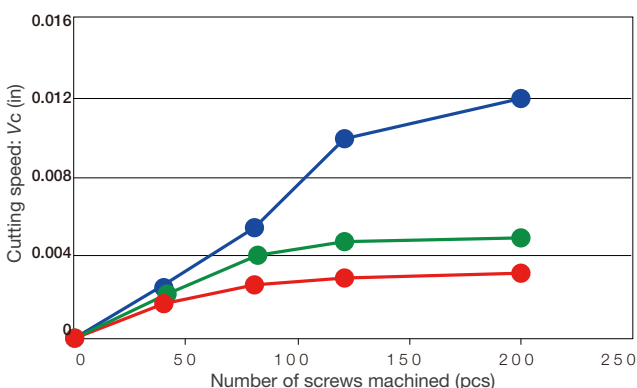
	1 pass	2 pass	3 pass	4 pass	5 pass	6 pass
Internal Coolant 7 MPa						
Internal Coolant 1 MPa						
External coolant						

Good chip, avoid jamming

Improvement of tool life

M Stainless steel:
External threading
(304SS)

Material : 304SS
 Holder : SER2525X16-CHP-MC
 Insert : 16ER15ISO AH725
 Cutting speed : $V_c = 390$ sfm
 Pitch : $P = 0.059''$
 Infeed method : Radial infeed (6 pass)

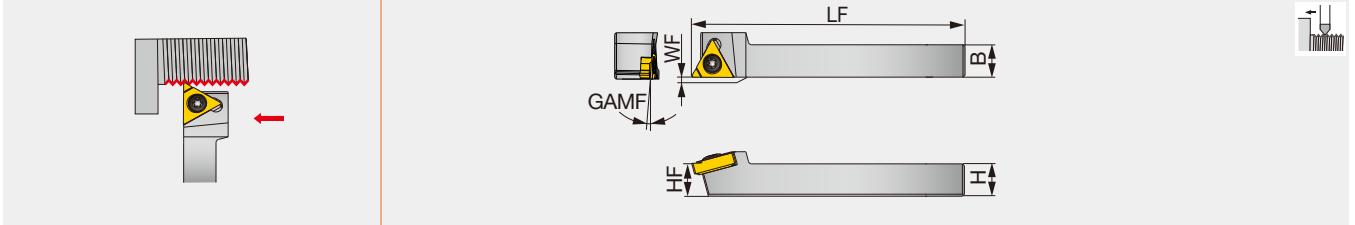


After 200 threads



SER

Screw-on external threading toolholders



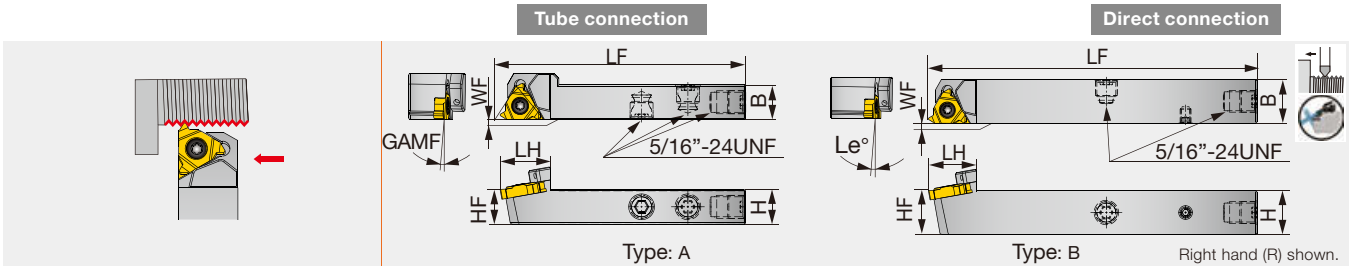
Metric	H	B	LF	HF	WF	GAMF	Insert
SER0808H11	8	8	100	8	0	1.5°	11ER...
SER1010H11	10	10	100	10	0	1.5°	11ER...

