



CHAMFERING RINGS

FOR
GOLD•TWIST **QUAD•TWIST™**
DRILL LINE
QUAD•DRILL+™

Ring Diameters:

1.34", 1.50", 1.65" and 1.85"

Fits Body Diameters:

10.0mm(.3937") - 25.4mm(1.000")

L:D Ratios:

Gold•Twist

3xD, 5xD, 8xD & 12xD

Quad•Twist & Quad•Drill+

3xD, 4xD & 5xD

Maximum Chamfer DOC:

.118" x 45°



Ingersoll is introducing the first Multi-Tool, 45 degree Chamfer Ring that offers a new twist to drilling and chamfering in one operation, reducing set-up and cycle time, improving productivity, and reducing inventory of special combination tools.

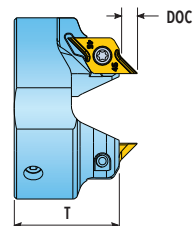
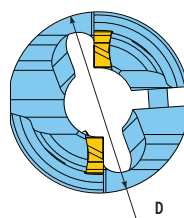
The new Chamfer Ring fits three of our most popular drill bodies: the Gold•Twist Drill, the Quad•Twist Drill, and the Quad•Drill+. It fits bodies ranging from 14.0mm (.551") - 20.6mm (.811") for 3, 5, 8 & 12XD Gold•Twist Drills and 3, 4, & 5XD Quad•Twist & Quad•Drill+ drills.

The new Chamfer Ring insert, CRNG 0802-45CD, in grade IN2505 is two effective. No more need to slow the feed rate down. It offers a maximum .118" x 45 degree chamfer size and a multi-layered PVD coating that works well in a wide range of materials. Both the Chamfer Ring and Inserts are available now.



CHAMFERING RINGS

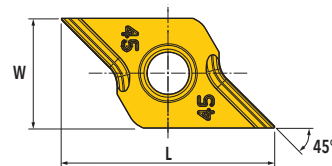
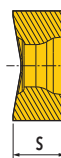
45° CHAMFERING RING - 2 EFFECTIVE INSERTS



Description	D (inch)	T (inch)	Fits Gold•Twist Series	Fits Quad•Twist Series	Fits Quad•Drill+ Series	Maximum Chamfer Size (DOC)
			Dia. Range (mm)	Dia. Range (mm)	Dia. Range (mm)	
CB100R02	1.34	0.787	10.0-10.4	na	na	.118" x 45 Deg
CB105R02	1.34	0.787	10.5-10.9	na	na	
CB110R02	1.34	0.787	11.0-11.4	na	na	
CB115R02	1.34	0.787	11.5-11.9	na	na	
CB120R02	1.34	0.787	12.0-12.4	na	na	
CB125R02	1.34	0.787	12.5-12.9	na	12.5-12.9	
CB130R02	1.34	0.787	13.0-13.4	na	13.0-13.4	
CB135R02	1.34	0.787	13.5-13.9	na	13.5-13.9	
CB140R02	1.50	0.866	14.0-14.4	14.0-14.4	14.0-14.4	
CB145R02	1.50	0.866	14.5-14.9	14.5-14.9	14.5-14.9	
CB150R02	1.50	0.866	15.0-15.9	15.0-15.9	15.0-15.9	
CB160R02	1.65	0.906	16.0-16.9	16.0-16.9	16.0-16.9	
CB170R02	1.65	0.906	17.0-17.9	17.0-17.9	17.0-17.9	
CB180R02	1.65	0.906	18.0-18.9	18.0-18.9	18.0-18.9	
CB190R02	1.65	0.906	19.0-19.9	19.0-19.9	19.0-19.9	
CB200R02	1.65	0.906	20.0-20.9	20.0-20.9	20.0-20.9	
CB210R02	1.85	0.945	21.0-21.9	21.0-21.9	21.0-21.9	
CB220R02	1.85	0.945	22.0-22.9	22.0-22.9	22.0-22.9	
CB230R02	1.85	0.945	23.0-23.9	23.0-23.9	23.0-23.9	
CB240R02	1.85	0.945	24.0-24.9	24.0-24.9	24.0-24.9	
CB250R02	1.85	0.945	25.0-25.9	25.0-25.9	25.0-25.9	

NOTE: For use with Gold•Twist 3, 5, 8, & 12XD and Quad•Twist & Quad•Drill+ 3, 4, & 5XD.

