



Insert Shapes

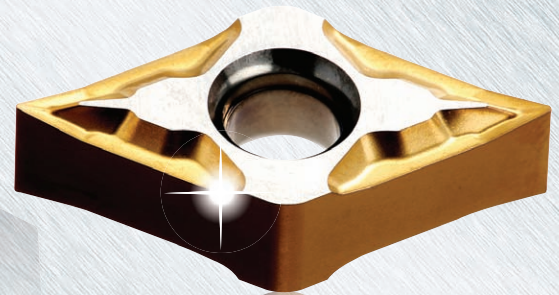
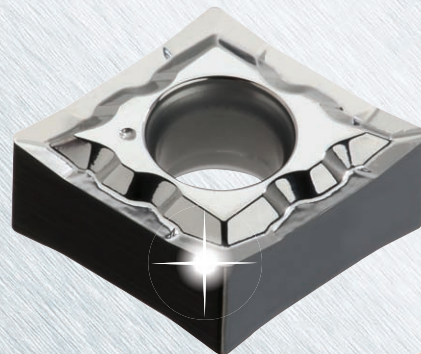
- CNGG
- DNGG

Corner Radii

- .004"
- .008"
- .016"
- .031"

Grades

- TT5080 (Gold-Rush post-coat) for high-temp alloys
- K10 (polished) for non-ferrous materials



Peripheral Ground ML Chipbreaker Inserts

Ingersoll is pleased to expand the successful Gold-Rhino™ product line by introducing double-sided, peripheral ground inserts. The combination of up-sharp, positive geometry with a ground periphery provides a highly accurate insert with a very sharp cutting edge, making it ideal for machining high-temp alloys and non-ferrous materials.


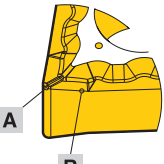
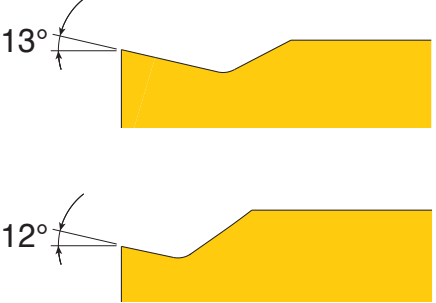
The ML geometry generates less cutting force, minimizes built-up edge during machining and provides an excellent surface finish. Available in 80 degree CNGG and 55 degree DNGG shapes, and with nose radii as small as .004", these inserts are offered in Gold-Rush PVD-coated grade TT5080 and uncoated and polished grade K10.

