

External grooving and parting

DGS type (2 corners)
SGS type (1 corner)

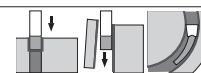
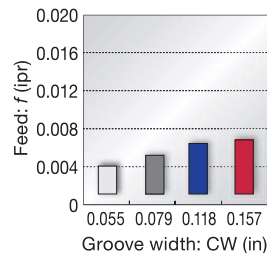


G124, G127 page

For Swiss lathes

Unique-designed edge and chipbreaker
Handed insert available
CW = 0.055" - 0.157"

■ Standard feed



DGM type (2 corners)
SGM type (1 corner)

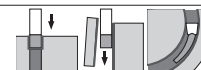
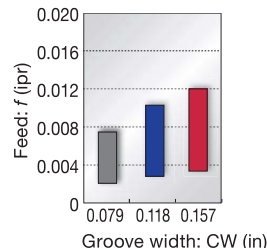


G125, G126 page

High fracture resistance

Smooth chip evacuation
Well-designed edge with high strength
Handed insert available
CW = 0.079" - 0.157"

■ Standard feed



DGL type (2 corners)

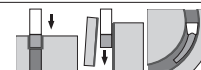
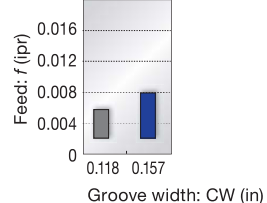


G129 page

1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often gives difficulties in chip control
CW = 0.118" - 0.157"

■ Standard feed



DGE type (2 corners)

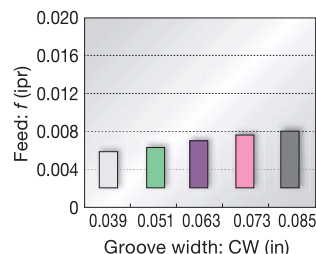


G128 page

For high accurate and shallow groove

Excellent chip control
CW = 0.039" - 0.085"

■ Standard feed



DGG type (2 corners)

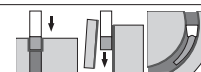
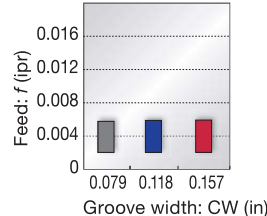


G128 page

For non-ferrous materials and titanium

Chipbreaker with low cutting force
Sharp cutting edge that prevents vibration and delivers fine surface finish
CW = 0.079" - 0.157"

■ Standard feed



External grooving of hardened steel

**SGN-CBN type
(1 corner)**

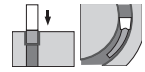
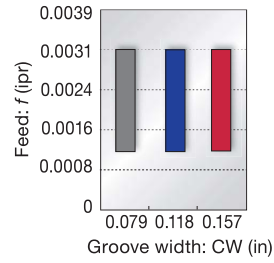


G129 page

For hardened steel cutting

Optimum cutting edge shape for grooving of hardened steels
High tolerance width for finishing
CW = 0.079" - 0.157"
(CW = ±0.001")

■ Standard feed



Grade	A
Insert	B
Ext. Toolholder	C
Int. Toolholder	D
Threading	E
Grooving	F
Miniature Tool	G
Milling Cutter	H
Endmill	I
Drilling Tool	J
Tooling System	K
User's Guide	L
Index	M

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Chipbreaker	Priority	Grade	Cutting speed Vc (sfm)
P	Steel 1045, 4135, etc.	< 300 HB	DGS	First choice	AH7025, AH725	164 - 591
		< 300 HB	DGM	Priority for wear resistance	T9225	262 - 984
		< 300 HB	DGM	Priority for wear resistance	T9125	262 - 656
		< 300 HB	DGS	Priority for fracture resistance	GH130	164 - 394
		< 300 HB	DGS	Priority for surface finish	NS9530	262 - 722
		< 300 HB	DGL	For mild steel Chip control	AH7025	164 - 591
M	Stainless steel 304SS, 316SS, 17-4 PH, etc.	< 200 HB	DGS	First choice	GH130	164 - 394
		< 200 HB	DGM	Priority for impact resistance	AH7025, AH725	164 - 394
K	Gray cast iron No.250B, No.300B, etc.	-	DGM	First choice	GH130	164 - 591
	Ductile cast iron 60-40-18, 60-55-06, etc.	-	DGM	First choice	GH130	164 - 394
N	Aluminum alloys Si < 12%	-	DGG	First choice	KS05F	328 - 1640
S	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	DGM	First choice	AH905	66 - 262
		< HRC 40	DGS	Priority for fracture resistance	AH7025, AH725	66 - 262
H	Hardened steel 4137, etc.	> HRC 50	DGN	First choice	BX360	262 - 492

See page **G122 - G123** for feed: f (ipr).



Reference pages: Toolholders → **G121**