

Breakers for Aluminum Alloy Turning

AZ Breaker



Superior chip control

- A unique corrugated chipbreaker geometry optimized for aluminum machining ensures precise chip flow control.

Excellent surface finishes

- High rake angle significantly reduces cutting resistance.
- Mirror finish on the top face dramatically reduces built-up edge.

Burr prevention


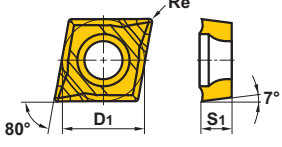

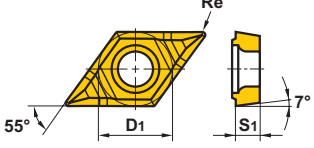

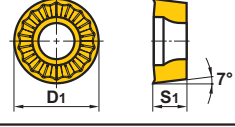

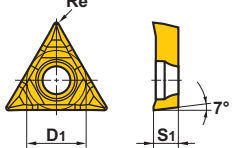

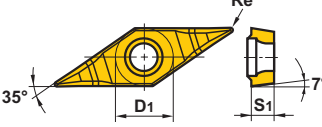
- Unique curved cutting edge gives increased sharpness.
- G-class tolerance inserts for accurate performance.

For different types of aluminum alloys

- Versatile cemented carbide (HTi10) is used for the insert substrate to cover a wide range of materials such as pure aluminum, aluminum alloys and non-metallic materials.

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Inserts

Shape	Order Number	(ISO) Number	Stock	Dimensions (inch)			Geometry
			HTi10	D1	S1	Re	
	CCGT21.50.5AZ	CCGT060202-AZ	●	.250	.094	.008	
	21.51AZ	060204-AZ	●	.250	.094	.016	
	32.50.5AZ	09T302-AZ	●	.375	.156	.008	
	32.51AZ	09T304-AZ	●	.375	.156	.016	
	32.52AZ	09T308-AZ	●	.375	.156	.031	
	430.5AZ	120402-AZ	●	.500	.188	.008	
	431AZ	120404-AZ	●	.500	.188	.016	
432AZ	120408-AZ	●	.500	.188	.031		
	DCGT21.50.5AZ	DCGT070202-AZ	●	.250	.094	.008	
	21.51AZ	070204-AZ	●	.250	.094	.016	
	32.50.5AZ	11T302-AZ	●	.375	.156	.008	
	32.51AZ	11T304-AZ	●	.375	.156	.016	
	32.52AZ	11T308-AZ	●	.375	.156	.031	
	RCGT0803M0-AZ	RCGT0803M0-AZ	●	.315	.125	—	
	10T3M0-AZ	10T3M0-AZ	●	.394	.156	—	
	TCGT21.50.5AZ	TCGT110202-AZ	●	.250	.094	.008	
	21.51AZ	110204-AZ	●	.250	.094	.016	
	21.52AZ	110208-AZ	●	.250	.094	.031	
	32.50.5AZ	16T302-AZ	●	.375	.156	.008	
	32.51AZ	16T304-AZ	●	.375	.156	.016	
	32.52AZ	16T308-AZ	●	.375	.156	.031	
	VCGT331AZ	VCGT160404-AZ	●	.375	.188	.016	
	332AZ	160408-AZ	●	.375	.188	.031	
	333AZ	160412-AZ	●	.375	.188	.047	
	43.57.5AZ	220530-AZ	★	.500	.219	.118	

● : Inventory maintained. ★ : Inventory maintained in Japan.

Recommended Cutting Conditions

Work Material		Hardness	Grade	Cutting Speed (SFM)	
N	Pure Aluminum	20–50HB	HTi10	1640–3935	
	Aluminum Alloy	Forged Products	Non Heat Treated	HTi10	1640–3280
			Heat Treated	HTi10	985–2295
	Cast Products	Si<12%	HTi10	655–1640	
		Si≥12%	HTi10	490–1310	
Copper Alloy		90–110HB	HTi10	655–1640	

For Your Safety

● Don't handle inserts and chips without gloves. ● Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage. ● Please use safety covers and wear safety glasses. ● When using compounded cutting oils, please take fire precautions. ● When attaching inserts or spare parts, please use only the correct wrench or driver.

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(Tools specifications subject to change without notice.)