FEATURES

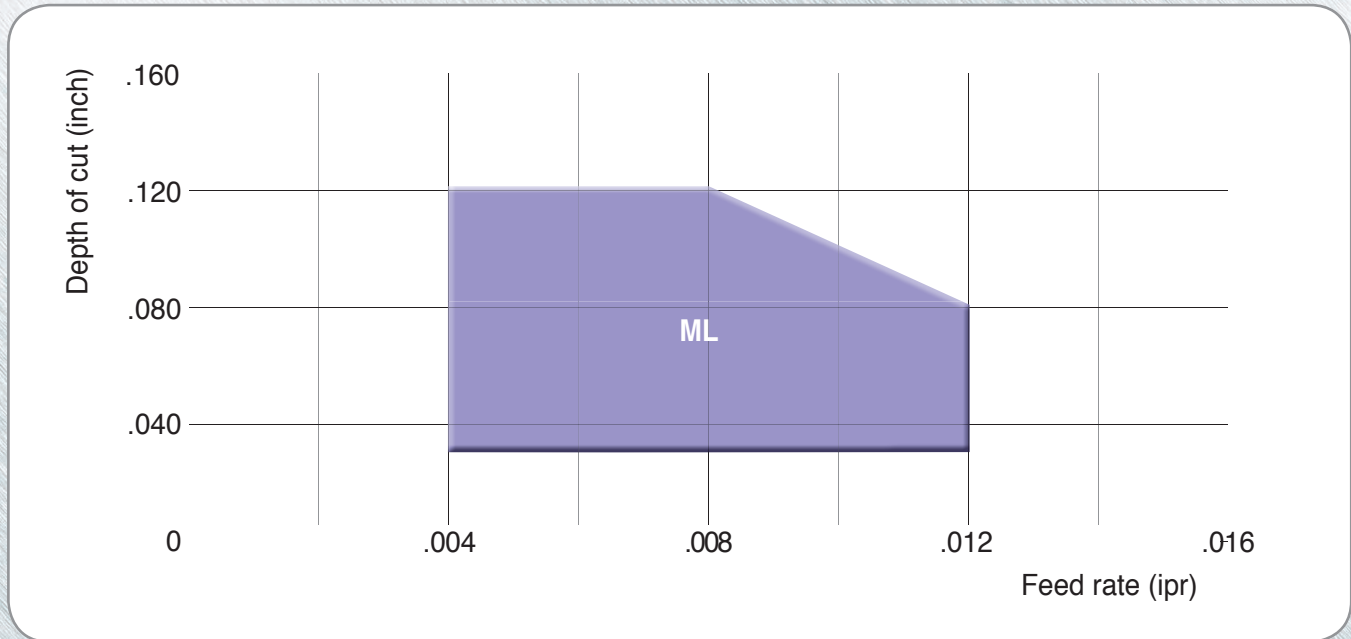
- Double-sided
- Peripheral ground
- High-positive ML chipbreaker with sharp cutting edge
- Fully compatible with all corresponding Gold-Rhino holders and boring bars



Edge geometry of ML chip breaker

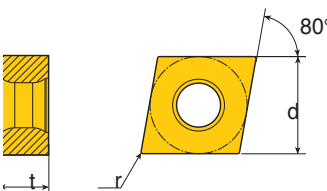
	Chip breaker	Edge geometry	
CNGG	 <p>ML</p>	 <p>A</p> <p>B</p>	 <p>13°</p> <p>A</p> <p>12°</p> <p>B</p>


Chipbreaker range



- Insert: CNGG 331 (090404) ML
- Cutting speed (V): 650 sfm
- Material: 0.45% Carbon Steel (HB200~230)

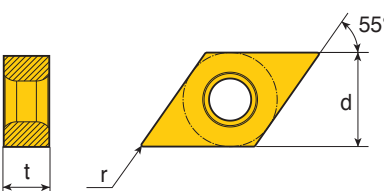
CNGG Negative 80° rhombic inserts


	Size	Dimension (in)		
		d	t	r
	330	.375	.187	.004
	330.5	.375	.187	.008
	331	.375	.187	.016
	332	.375	.187	.031

Insert	Designation	Recommended machining conditions		PVD coated	Uncoated
		feed (ipr)	ap (in)	TT5080	K10
	CNGG 330 (090401) ML	.001-.004	.004-.040	●	●
	330.5 (090402) ML	.002-.006	.008-.047	●	●
	331 (090404) ML	.004-.012	.031-.118	●	●
	332 (090408) ML	.005-.014	.040-.118	●	●

● : Standard item

DNGG Negative 55° rhombic inserts

	Size	Dimension (mm)		
		d	t	r
	3.53.50	.437	.219	.004
	3.53.50.5	.437	.219	.008
	3.53.51	.437	.219	.016
	3.53.52	.437	.219	.031

Insert	Designation	Recommended machining conditions		PVD coated	Uncoated
		feed (ipr)	ap (in)	TT5080	K10
	DNGG 3.53.50 (130501) ML	.001-.004	.004-.040	●	●
	3.53.50.5 (130502) ML	.002-.006	.008-.047	●	●
	3.53.51 (130504) ML	.004-.012	.031-.118	●	●
	3.53.52 (130508) ML	.005-.014	.040-.118	●	●

● : Standard item