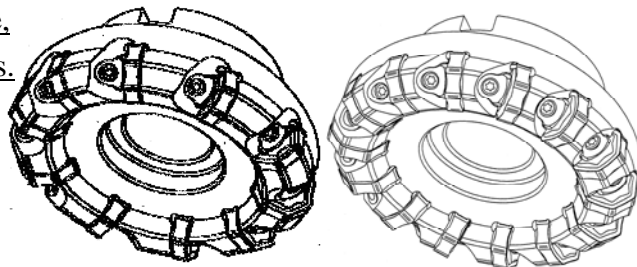





To use the cutter safely and not to decrease its performance,  
Please observe the following steps and each standard values.

## Instruction manual for AHX640W

### High efficient face milling cutter for cast iron



attached component

wedge	wedge screw	wrench
		
CWAHX640WN	LS0622T	TKY15T

Please use original parts.  
If other parts are used, the performance will be inferior and the safety can not be assured.

#### 1. Feature of the product

##### a. Double positive cutting edge

Although the insert is negative typed, we succeeded to make double positive cutting edge. It shows the excellent sharpness.

##### b. Heptagonal indexable insert

The insert is heptagonal so it has total of 14 corners that is very economical for using.

##### c. Extra fine pitch / Super extra fine pitch typed cutter

This cutter provide you high speed cutting by the number of tooth.

#### 2. Setting instruction for placing and removing the insert

##### a. Cleaning

Please clean up the insert and the insert pocket carefully with air blowing or a brush.

##### b. placing and removing

Please untighten the wedge until the position shown figure A, when you exchange the insert. Because the wedge has A.F.I. structure.

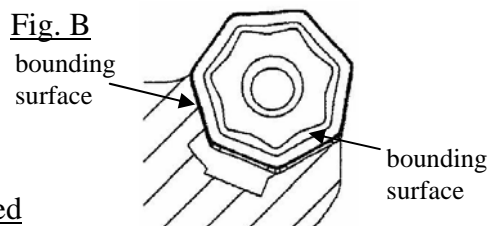
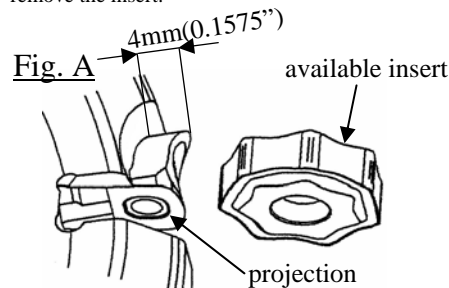
##### c. Clamping

Press firmly down the insert and tighten the screw by attached torques wrench.

● Prescribed tightening torque value 6.0N·m (4.44ft·lb)

● Please insert the torques wrench firmly to the bottom of the torques pitch.

Please untighten the wedge until the protrusion of more than 4mm(0.1575") when you place or remove the insert.



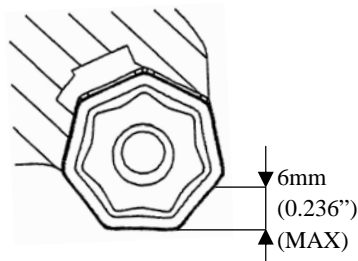
#### 3. Attaching the tool to an arbor

##### a. Cleaning

Before attaching the tool, ensure that all locating faces are cleaned and are free of any obstructions.

#### 4. Limited values

##### a. Maximum depth of cutting



##### b. Maximum allowable spindle speed

Cutter Dia. (mm)	φ 80 (φ 3.150")	φ 100 (φ 3.937")	φ 125 (φ 4.921")	φ 160 (φ 6.299")	φ 200 (φ 7.874")	φ 250 (φ 9.842")	φ 315 (φ 12.402")
Spindle speed (min <sup>-1</sup> )	8,900	7,800	6,600	5,300	4,100	2,900	1,700
Cutter Dia. (inch)	φ 3" (φ 76.2)	φ 4" (φ 101.6)	φ 5" (φ 127)	φ 6" (φ 152.4)	φ 8" (φ 203.2)	φ 10" (φ 254)	φ 12" (φ 304.8)
Spindle speed (min <sup>-1</sup> )	9200	7,700	6,500	5,500	4,000	2,800	1,900

#### 5.

Work material	tensile strength	Grade	Cutting speed (m/min)	Feed per tooth (mm/tooth)	
K Cast iron	≤200MPa	MC5020	300 (250-350)	0.3 (0.2-0.4)	
	250-350MPa		220 (150-300)	0.3 (0.2-0.4)	
	Ductile cast iron		≤450MPa	200 (150-250)	0.2 (0.1-0.3)
			500-800MPa	170 (150-200)	0.2 (0.1-0.3)

Work material	tensile strength	Grade	Cutting speed (SFM)	Feed per tooth (inch/tooth)	
K Cast Iron	≤200MPa	MC5020	980 (820-1150)	.012 (.008-.016)	
	250-350MPa		720 (490-980)	.012 (.008-.016)	
	Ductile cast Iron		≤450MPa	655 (490-820)	.008 (.004-.012)
			500-800MPa	575 (490-655)	.008 (.004-.012)

When you want to know the more detail of cutting condition, please order "Tools news" or access the following URL.

<http://www.mitsubishicarbide.com/mmc/en/product/catalog/catalog.html>