SPARE PARTS

Designation	Clamping screw	Wrench
SER**H11	SR M2.6-L6.7-S11	T-8/5

JSE2R16-CHP

Screw-on external threading toolholders. High pressure coolant capability with tube and direct connection



Inch	H	B	LF	LH	HF	WF	GAMF	Type	Insert
JSE2R08F16-CHP	0.500	0.500	3.344	0.748	0.500	0	1°	A	16ER...
JSE2R08X16-CHP	0.500	0.500	4.750	0.748	0.500	0	1°	B	16ER...
JSE2R10X16-CHP	0.625	0.625	4.750	0.748	0.625	0	1°	B	16ER...

Metric	H	B	LF	LH	HF	WF	GAMF	Type	Insert
JSE2R1212F16-CHP*	12	12	85	19	12	0	1°	A	16ER...
JSE2R1212X16-CHP	12	12	120	19	12	0	1°	B	16ER...
JSE2R1616X16-CHP	16	16	120	19	16	0	1°	B	16ER...

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench
JSE2R**16-CHP	CSTB-3.5	T-15F	SR5/16UNFTL360	P-4

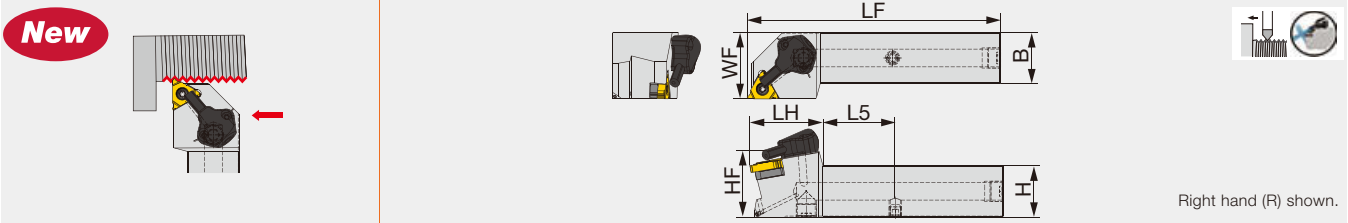
* External coolant tube connection type

SER-X-CHP-MC

Direct connection

Tube connection

Screw-on external threading toolholders. High pressure coolant capability with tube and direct connection



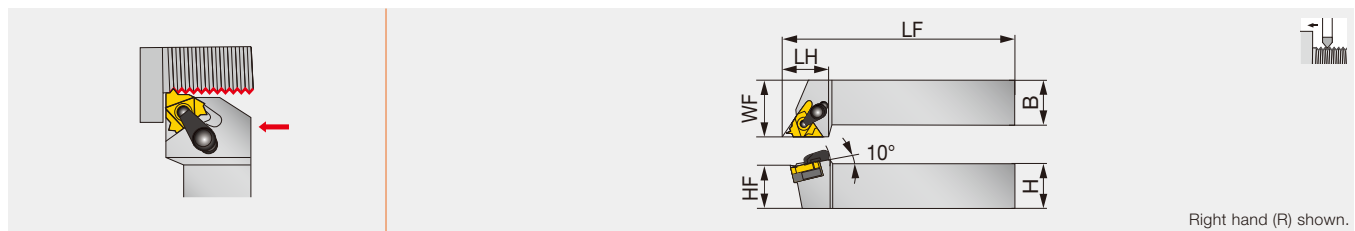
Metric	H	B	LF	LH	HF	WF	L5	Insert
SER2020X16-CHP-MC	20	20	107	36	20	25	27.9	16ER...
SER2525X16-CHP-MC	25	25	122	36	25	32	33.75	16ER...
SER2525X22-CHP-MC	25	25	122	36	25	32	33.75	22ER...

