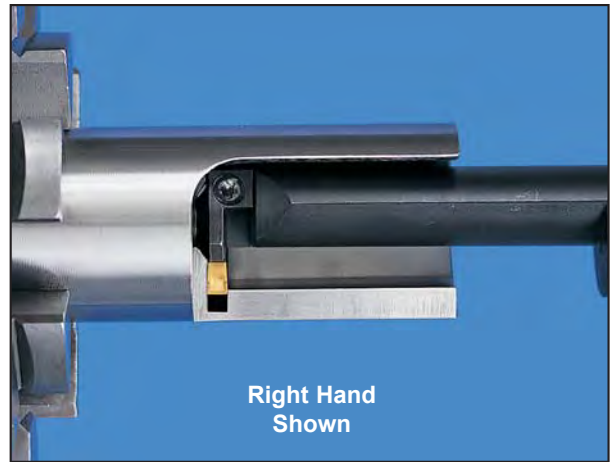


## PRODUCT INFORMATION

- Internal grooving for diameters 1" and larger.
- 3/4" and 1" shank diameters.
- Right hand orientation standard.
- Short neck lengths for greater rigidity; long neck lengths for greater reach.
- Elliptical neck for increased strength and rigidity.
- Modifications can be provided on any of our tooling. Please contact us with your application requirements.



Right Hand Shown

## INSERT STYLES

**INSERT SELECTIONS**  
SEE PAGE 6-1

**CORNER RADIUS**  
(TOP VIEW)

**SHARP CORNER**  
(TOP VIEW)



## PRODUCT DEMONSTRATION

## SPEEDS AND FEEDS

## APPLICATION REFERENCE

## TROUBLESHOOTING

**TECHNICAL SECTIONS**



[www.thinbit.com/qr1-7](http://www.thinbit.com/qr1-7)

PG 9-10

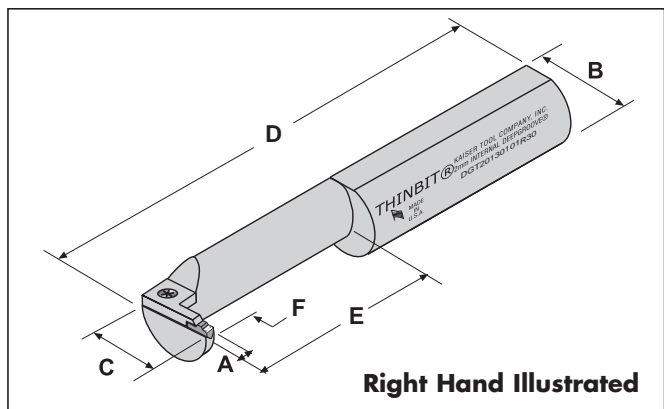
PG 9-4

PG 9-7

## KAISER TOOL COMPANY, INC.

Phone: 888-THINBIT (888-844-6248) or (260) 484-3620 • Fax: 888-THINFAX (888-844-6329) or (260) 482-1881  
www.thinbit.com • General E-mail: [thinbit@kaisertool.com](mailto:thinbit@kaisertool.com) • Orders: [orders@thinbit.com](mailto:orders@thinbit.com) • Quotes: [quotes@thinbit.com](mailto:quotes@thinbit.com)

# I.D. GROOVING TOOLS



## ORDERING INSTRUCTIONS

Select the **ORDER CODE** in the table below that represents your selection of tool specifications.