INSERTS



Designation	L	W	S	Grade
CRNG-0802-45CD	.583	.295	.144	IN2505

HARDWARE

Description	Insert Screw	Torx	Clamping Screw	Wrench
CB100R02 - CB135R02	SO 25065I	HZS.0004	SHM3X0.5X10 ¹	L-W2.5
CB140R02 - CB150R02	SO 25065I	HZS.0004	SHM4X0.7X12 ²	L-W3
CB160R02 - CB250R02	SO 25065I	HZS.0004	SHM5X0.8X16 ³	L-W4

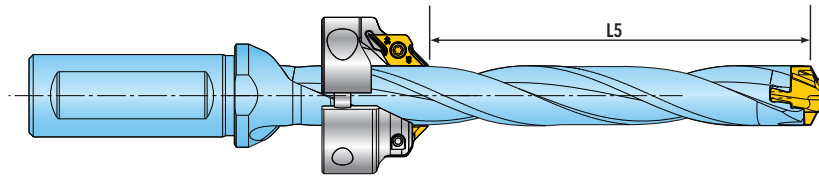
¹ Clamping Torque: 3 [N m] 26 [lbf-in]

² Clamping Torque: 4 [N m] 35 [lbf-in]

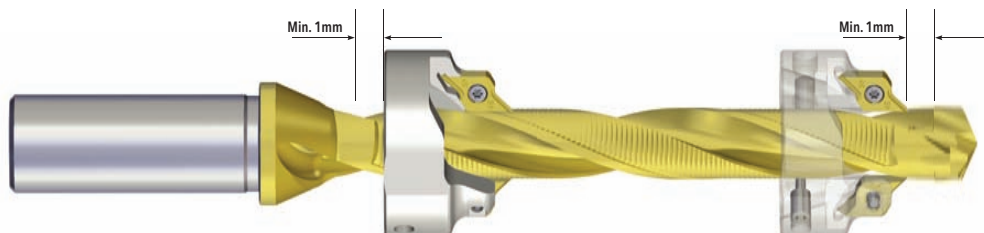
³ Clamping Torque: 6-7 [N m] 53-61 [lbf-in]