SPARE PARTS

Designation	Clamping screw	Wrench	Shim screw	Shim	Coolant unit	Coolant plug	Wrench
SER**X16-CHP-MC	CSTB-3.5ST	T-15F	DTS5-3.5	A16-1DT	CU-V-CHP	PLUGG1/8-6.5TL360	P-3.5
SER**X22-CHP-MC	CSTB-4ST	T-15F	DTS6-4	GX22-1DT	CU-CW-CHP	PLUGG1/8-6.5TL360	P-4

CER/L

Clamp-on external threading toolholders (screw-on type available as option for -DT type holders)



Inch	H	B	LF	LH	HF	WF	Insert
CER/L123DT	0.750	0.750	5.000	0.870	0.750	1.000	16ER/L...
CER/L163DT	1.000	1.000	6.000	1.000	1.000	1.250	16ER/L...
CER/L203DT	1.250	1.250	6.000	1.250	1.250	1.500	16ER...
CER/L164DT	1.000	1.000	6.000	1.000	1.000	1.250	22ER...
CER/L204DT	1.250	1.250	6.000	1.250	1.250	1.500	22ER...

Metric	H	B	LF	LH	HF	WF	Insert
CER/L1212H16DT	12	12	100	24	12	16	16ER/L...
CER/L1616H16DT	16	16	100	24	16	20	16ER/L...
CER/L2020K16DT	20	20	125	24	20	25	16ER/L...
CER/L2525M16DT	25	25	150	28	25	32	16ER/L...
CER/L2525M22DT	25	25	150	31.3	25	32	22ER/L...
CER3232P16T	32	32	170	32	32	40	16ER...
CER3232P22T	32	32	170	32	32	40	22ER...
CER2525M27T	25	25	150	34	25	32	27ER...
CER3232P27T	32	32	170	34	32	40	27ER...

Note: A clamp set for CER/L type consists of a clamp and a clamping screw. A shim set for CER/L type consists of a shim and a shim screw. Standard shims for CER/L type can be used for both left hand and right hand toolholders. Use either of the sides depending on the hand.

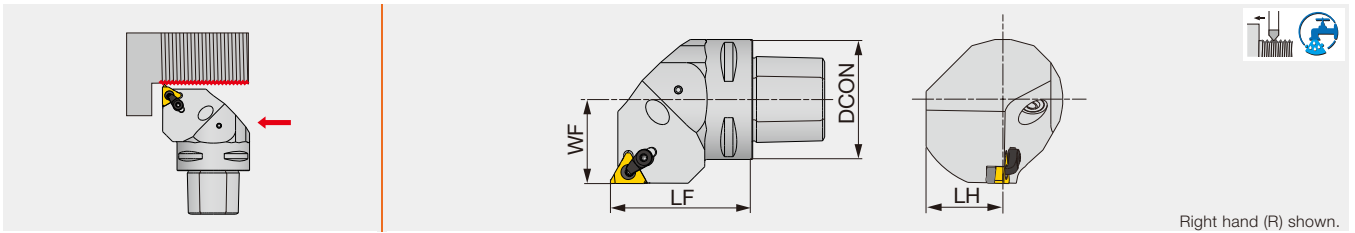
SPARE PARTS

Designation	Clamp set	Clamping screw	Screw	Shim	Shim set	Wrench	Wrench 1	Wrench 2
CER/L123-DT	CSP16	CSTB-3.5ST	DTS5 - 3.5	A16 - 1DT	-	P-3.5	T-15F	-
CER/L163-DT	CSP16	CSTB-3.5ST	DTS5 - 3.5	A16 - 1DT	-	P-3.5	T-15F	-
CER203-DT	CSP22	CSTB-4ST	DTS6-4	GX22-1DT	-	P-3.5	T-15F	-
CER164-DT	CSP22	CSTB-4ST	DTS6-4	GX22-1DT	-	P-4	T-20F	-
CER204-DT	CSP22	CSTB-4ST	DTS6-4	GX22-1DT	-	P-4	T-20F	-
CER/L**16DT	CSP22	CSTB-3.5ST	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-
CER/L2525M22DT	CSP22	CSTB-4ST	DTS6-4	GX22-1DT	-	P-4	T-15F	T-20F
CER3232P16T	CSP16	-	-	-	A16-1	-	T-15F	-
CER3232P22T	CSP22	-	-	-	NXE22-1	-	T-20F	-
CER**27T	CSP27	-	-	-	NXE27-1	P-4	-	-

