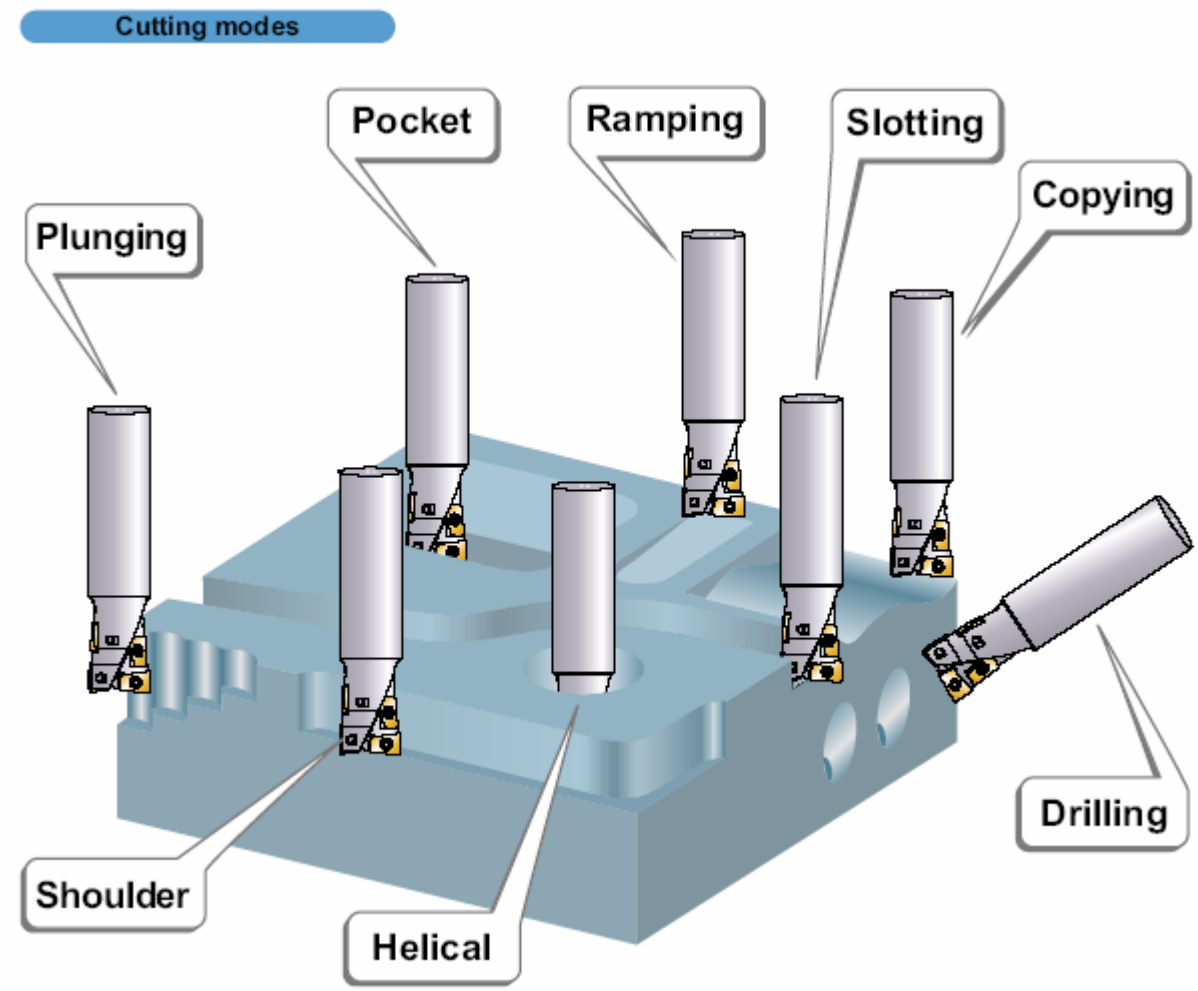
Mid Iowa Tools
Metro Tool & Abrasives
McNeal Tool Company

JULY, 2006

Mitsubishi's AQX is a tool that is multifunctional —
from drilling to end milling it does it all!

One insert geometry provides easy tool management. It is possible to use inserts twice by rotating them. The VP15TF Miracle Coating displays high weld resistance; therefore, it can be used for machining a wide range of materials such as plain steels, mild steels, low carbon steels, and stainless steels.

