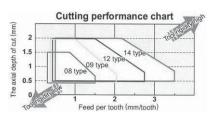# How to use *AJX* high feed radius cutter

1.Features

①The AJX can achieve high feed rates due to employing a double-phased straight main cutting edge with a minor edge.

Cutting performance chart

②Even when using a large overhang stable machining can be conducted.
③The AJX can be use as a radius milling cutter.
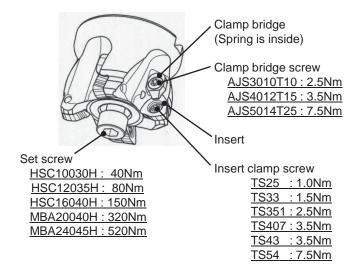④All items are standardized with through coolant holes.

2.How to locate the insert

①Prior to locating the insert, air blow the insert seat.
②Press firmly down on the insert when tightening the clamping screw.
（※To prevent the screw from seizing, use anti-seize cream, additionally ensure that the clamping forces are not exceeded.）
③Once the insert is firmly located, clamp the bridge down.
（※AJX06 and 08 type do not use clamp bridge.）
④To index the insert, the clamp bridge does not need to be completely removed.

3.How to attach the tool (arbor)

〔Shank type〕
①Before attaching to a milling holder , ensure that all locating faces have been cleaned and are free of any obstructions.
〔Arbor type〕
①Before attaching to an arbor, ensure that all locating faces have been cleaned and are free of any obstructions.
②Set the tool into the arbor, and locate using the set screw provided with the tool.
③The set screw provided with the AJX is specially designed for through coolant.

Clamp bridge (Spring is inside)

Clamp bridge screw
AJS3010T10 : 2.5Nm
AJS4012T15 : 3.5Nm
AJS5014T25 : 7.5Nm

Insert

Set screw
HSC10030H : 40Nm
HSC12035H : 80Nm
HSC16040H : 150Nm
MBA20040H : 320Nm
MBA24045H : 520Nm

Insert clamp screw
TS25　 : 1.0Nm
TS33　 : 1.5Nm
TS351 : 2.5Nm
TS407 : 3.5Nm
TS43　 : 3.5Nm
TS54　 : 7.5Nm

Please send up for a catalogue 〔TOOLS NEWS B028〕 or refer to PDF catalogue 〔B028〕 on the following Web site   http://www.mitsubishicarbide.com/mmc/jp/ about recommended cutting conditions.
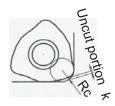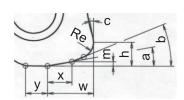
4. Various parts & torque settings

	Order number	Insert	Clamp screw	Clamp bridge	Clamp bridge screw	Spring	Wrench	Set screw
Shank type	AJX06R***※	JOM※06T2** ZZ※R-※	TS25	-	-	-	TKY08F	-
	AJX08R***※	JOM※0803** ZZ※R-※	TS33	-	-	-	TKY08D	
	AJX09R***	JDM※09T3** ZD※R-※	TS351	AMS3	AJS3010T10	ASS2	TKY10D	
	AJX12R302	JDM※1204** ZD※R-※	TS407	AMS4	AJS4012T15		TKY15D	
	AJX12R***		TS43					
	AJX14R***	JDM※1405** ZD※R-※	TS54	AMS5	AJS5014T25	ASS3	TKY25D	
Arbor type	AJX09-050	JDM※09T3** ZD※R-※	TS351	AMS3	AJS3010T10	ASS2	TKY10D	HSC10030H
	AJX09-052							
	AJX12-050	JDM※1204** ZD※R-※	TS43	AMS4	AJS4012T15		TKY15T	
	AJX12R050							
	AJX12-052							
	AJX12-063							
	AJX12R063							
	AJX12-066							
	AJX12-080							HSC12035H
	AJX12R080							
	AJX12-100							HSC16040H
	AJX12R100							
	AJX14-063	JDM※1405** ZD※R-※	TS54	AMS5	AJS5014T25	ASS3	TKY25T	HSC10030H
	AJX14R063							
	AJX14-066							
	AJX14-080							HSC12035H
	AJX14R080							
	AJX14-100							HSC16040H
	AJX14R100							
	AJX14-125							MBA20040H
	AJX14R125							
	AJX14-160							MBA24045H
	AJX14R160							

Please use original parts. If the other parts (screws, clamp bridges etc.) are used, the performance will be inferior and safety can not be assured.

5. Cutting edge geometry

When programming please consider the tool as a Rc cutter. However, note the amount of material uncut portion after machining is (k).

Insert		Rc (mm)	Uncut portion k (mm)	Cutting edge geometry （mm）							
Order number	Re			w	x	y	(h)	(m)	a	b	c
JOM※06T215ZZ※R-※	1.5	2.0	0.33	3.48	1.99	1.24	2.03	0.40	11.5°	23.5°	9°
JOM※080320ZZ※R-※	2.0	2.5	0.46	4.25	2.14	1.35	2.66	0.43	11.5°	23.5°	9°
JDM※09T320ZD※R-※	2.0	3.0	0.47	4.99	2.41	1.76	2.92	0.49	11.5°	23.5°	9°
JDM※120420ZD※R-※	2.0	3.0	0.63	5.81	3.07	2.47	2.98	0.54	10°	22°	9°
JDM※140520ZD※R-※	2.0	3.0	0.64	5.87	3.11	2.79	2.98	0.54	10°	22°	9°

〔Mar, 2011 revised〕

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