



For more information

Face milling cutter

DOPENT

Tungaloy Report No. 372S2-US

Neutral inserts for non-ferrous applications



Neutral inserts for non-ferrous applications for both right and left hand uses

■ Applicable to a wide range of applications

Neutral inserts can be used for duplex milling of plates and blocks.

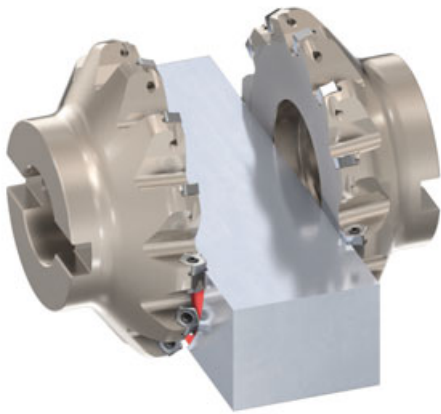


Image of duplex milling applications

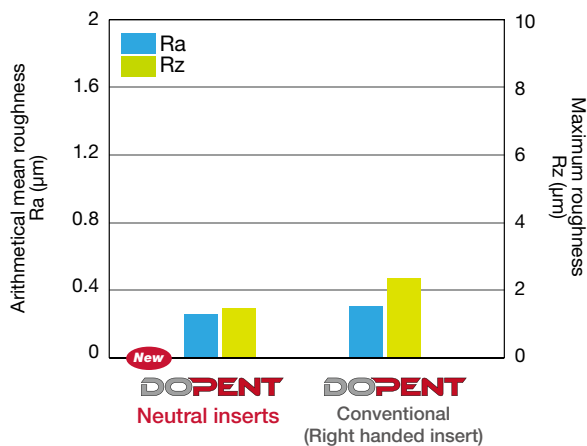


Neutral insert

PNCUGNFN-AJ**

■ Cutting performance

■ Surface quality



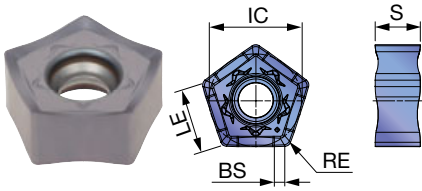
N

Cutter : TEN09R500U0150A10 (DC = ø5.000", CICT = 10)
 Insert : PNCU0905GNFN-AJ KS05F
 PNCU0905GNFR-AJ TH10 (Conventional)
 Workpiece material : A7075 / AlZn5.5MgCu
 Cutting speed : Vc = 820 sfm
 Feed per revolution : fz = 0.004 ipt
 Depth of cut : ap = 0.024"
 Width of cut : ae = 3.150"
 Coolant : Wet

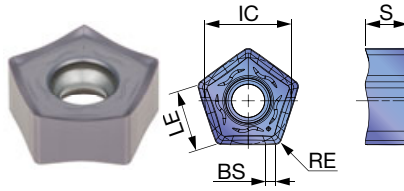
Neutral inserts provide excellent surface finishing quality that is equivalent to the conventional right hand inserts.

INSERT

PN*U0905GNEN-MJ (Neutral hand)

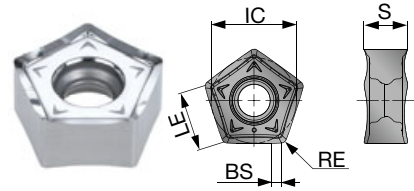


PNCU0905GNEN-ML (Neutral hand)

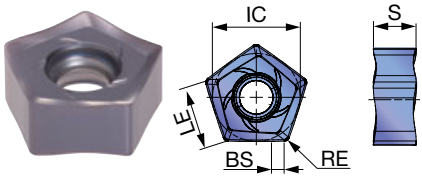


New

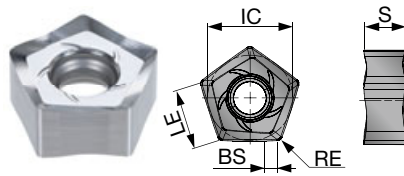
PNCU0905GNFN-AJ (Neutral hand)



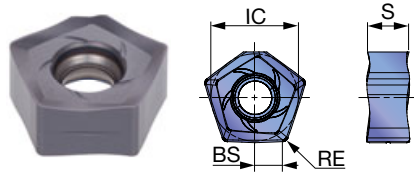
PNCU0905GNER-MJ (Right hand)



PNCU0905GNFR-AJ (Right hand)



PNCU0905GNER-W (Right hand)



P	Steel	★	☆	★	☆	★	☆	☆	★									
M	Stainless			★	☆	☆	☆	☆										
K	Cast iron		☆		★	☆	★											
N	Non-ferrous										★	☆						
S	Superalloys		★	☆	☆	★												
H	Hard materials		★															

★ : First choice
☆ : Second choice

Designation	RE	APMX	Coated							Cermets		Uncoated		LE	S	IC	BS
			AH3225	AH8015	AH3135	AH120	AH725	T1215	T3225	T3130	NS740	KS05F	TH10				
PNMU0905GNEN-MJ	0.031	0.252	●	●	●	●		●	●	●				0.350	0.236	0.480	0.055
PNCU0905GNEN-MJ	0.031	0.252	●	●	●	●		●	●	●				0.350	0.236	0.480	0.055
PNCU0905GNER-MJ	0.031	0.252							●	●				0.350	0.233	0.480	0.055
PNCU0905GNEN-ML	0.031	0.252	●	●	●									0.350	0.235	0.480	0.055
New PNCU0905GNFN-AJ	0.031	0.252									●			0.350	0.243	0.480	0.055
PNCU0905GNFR-AJ	0.031	0.252										●		0.350	0.246	0.480	0.055
PNCU0905GNER-W	0.031	0.079				●								-	0.233	0.480	0.150

● : New product
● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Selection criteria	Recommended grade	Chip-breaker	Cutting speed Vc (sfm)	Feed per tooth fz (ipt)
N	Aluminum alloys Si < 13%	First choice	KS05F	AJ	1640 - 4921	0.004 - 0.020
	Aluminum alloys Si ≥ 13%	First choice	KS05F	AJ	492 - 1640	0.004 - 0.020

- Remove excessive chips with an air blast to prevent chip jamming.
- Use water-soluble coolant to avoid built-up edge in case extreme welding occurs on cutting edges. (ex. aluminum machining).
- For operations with a varied depth of cut (ex. casting skin) and machining of workpiece materials with interrupted surface, the feed (fz) should be set to the lower recommended value shown in the above table.

- Cutting conditions may be limited depending on machine power, workpiece rigidity, and spindle output. When the cutting width, depth or overhang length is large, set Vc and fz to the lower recommended values and check the machine power and vibration.

Tungaloy-NTK America Inc.

United States

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

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

Mexico

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



tungaloy.com/us

follow us at:

facebook.com/TungaloyNTK

instagram.com/tungaloyntkamerika

linkedin.com/company/tungaloyntkamerika

tiktok.com/@tungaloyntkamerika

To see Tungaloy products in action visit:



www.youtube.com/tungaloycorporation

Distributed by:



Tungaloy APP & SNS

FIND US ON THE CLOUD!
machingcloud.com



AS9100 Certified
78006
2015.11.04
ISO 14001 Certified
EC97J1123
1997.11.26