**EXAMPLE:**

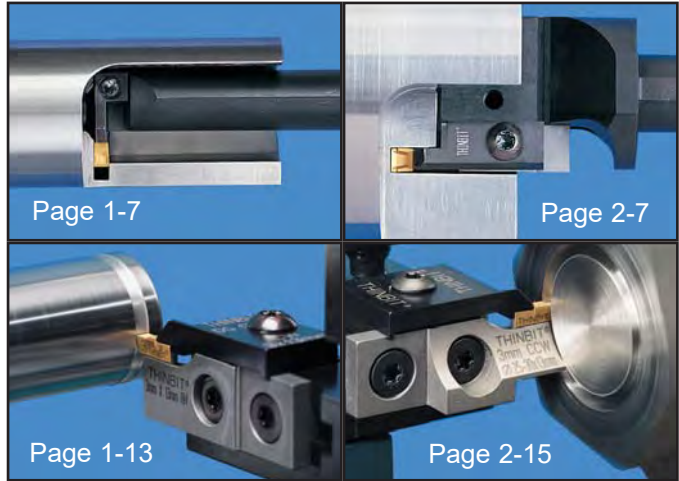
The **ORDER CODE** for a 2mm insert width toolholder package with a depth of cut of .500", a 1" shank and a 3" neck is: **DGPZ2013010130**

SPECIFICATIONS					ORDER CODE						INFO.					
Minimum Bore	Insert Width	Depth of Cut	Neck Length	Shank Diameter	Toolholder Package Includes Shank, Clamp and Hardware	Inserts	Replacement Parts				Overall Length					
'C'	'A'	'F'	'E'	'B'	Right Hand	Use Inserts Beginning With	Shank	Clamp	Screw	Wrench	'D'					
1"	2mm (.078")	.393"	1.5"	3/4"	DGPZ2010013415	'DGI2' (Page 6-2)	DGT20100134R15	DGC82013	S4552	W3200	5.5"					
				1"	DGPZ2010010115		DGT20100101R15									
			3"	3/4"	DGPZ2010013430		DGT20100134R30					7"				
		1"	DGPZ2010010130	DGT20100101R30												
		.500"	1.5"	3/4"	DGPZ2013013415		DGT20130134R15					5.5"				
				1"	DGPZ2013010115		DGT20130101R15									
	3"		3/4"	DGPZ2013013430	DGT20130134R30		7"									
	1"	DGPZ2013010130	DGT20130101R30													
	1"	3mm (.118")	.393"	1.5"	3/4"		DGPZ3010013415				'DGM13' (Page 6-2)	DGT30100134R15	DGC83013	S4552	W3200	5.5"
					1"		DGPZ3010010115					DGT30100101R15				
				3"	3/4"		DGPZ3010013430					DGT30100134R30				
			1"	DGPZ3010010130	DGT30100101R30											
.500"			1.5"	3/4"	DGPZ3013013415	DGT30130134R15	5.5"									
				1"	DGPZ3013010115	DGT30130101R15										
		3"	3/4"	DGPZ3013013430	DGT30130134R30	7"										
1"		DGPZ3013010130	DGT30130101R30													
1"		4mm (.157")	.393"	1.5"	3/4"	DGPZ4010013415	'DGM14' (Page 6-2)	DGT40100134R15	DGC84013	S4552		W3200				5.5"
					1"	DGPZ4010010115		DGT40100101R15								
				3"	3/4"	DGPZ4010013430		DGT40100134R30								
			1"	DGPZ4010010130	DGT40100101R30											
	.500"		1.5"	3/4"	DGPZ4013013415	DGT40130134R15		5.5"								
				1"	DGPZ4013010115	DGT40130101R15										
		3"	3/4"	DGPZ4013013430	DGT40130134R30	7"										
	1"	DGPZ4013010130	DGT40130101R30													

### KAISER TOOL COMPANY, INC.

**PRODUCT INFORMATION**

- 2, 3, 4, 5 and 6mm insert widths.
- Recessed pocket and raised edge for chip control.
- Internal grooving, external grooving, face grooving and parting.
- Sub-micron grain **DURA-MAX® 2000** carbide.
- Inserts available with TiN, TiAlN, TiCN and Diamond coating.



