

GrooveLine

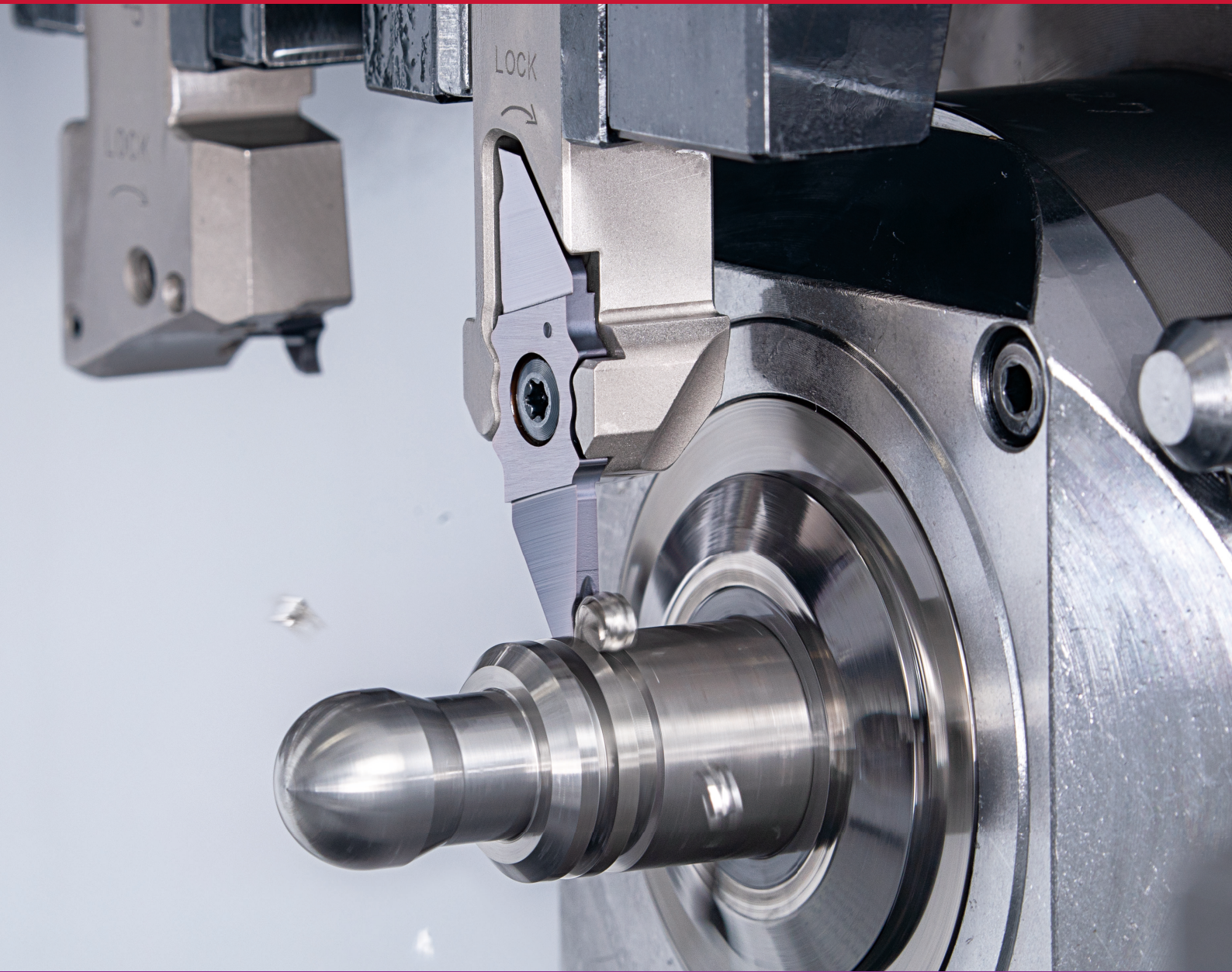
DUO^{UST}JCUT

www.tungaloy.com/us

Tungaloy Report No. 504S1-US



New JXPS-style parting insert with 3D chipbreaker



INDUSTRY 4.0
FEED the SPEED!