Please contact your Metro Tool & Abrasives sales engineer for a demonstration.
Phone 319-366-1617 Fax 319-366-8870

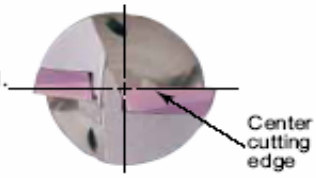


Features

Cutting edge diameter	5/8, 43/64, 3/4, 51/64, 1, 1-3/64, 1-1/4, 1-19/64, 1-1/2
Applications	Shoulder milling, slotting, drilling, helical, pocket, ramping, copying

Employs a center cutting edge

The **AQX** is designed with a center cutting edge which makes it possible to drill, without a prepared hole or endmilling with only one tool.



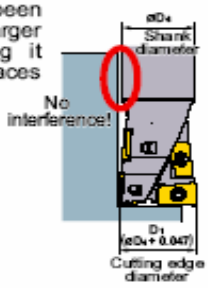
Lower cutting edge consists of 2 edges

The lower cutting edge consists of 2 edges, resulting in higher feed rates and cutting edge strength.

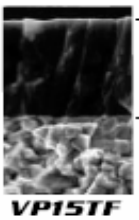
Undercut type standardized

The cutting edge diameter has been designed so that it is 0.047 inch larger than the shank diameter, making it possible to machine vertical faces without any interference.

Order number	D_1	D_4
AQXUR11○SA10L	0.672	0.625
AQXUR13○SA12L	0.797	0.750
AQXUR17○SA16L	1.047	1.000
AQXUR21○SA20L	1.297	1.250



MIRACLE coated insert



Miracle coated **VP15TF** displays high weld resistance therefore it can be used for machining a wide range of workpiece materials such as mild steels, carbon steels, alloy steel and stainless steels.

One insert geometry employed

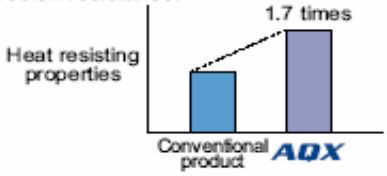
Tool management is made easier by employing one insert geometry. In addition, by rotating inserts it is possible to use the inserts twice.

Employs coolant holes

Coolant holes are designed into the body of the tool to improve cooling and chip disposal. This tool is available without coolant holes. Please select the type that suits your needs.

High heat resistant body & special surface treatment

The body of the tool is made from a special alloy steel that has high heat resistant properties. A special surface treatment is used to increase wear and corrosion resistance.



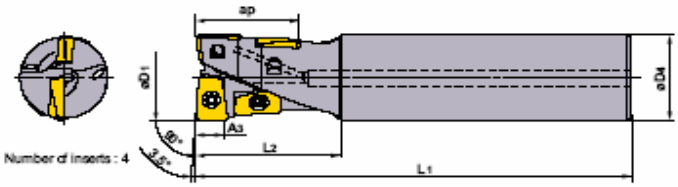
Wide insert line up

M2 breaker

- Economical molded inserts.
- Suitable for machining a wide range of workpiece materials under various cutting conditions.

G1 breaker

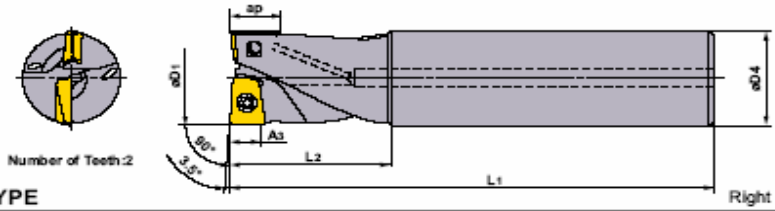
- High accuracy peripheral ground inserts.
- Large rake angle to provide high cutting edge sharpness.
- HTi10 insert is available with a polished rake face to prevent welding problems when machining aluminium alloys.



STANDARD EDGE TYPE

Right hand tool holder only.