**INSERT GEOMETRY**

<p><b>SHARP CORNER (TOP VIEW)</b></p>	<p><b>CORNER RADIUS (TOP VIEW)</b></p>	<p><b>FULL RADIUS (TOP VIEW)</b></p>	<p><b>60° THREADING (TOP VIEW)</b></p>
<p><b>7° LEAD ANGLE (TOP VIEW)</b></p> <p>Right Hand    Left Hand</p>	<p><b>15°(+) TOP RAKE (SIDE VIEW)</b></p>	<p><b>15° (-) TOP RAKE (SIDE VIEW)</b></p>	<p><b>90° CHAMFERING (TOP VIEW)</b></p>

TECHNICAL SECTIONS	PRODUCT DEMONSTRATION	SPEEDS AND FEEDS	APPLICATION REFERENCE	TROUBLESHOOTING
	<p><a href="http://www.thinbit.com/qr6-1">www.thinbit.com/qr6-1</a></p>	PGS 9-10, 9-12, 9-18 & 9-20	PGS 9-3 & 9-4	PG 9-7

## ORDERING INSTRUCTIONS

Select the **ORDER CODE** in the table at right that represents your selection of insert geometry and coating. Please pay special attention to the '**Compatibility**' column to match the insert with the correct tooling.

The **ORDER CODE** for a 3mm wide, '**DGI**' Style insert with .015" radius and TiN coating is '**DGI 30BC**'