TUNGCAP

C-CER/L

Clamp-on external threading toolholders with TungCap connection. High pressure coolant capability



Metric	DCON	LF	LH	WF	RE	Insert
C4CER/L27050-16ERN(2)	40	50	25	27	0.8	16ER/L...
C5CER/L35060-16ER(1)	50	60	32	35	0.8	16ER/L...
C5CER/L35060-16ERN(2)	50	60	32	35	0.8	16ER/L...
C6CER/L45065-16ER(1)	63	65	41	45	0.8	16ER/L...
C6CER/L45065-16ERN(2)	63	65	41	45	0.8	16ER/L...

(1) Applicable for 3 MPa pressure coolant. (2) Applicable for 7 MPa pressure coolant.

SPARE PARTS

Designation	Clamp set	Clamping screw	Coolant parts	Screw	Shim	Wrench	Wrench 1
C5CE*35060-16ER	CSP16	CSTB-3.5ST	EZ104	DTS5-3.5	A16-1DT	P-3.5	T-15F
C5CE*35060-16ERN	CSP16	CSTB-3.5ST	SATZ-M10X1-M5	DTS5-3.5	A16-1DT	P-3.5	T-15F
C6CE*45065-16ER	CSP16	CSTB-3.5ST	EZ104	DTS5-3.5	A16-1DT	P-3.5	T-15F
C6CE*45065-16ERN	CSP16	CSTB-3.5ST	SATZ-M10X1-M5	DTS5-3.5	A16-1DT	P-3.5	T-15F

Tungaloy America, Inc.

3726 N Ventura Drive, Arlington Heights, IL 60004, U.S.A.

Inside Sales: +1-888-554-8394

Technical Support: +1-888-554-8391

Fax: +1-888-554-8392

www.tungaloy.com/us

Tungaloy Canada

432 Elgin St. Unit 3, Brantford, Ontario N3S 7P7, Canada

Phone: +1-519-758-5779 Fax: +1-519-758-5791

www.tungaloy.com/ca

Tungaloy de Mexico S.A.

C Los Arellano 113, Parque Industrial Siglo XXI

Aguascalientes, AGS, Mexico 20290

Phone: +52-449-929-5410 Fax: +52-449-929-5411

www.tungaloy.com/mx



Scan for instant
web access



www.tungaloy.com/us

follow us at:

facebook.com/tungaloyamerica

twitter.com/tungaloy

instagram.com/tungaloyamerica

linkedin.com/company/tungaloy-america

To see this product in action visit:

Tung-TV

www.youtube.com/tungaloycorporation

Distributed by:



FIND US ON THE CLOUD!
machiningcloud.com



TurnLine



TUNGTHREAD

www.tungaloy.com/us

Tungaloy Report No. 375S2-US

Expansion of insert & tool holder for small diameter internal threading



INDUSTRY 4.0
FEED the SPEED!



For more information

Efficient internal thread turning of small diameter holes!



Conventional

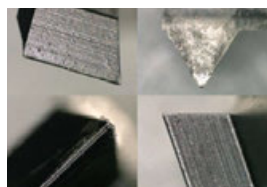
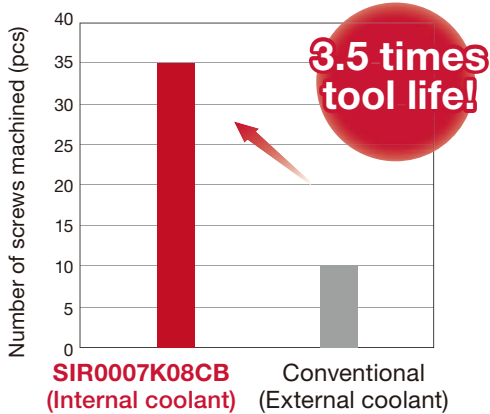
New



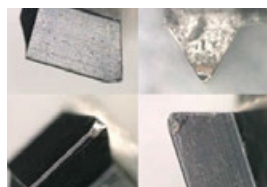
- Economical 3-edged insert
- For small holes in diameters 0.290" and larger
- Through-coolant holders are also available