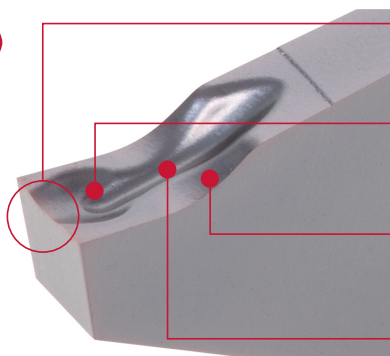


Innovative clamping system ensures stability in **parting-off operations**

Innovative dual-rake JXPS chipbreaker enables effective chip control

- Chip entanglement and other unwanted chip issues are eliminated
- **Excellent surface integrity** is achieved as chips are compressed, curled and effectively removed from the surface

New



Concave cutting edge

Rolls up and compresses the chip at the entry of the cut

Dimple

Curls the chip allowing effective chip evacuation

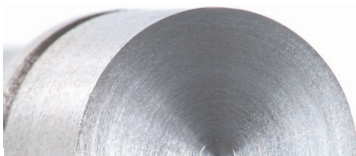
Prime chipbreaker

Directs the chip away from the surface ensuring good surface finishing

Coolant route

Chip forms and surface quality

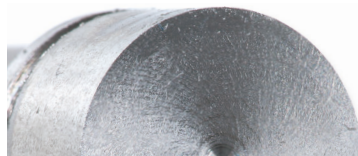
3D chipbreaker



No scratches by chips



Ground chipbreaker



Scratches by chips

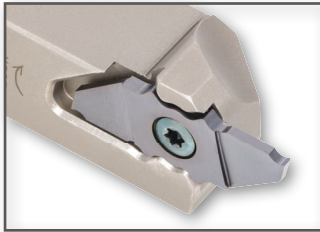


Toolholder	: JSXXL1212X09
Insert	: JXPS12L15F SH725
Workpiece material	: 304SS
Cutting speed	: $V_c = 328$ sfm
Feed	: $f = 0.001$ ipr
Groove width	: $CW = 0.059$ "
Machining	: Parting-off ($\phi 0.472$ ")
Coolant	: Wet
Machine	: Swiss lathe

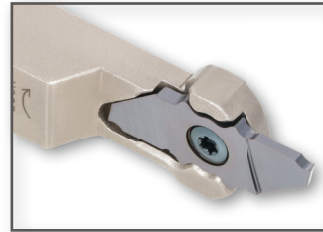
4 types of inserts are available for various parting-off diameters and can be mounted **in the same pocket of the toolholder**.

- Optimized overhang length for **stable machining**

Regular-type toolholder



Toolholder for sub-spindle



Max. parting dia.

ø0.236"

ø0.472"

ø0.630"

ø0.787"



New

3D chipbreaker

–

New JXPS12

New JXPS16

New JXPS20

Ground chipbreaker JXPG06

JXPG12

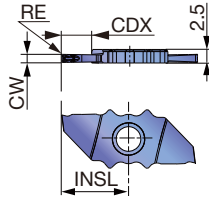
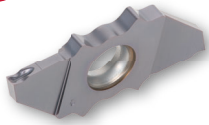
JXPG16

JXPG20

INSERT

JXPS**R/L-F (with 3D chipbreaker, sharp edge)

New



Right-hand (R) shown.

Designation	CW±0.025	RE	SH725		Dimensions (in)		
			R	L	CUTDIA	CDX*	INSL
JXPS12R/L10F	0.039	0.002	●	●	0.472	0.256	0.492
JXPS12R/L15F	0.059	0.002	●	●	0.472	0.256	0.492
JXPS16R/L15F	0.059	0.002	●	●	0.630	0.335	0.571
JXPS20R/L20F	0.079	0.002	●	●	0.787	0.413	0.650

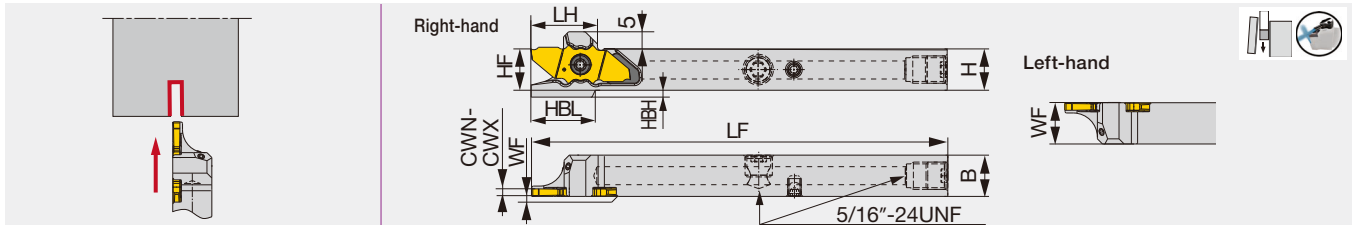
*Max grooving depth (CDX) varies depending on workpiece diameters.