### KAISER TOOL COMPANY, INC.

# 'DGI' & 'DGMI' STYLE OD/ID AND FACE GROOVING INSERTS

SPECIFICATIONS			ORDER CODE						
Insert Width +.005"/ -.000"	Compatibility	Insert Geometry	DURA-MAX® 2000 Carbide See Page 9-10 or 9-12 for Speeds and Feeds						
			Uncoated	TiN	TiCN Non-stock	TiAlN	Diamond Non-stock		
.078" (2mm)	Use in all 2mm 'DGP'	Sharp Corner	DGI20BU1	DGI20BC1	DGI20BD1	DGI20BE1	DGI20BF1		
		.004" (.10mm) radius	DGI20BU2010	DGI20BC2010	DGI20BD2010	DGI20BE2010	DGI20BF2010		
		.008" (.20mm) radius	DGI20BU2020	DGI20BC2020	DGI20BD2020	DGI20BE2020	DGI20BF2020		
		.010" (.25mm) radius	DGI20BU2025	DGI20BC2025	DGI20BD2025	DGI20BE2025	DGI20BF2025		
		.015" (.38mm) radius	DGI20BU	DGI20BC	DGI20BD	DGI20BE	DGI20BF		
		.020" (.50mm) radius	DGI20BU2050	DGI20BC2050	DGI20BD2050	DGI20BE2050	DGI20BF2050		
		.030" (.75mm) radius	DGI20BU2075	DGI20BC2075	DGI20BD2075	DGI20BE2075	DGI20BF2075		
		Full Radius	DGI20BU4	DGI20BC4	DGI20BD4	DGI20BE4	DGI20BF4		
		15° (+) Top Rake	DGI20BU7P	DGI20BC7P	DGI20BD7P	DGI20BE7P	DGI20BF7P		
		15° (-) Top Rake	DGI20BU7N	DGI20BC7N	DGI20BD7N	DGI20BE7N	DGI20BF7N		
		7° R.H. Lead Angle	DGI20BU3R	DGI20BC3R	DGI20BD3R	DGI20BE3R	DGI20BF3R		
		7° L.H. Lead Angle	DGI20BU3L	DGI20BC3L	DGI20BD3L	DGI20BE3L	DGI20BF3L		
		.118" (3mm)	Use ONLY with 3mm 'DGPZ' ID tools and face grooving heads with major diameter codes '02' and '25'	Sharp Corner	DGMI30BU1	DGMI30BC1	DGMI30BD1	DGMI30BE1	DGMI30BF1
				.015" (.38mm) radius	DGMI30BU	DGMI30BC	DGMI30BD	DGMI30BE	DGMI30BF
Use in 3mm 'DGP' for OD grooving/parting and major diameters greater than .984"	Sharp Corner		DGI30BU1	DGI30BC1	DGI30BD1	DGI30BE1	DGI30BF1		
	.004" (.10mm) radius		DGI30BU2010	DGI30BC2010	DGI30BD2010	DGI30BE2010	DGI30BF2010		
	.008" (.20mm) radius		DGI30BU2020	DGI30BC2020	DGI30BD2020	DGI30BE2020	DGI30BF2020		
	.010" (.25mm) radius		DGI30BU2025	DGI30BC2025	DGI30BD2025	DGI30BE2025	DGI30BF2025		
	.015" (.38mm) radius		DGI30BU	DGI30BC	DGI30BD	DGI30BE	DGI30BF		
	.020" (.50mm) radius		DGI30BU2050	DGI30BC2050	DGI30BD2050	DGI30BE2050	DGI30BF2050		
	.030" (.75mm) radius		DGI30BU2075	DGI30BC2075	DGI30BD2075	DGI30BE2075	DGI30BF2075		
	.040" (1.0mm) radius		DGI30BU2100	DGI30BC2100	DGI30BD2100	DGI30BE2100	DGI30BF2100		
	Full Radius		DGI30BU4	DGI30BC4	DGI30BD4	DGI30BE4	DGI30BF4		
	15° (+) Top Rake		DGI30BU7P	DGI30BC7P	DGI30BD7P	DGI30BE7P	DGI30BF7P		
	15° (-) Top Rake		DGI30BU7N	DGI30BC7N	DGI30BD7N	DGI30BE7N	DGI30BF7N		
	7° R.H. Lead Angle		DGI30BU3R	DGI30BC3R	DGI30BD3R	DGI30BE3R	DGI30BF3R		
	7° L.H. Lead Angle		DGI30BU3L	DGI30BC3L	DGI30BD3L	DGI30BE3L	DGI30BF3L		
	60° Threading		DGI30BU5	DGI30BC5	DGI30BD5	DGI30BE5	DGI30BF5		
	90° Chamfering		DGI30BU6	DGI30BC6	DGI30BD6	DGI30BE6	DGI30BF6		
	.157" (4mm)		Use ONLY with 4mm 'DGPZ' ID tools and face grooving heads with major diameter codes '02' and '25'	Sharp Corner	DGMI40BU1	DGMI40BC1	DGMI40BD1	DGMI40BE1	DGMI40BF1
.015" (.38mm) radius		DGMI40BU		DGMI40BC	DGMI40BD	DGMI40BE	DGMI40BF		
Use in 4mm 'DGP' for OD grooving/parting and major diameters greater than .984"		Sharp Corner	DGI40BU1	DGI40BC1	DGI40BD1	DGI40BE1	DGI40BF1		