- Single-edged insert
- For hole diameters in 0.354" and larger
- No through-coolant

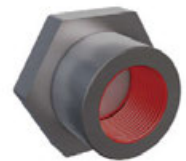
Cutting performance



SIR0007K08CB
(Internal coolant)
After 30 threaded



Conventional
After 10 threaded

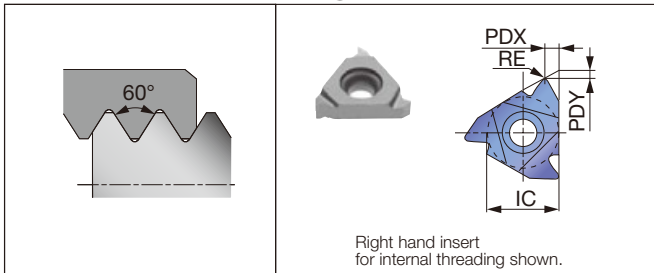


- M** Holder : SIR0007K08CB (Internal coolant)
 Insert : 08IRA60 AH725
 Workpiece material : 316SS
 Cutting speed : Vc = 197 sfm
 Pitch : 0.030" (0.75 mm)
 Machining : Internal threading
 Infeed method : Radial infeed
 Coolant : Wet

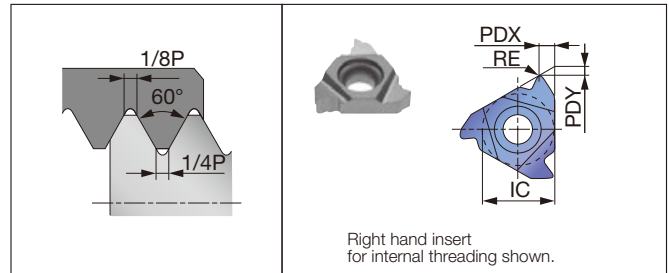
Standard cutting conditions

ISO	Workpiece materials	Hardness	Cutting speed Vc (sfm)	
			AH725	GH330
P	Carbon steel	< 200 HB	262 - 591	262 - 558
		> 200 HB	197 - 525	197 - 427
M	Stainless steel	-	164 - 427	230 - 394

60° thread angle



ISO metric



Partial-profile inserts

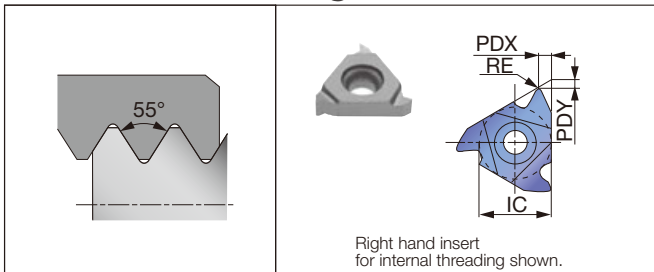
Insert size	Pitch (mm)	TPI	Hand of cut	Internal insert (in)							
				Designation	Grades		IC	PDX	PDY	RE	
					Coating						
06	0.5-1.25	48-20	R	06IRA60	AH725	GH330	●	0.157	0.024	0.024	0.002
08	0.5-1.5	48-16	R	08IRA60			●	0.197	0.028	0.024	0.002

Full-profile inserts

Insert size	Pitch (mm)	TPI	Hand of cut	Internal insert (in)							
				Designation	Grades		IC	PDX	PDY	RE	
					Coating						
06	0.5		R	06IR05ISO			●	0.157	0.035	0.024	0.002
06	0.75		R	06IR075ISO			●	0.157	0.024	0.024	0.002
06	1		R	06IR10ISO			●	0.157	0.024	0.024	0.002
06	1.25		R	06IR125ISO			●	0.157	0.024	0.024	0.003
08	1		R	08IR10ISO			●	0.197	0.024	0.024	0.002
08	1.25		R	08IR125ISO			●	0.197	0.028	0.028	0.003
08	1.5		R	08IR15ISO			●	0.197	0.028	0.028	0.004
08	1.75		R	08IR175ISO			●	0.197	0.024	0.024	0.004

●: New / Package quantity = 5 pcs.