Type	Order Number	Stock R	Coolant Hole	Dimensions (inch) D1	L1	D4	L2	A3*1	ap*2	Insert	Clamp Screw	Wrench
Standard	AQXUR124WA12S	+	Y	3/4	4-1/8	3/4	1-3/8	7/32	3/4	QOG/MT0934R-G1/M2	TS25	TKY08F
	AQXUR164WA16S	+	Y	1	4-7/8	1	1-5/8	9/32	1	QOG/MT1443R-G1/M2	TS32	TKY08D
	AQXUR204WA20S	+	Y	1-1/4	5-1/4	1-1/4	2	3/8	1-1/4	QOG/MT1651R-G1/M2	TS407	TKY15D
	AQXUR244WA20S	+	Y	1-1/2	5-5/8	1-1/4	2-3/8	7/16	1-1/2	QOG/MT1959R-G1/M2	TS5	TKY25D
Long	AQXUR124SA12L	+	Y	3/4	7-1/4	3/4	2-3/8	7/32	3/4	QOG/MT0934R-G1/M2	TS25	TKY08F
	AQXUR134SA12L	+	Y	51/64	7-1/4	3/4	1-3/8	7/32	3/4	QOG/MT0934R-G1/M2	TS25	TKY08F
	AQXUR164SA16L	+	Y	1	8-1/2	1	3	9/32	1	QOG/MT1443R-G1/M2	TS32	TKY08D
	AQXUR174SA16L	+	Y	1-3/64	8-1/2	1	1-5/8	9/32	1	QOG/MT1443R-G1/M2	TS32	TKY08D
	AQXUR204SA20L	+	Y	1-1/4	9	1-1/4	3-1/2	3/8	1-1/4	QOG/MT1651R-G1/M2	TS407	TKY15D
	AQXUR214SA20L	+	Y	1-19/64	9	1-1/4	2	3/8	1-1/4	QOG/MT1651R-G1/M2	TS407	TKY15D
	AQXUR244SA20L	+	Y	1-1/2	9-1/2	1-1/4	2-3/8	7/16	1-1/2	QOG/MT1959R-G1/M2	TS5	TKY25D



SHORT EDGE TYPE

Right hand tool holder only.

Type	Order Number	Stock R	Coolant Hole	Dimensions (inch) D1	L1	D4	L2	A3*1	ap*2	Insert	Clamp Screw	Wrench
Standard	AQXUR102WA10S	+	Y	5/8	3-11/16	5/8	1-1/8	3/16	9/32	QOG/MT0830R-G1/M2	TS2A	TKY06F
	AQXUR122WA12S	+	Y	3/4	4-1/8	3/4	1-3/8	7/32	11/32	QOG/MT0934R-G1/M2	TS25	TKY08D
	AQXUR162WA16S	+	Y	1	4-7/8	1	1-5/8	9/32	15/32	QOG/MT1443R-G1/M2	TS32	TKY08D
	AQXUR202WA20S	+	Y	1-1/4	5-1/4	1-1/4	2	3/8	9/16	QOG/MT1651R-G1/M2	TS407	TKY15D
	*AQXUR242WA20S	+	Y	1-1/2	5-5/8	1-1/4	2-3/8	7/16	11/16	QOG/MT1959R-G1/M2	TS55	TKY25D
Long	AQXUR102SA10L	+	Y	5/8	6-7/8	5/8	2	3/16	9/32	QOG/MT0830R-G1/M2	TS2A	TKY06F
	AQXUR112SA10L	+	Y	43/64	6-7/8	5/8	1-1/8	3/16	9/32	QOG/MT0830R-G1/M2	TS2A	TKY06F
	AQXUR122SA12L	+	Y	3/4	7-1/4	3/4	2-3/8	7/32	11/32	QOG/MT0934R-G1/M2	TS25	TKY08F
	AQXUR132SA12L	+	Y	51/64	7-1/4	3/4	1-3/8	7/32	11/32	QOG/MT0934R-G1/M2	TS25	TKY08F
	AQXUR162SA16L	+	Y	1	8-1/2	1	3	9/32	15/32	QOG/MT1443R-G1/M2	TS32	TKY08D
	AQXUR172SA16L	+	Y	1-3/64	8-1/2	1	1-5/8	9/32	15/32	QOG/MT1443R-G1/M2	TS32	TKY08D
	AQXUR202SA20L	+	Y	1-1/4	9	1-1/4	3-1/2	3/8	9/16	QOG/MT1651R-G1/M2	TS407	TKY15D
	AQXUR212SA20L	+	Y	1-19/64	9	1-1/4	2	3/8	9/16	QOG/MT1651R-G1/M2	TS407	TKY15D
	AQXUR242SA20L	+	Y	1-1/2	9-1/2	1-1/4	2-3/8	7/16	11/16	QOG/MT1959R-G1/M2	TS55	TKY15D

(Note 1) *1 As represents the depth of cut when the cutting edge consists of 2 edges. *2 ap: Maximum depth of cut.
(Note 2) When exceeding As depth of cut, reduce feed rates by 50%.

+ : Inventory maintained. □ : Not manufactured.