		.004" (.10mm) radius	DGI40BU2010	DGI40BC2010	DGI40BD2010	DGI40BE2010	DGI40BF2010		
		.008" (.20mm) radius	DGI40BU2020	DGI40BC2020	DGI40BD2020	DGI40BE2020	DGI40BF2020		
		.010" (.25mm) radius	DGI40BU2025	DGI40BC2025	DGI40BD2025	DGI40BE2025	DGI40BF2025		
		.015" (.38mm) radius	DGI40BU	DGI40BC	DGI40BD	DGI40BE	DGI40BF		
		.020" (.50mm) radius	DGI40BU2050	DGI40BC2050	DGI40BD2050	DGI40BE2050	DGI40BF2050		
		.030" (.75mm) radius	DGI40BU2075	DGI40BC2075	DGI40BD2075	DGI40BE2075	DGI40BF2075		
		.040" (1.0mm) radius	DGI40BU2100	DGI40BC2100	DGI40BD2100	DGI40BE2100	DGI40BF2100		
		Full Radius	DGI40BU4	DGI40BC4	DGI40BD4	DGI40BE4	DGI40BF4		
		15° (+) Top Rake	DGI40BU7P	DGI40BC7P	DGI40BD7P	DGI40BE7P	DGI40BF7P		
		15° (-) Top Rake	DGI40BU7N	DGI40BC7N	DGI40BD7N	DGI40BE7N	DGI40BF7N		
		7° R.H. Lead Angle	DGI40BU3R	DGI40BC3R	DGI40BD3R	DGI40BE3R	DGI40BF3R		
		7° L.H. Lead Angle	DGI40BU3L	DGI40BC3L	DGI40BD3L	DGI40BE3L	DGI40BF3L		
		.197" (5mm)	Use in all 5mm 'DGP'	Sharp Corner	DGI50BU1	DGI50BC1	DGI50BD1	DGI50BE1	DGI50BF1
				.004" (.10mm) radius	DGI50BU2010	DGI50BC2010	DGI50BD2010	DGI50BE2010	DGI50BF2010
				.008" (.20mm) radius	DGI50BU2020	DGI50BC2020	DGI50BD2020	DGI50BE2020	DGI50BF2020
.010" (.25mm) radius	DGI50BU2025			DGI50BC2025	DGI50BD2025	DGI50BE2025	DGI50BF2025		
.015" (.38mm) radius	DGI50BU			DGI50BC	DGI50BD	DGI50BE	DGI50BF		
.020" (.50mm) radius	DGI50BU2050			DGI50BC2050	DGI50BD2050	DGI50BE2050	DGI50BF2050		
.030" (.75mm) radius	DGI50BU2075			DGI50BC2075	DGI50BD2075	DGI50BE2075	DGI50BF2075		
.040" (1.0mm) radius	DGI50BU2100			DGI50BC2100	DGI50BD2100	DGI50BE2100	DGI50BF2100		
Full Radius	DGI50BU4			DGI50BC4	DGI50BD4	DGI50BE4	DGI50BF4		
15° (+) Top Rake	DGI50BU7P			DGI50BC7P	DGI50BD7P	DGI50BE7P	DGI50BF7P		
15° (-) Top Rake	DGI50BU7N			DGI50BC7N	DGI50BD7N	DGI50BE7N	DGI50BF7N		
7° R.H. Lead Angle	DGI50BU3R			DGI50BC3R	DGI50BD3R	DGI50BE3R	DGI50BF3R		
7° L.H. Lead Angle	DGI50BU3L			DGI50BC3L	DGI50BD3L	DGI50BE3L	DGI50BF3L		
.236" (6mm)	Use in all 6mm 'DGP'			Sharp Corner	DGI60BU1	DGI60BC1	DGI60BD1	DGI60BE1	DGI60BF1
		.004" (.10mm) radius	DGI60BU2010	DGI60BC2010	DGI60BD2010	DGI60BE2010	DGI60BF2010		
		.008" (.20mm) radius	DGI60BU2020	DGI60BC2020	DGI60BD2020	DGI60BE2020	DGI60BF2020		
		.010" (.25mm) radius	DGI60BU2025	DGI60BC2025	DGI60BD2025	DGI60BE2025	DGI60BF2025		
		.015" (.38mm) radius	DGI60BU	DGI60BC	DGI60BD	DGI60BE	DGI60BF		
		.020" (.50mm) radius	DGI60BU2050	DGI60BC2050	DGI60BD2050	DGI60BE2050	DGI60BF2050		
		.030" (.75mm) radius	DGI60BU2075	DGI60BC2075	DGI60BD2075	DGI60BE2075	DGI60BF2075		
		.040" (1.0mm) radius	DGI60BU2100	DGI60BC2100	DGI60BD2100	DGI60BE2100	DGI60BF2100		
		Full Radius	DGI60BU4	DGI60BC4	DGI60BD4	DGI60BE4	DGI60BF4		
		15° (+) Top Rake	DGI60BU7P	DGI60BC7P	DGI60BD7P	DGI60BE7P	DGI60BF7P		
		15° (-) Top Rake	DGI60BU7N	DGI60BC7N	DGI60BD7N	DGI60BE7N	DGI60BF7N		
		7° R.H. Lead Angle	DGI60BU3R	DGI60BC3R	DGI60BD3R	DGI60BE3R	DGI60BF3R		
		7° L.H. Lead Angle	DGI60BU3L	DGI60BC3L	DGI60BD3L	DGI60BE3L	DGI60BF3L		

DGI STYLE  
OD/ID & FACE GROOVING  
INSERTS