55° thread angle



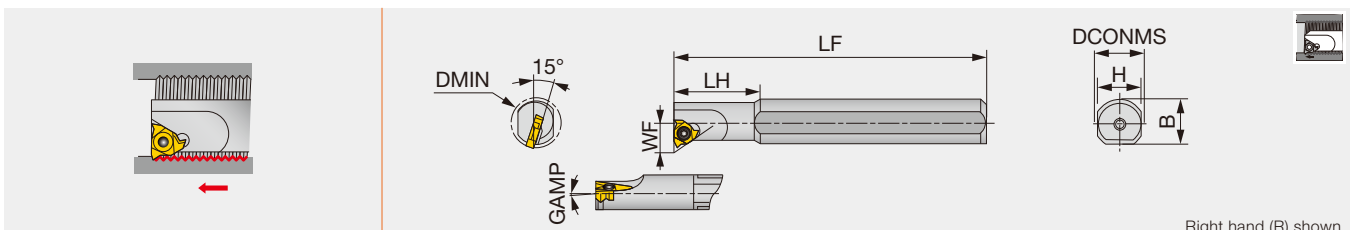
Partial-profile inserts

Insert size	Pitch (mm)	TPI	Hand of cut	Internal insert (in)							
				Designation	Grades		IC	PDX	PDY	RE	
					Coating						
06	0.5-1.25	48-20	R	06IRA55	AH725	GH330	●	0.157	0.020	0.020	0.002
08	0.5-1.5	48-16	R	08IRA55			●	0.197	0.028	0.024	0.002

New

SIR

Internal threading bars, Screw-on clamp



Metric	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMP	Coolant hole	Insert
SIR0005H06	STEEL	6.4	12	4.3	100	12	11	-	1.5°	Without	06IR...
SIR0007K08	STEEL	7.8	16	5.3	125	18	15	-	1.5°	Without	08IR...
SIR0005H06CB	CARBIDE	6.4	6	4.3	100	25	5	-	1.5°	With	06IR...
SIR0007K08CB	CARBIDE	8	8	5.3	125	30	7	-	1.5°	With	08IR...

Note: The right hand insert (**IR...type) is used for the right hand toolholders (SIR...type).
Recommend over 1 mm clearance between internal diameter of thread and each tools DMIN.

SPARE PARTS

Designation	Clamping screw	Wrench
SIR0005H06...	SR 14-552	T-6F-S
SIR0007K08...	SR 14-558	T-6F-S

Applicable thread size

Description	ISO metric	Unified IRA60 Insert	Parallel pipe IRA55 Insert
SIR0005H06...	≥ M9	≥ 3/8-24 UNF	≥ G1/8
SIR0007K08...	≥ M11	≥ 7/16-20 UNF	≥ G1/4

Tungaloy America, Inc.

3726 N Ventura Drive, Arlington Heights, IL 60004, U.S.A.

Inside Sales: +1-888-554-8394

Technical Support: +1-888-554-8391

Fax: +1-888-554-8392

www.tungaloy.com/us

Tungaloy Canada

432 Elgin St. Unit 3, Brantford, Ontario N3S 7P7, Canada

Phone: +1-519-758-5779 Fax: +1-519-758-5791

www.tungaloy.com/ca

Tungaloy de Mexico S.A.

C Los Arellano 113, Parque Industrial Siglo XXI

Aguascalientes, AGS, Mexico 20290

Phone: +52-449-929-5410 Fax: +52-449-929-5411

www.tungaloy.com/mx



Scan for instant
web access



www.tungaloy.com/us

follow us at:

facebook.com/tungaloyamerica

twitter.com/tungaloy

instagram.com/tungaloyamerica

linkedin.com/company/tungaloy-america

To see this product in action visit:

Tung-TV

www.youtube.com/tungaloycorporation

Distributed by:



FIND US ON THE CLOUD!
machiningcloud.com