● : New product
CUTDIA: Max. parting-off dia.
Package quantity = 5 pcs.

JSXXR/L-X-CHP

TUNG T JET

Parting-off tool for swiss lathes, coolant-through



Inch	CWN	CWX	H	B	LF**	LH**	HF	WF (R/L)	HBL**	HBH	Insert	Torque
JSXXR/L083X-CHP	0.039	0.079	0.500	0.500	4.750	≤ 0.764	0.500	0.008/0.492	0.736	0.051	JX**06...,12...,16...	0.89
JSXXR/L103X-CHP	0.039	0.079	0.625	0.625	4.750	≤ 0.764	0.625	0.008/0.617	-	-	JX**06...,12...,16...	0.89

Metric	CWN	CWX	H	B	LF**	LH**	HF	WF (R/L)	HBL**	HBH	Insert	Torque*
JSXXR/L1012H09-CHP	1	2	10	12	102	19.2	10	0.2/11.8	18.7	3	JX**06...,12...,16..., 20...	1.2
JSXXR/L1212X09-CHP	1	2	12	12	120	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2
JSXXR/L1616X09-CHP***	1	2	16	16	120	19.4	16	0.2/15.8	18.7	2.5	JX**06...,12...,16..., 20...	1.2
JSXXR/L1616X09B-CHP	1	2	16	16	120	19.4	16	0.2/15.8	18.7	-	JX**06...,12...,16..., 20...	1.2

Torque: Recommended clamping torque: lb-ft (*N·m)

LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX16... insert. LF, LH, and HBL will all be 0.079" (2 mm) shorter than the above values with JX**12... and JX**20... inserts, and 0.157" (4 mm) shorter for JX**06... insert.

***To be replaced with the new design

Use the right-hand insert (JX***R...) for a right-hand holder (JSXXR...); the left-hand insert (JX***L...) for a left-hand holder (JSXXL...).

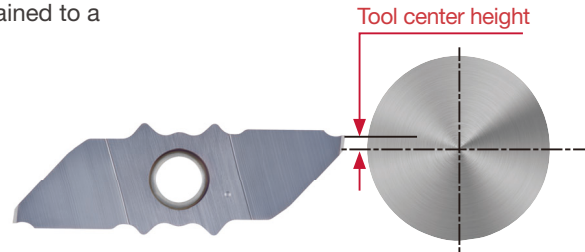
SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectTungJet plug	Wrench
JSXXR...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

For other types of toolholders, please check in Tungaloy Report (NO. 504-US) or the General Catalog

Adjustment of tool center height

When parting off bars, it is essential that the center height is maintained to a tolerance of $\pm 0.004''$ for maximum tool life.



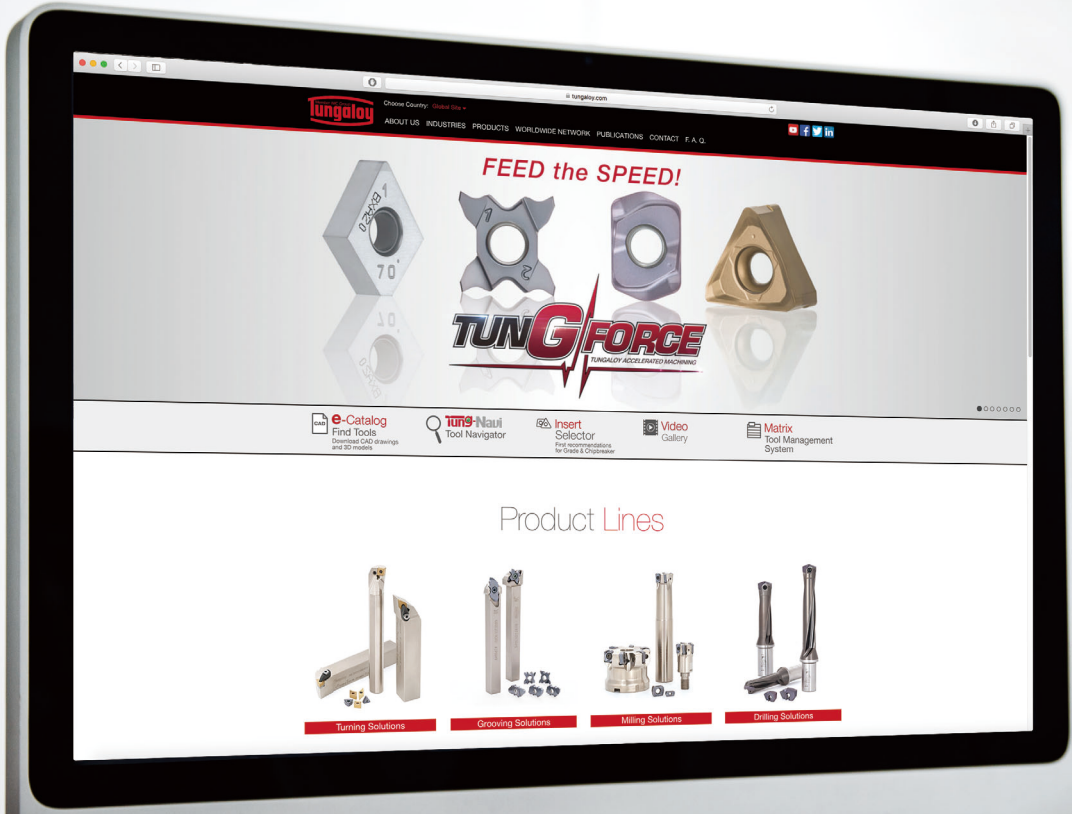
STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed V_c (sfm)	Feed f (ipr)
P	Low carbon steels 1015, etc.	SH725	164 - 656	0.0004 - 0.002
	Carbon steels, Alloy steels 1055, etc.	SH725	164 - 656	0.0004 - 0.002
	Free cutting steels SUH22, SUH23, etc.	SH725	164 - 656	0.0004 - 0.002
M	Stainless steels 304SS, etc.	SH725	164 - 656	0.0004 - 0.002
N	Aluminum alloys 5056, 6061, etc.	SH725	492 - 656	0.0004 - 0.002
	Copper alloy C2600, C280C, etc.	SH725	328 - 656	0.0004 - 0.002
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262	0.0004 - 0.002
	Superalloys Inconel718, etc.	SH725	98 - 262	0.0004 - 0.002

PRACTICAL EXAMPLES

Workpiece type		Optical part	Motor component
Toolholder		JSXXR1010X09-S	JSXXR1010X09
Insert		New JXPS16R15F	New JXPS12R15F
Grade		SH725	SH725
Workpiece material		304SS	1045
Cutting conditions	Cutting speed: Vc (sfm)	246	230
	Feed : f (ipr)	0.0004	0.0012
	Groove width : CW (in)	0.059	0.059
	Machining	Parting-off	Parting-off
	Coolant	Wet	Wet
Results		<p>Excellent chip control</p> <p>Competitor DUOJUST CUT DuoJust-Cut's JXPS geometry has provided effective chip control, enabling superior surface integrity.</p>	<p>Fewer scraps</p> <p>Competitor DUOJUST CUT DuoJust-Cut's JXPS geometry has provided consistent chip forming, eliminating chip entangling on the workpiece when used with the sub-spindle. The result: part scraps have been significantly reduced.</p>
Workpiece type		Pneumatic part	Motor shaft
Toolholder		JSXXR1010X09	JSXXR1616X09
Insert		New JXPS12R15F	New JXPS20R20F
Grade		SH725	SH725
Workpiece material		304SS	1045
Cutting conditions	Cutting speed: Vc (sfm)	197	213
	Feed : f (ipr)	0.0004	0.0012
	Groove width : CW (in)	0.059	0.079
	Machining	Parting-off	Parting-off
	Coolant	Wet	Wet
Results		<p>Tool life 2 times!</p> <p>DUOJUST CUT Competitor</p> <p>DuoJust-Cut JXPS geometry has improved surface integrity by eliminating re-cutting of chips that caused scratches on the finished surface. Tool life was doubled.</p>	<p>Tool life 150%</p> <p>DUOJUST CUT Competitor</p> <p>DuoJust-Cut's JXPS geometry has provided superior surface integrity thanks to its high tool rigidity and good chip control, while enabling 150% longer tool life.</p>

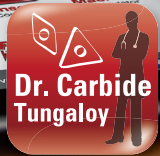
Check our site and our App to get more info!



Available on the App Store



GET IT ON Google play



Available on the App Store



GET IT ON Google play

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



Available on the
App Store



GET IT ON
Google play



Available on the
App Store



GET IT ON
Google play