CHAMFERING RINGS

■ FOR **GOLD®TWIST**
PRIME

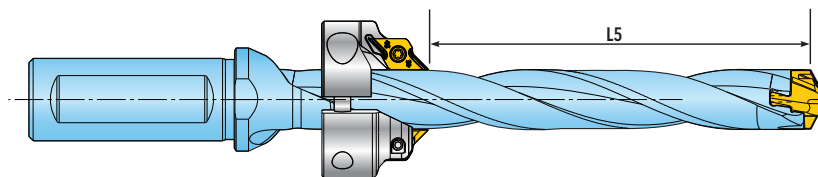


L:D	Body Designation		Ring Designation	L5 (min) inch	L5 (max) inch
	Cylindrical Shank	Shank with Flat			
3	TD1300039S6R01	TD1300039C0R01	CB130R02	0.748	0.748
	TD1350040S6R01	TD1350040C0R01	CB135R02	0.748	0.787
	TD1400042S6R01	TD1400042C0R01	CB140R02	0.826	0.866
	TD1450043S6R01	TD1450043C0R01	CB145R02	0.866	0.905
	TD1500045S7R01	TD150004518R01	CB150R02	0.905	0.905
	TD1600048S7R01	TD160004818R01	CB160R02	0.945	0.984
	TD1700051S7R01	TD170005118R01	CB170R02	1.024	1.102
	TD1800054S1R01	TD1800054C8R01	CB180R02	1.063	1.181
	TD1900057S1R01	TD1900057C8R01	CB190R02	1.142	1.299
	TD2000060S1R01	TD2000060C8R01	CB200R02	1.181	1.417
	TD2100063S1R01	TD2100063C8R01	CB210R02	1.260	1.535
	TD2200066S1R01	TD2200066C8R01	CB220R02	1.299	1.654
	TD2300069S9R01	TD2300069B7R01	CB230R02	1.378	1.772
	TD2400072S9R01	TD2400072B7R01	CB240R02	1.417	1.890
	TD2500075S9R01	TD2500075B7R01	CB250R02	1.496	2.008
5	TD1000050S6R01	TD1000050C0R01	CB100R02	1.102	1.102
	TD1050052S6R01	TD1050052C0R01	CB105R02	1.142	1.181
	TD1100055S6R01	TD1100055C0R01	CB110R02	1.220	1.299
	TD1150057S6R01	TD1150057C0R01	CB115R02	1.260	1.378
	TD1200060S6R01	TD1200060C0R01	CB120R02	1.299	1.772
	TD1250062S6R01	TD1250062C0R01	CB125R02	1.338	1.575
	TD1300065S6R01	TD1300065C0R01	CB130R02	1.417	1.693
	TD1350067S6R01	TD1350067C0R01	CB135R02	1.457	1.693
	TD1400070S6R01	TD1400070C0R01	CB140R02	1.496	1.890
	TD1450072S6R01	TD1450072C0R01	CB145R02	1.535	1.890
	TD1500075S7R01	TD150007518R01	CB150R02	1.614	2.087
	TD1600080S7R01	TD160008018R01	CB160R02	1.693	2.283
	TD1700085S7R01	TD170008518R01	CB170R02	1.811	2.480
	TD1800090S1R01	TD1800090C8R01	CB180R02	1.890	2.677
	TD1900095S1R01	TD1900095C8R01	CB190R02	2.008	2.677
	TD2000100S1R01	TD2000100C8R01	CB200R02	2.087	3.071
	TD2100105S1R01	TD2100105C8R01	CB210R02	2.205	3.110
	TD2200110S1R01	TD2200110C8R01	CB220R02	2.283	3.307
	TD2300115S9R01	TD2300115B7R01	CB230R02	2.402	3.504
	TD2400120S9R01	TD2400120B7R01	CB240R02	2.480	3.701
	TD2500125S9R01	TD2500125B7R01	CB250R02	2.598	3.898

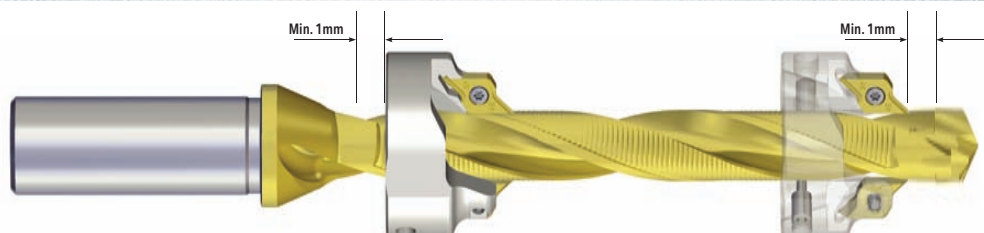


CHAMFERING RINGS

■ FOR **GOLD®TWIST**

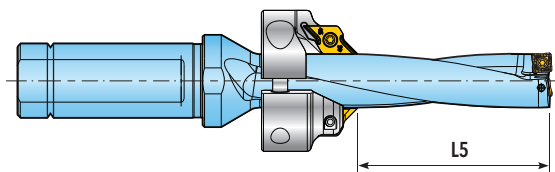


L:D	Body Designation		Ring Designation	L5 (min) inch	L5 (max) inch
	Cylindrical Shank	Shank with Flat			
8	TD1000080S6R01	TD1000080C0R01	CB100R02	1.772	2.283
	TD1050084S6R01	TD1050084C0R01	CB105R02	1.929	2.441
	TD1100088S6R01	TD1100088C0R01	CB110R02	1.929	2.598
	TD1150092S6R01	TD1150092C0R01	CB115R02	2.087	2.756
	TD1200096S6R01	TD1200096C0R01	CB120R02	2.087	2.913
	TD1250100S6R01	TD1250100C0R01	CB125R02	2.244	3.070
	TD1300104S6R01	TD1300104C0R01	CB130R02	2.244	3.228
	TD1350108C0R01	TD1350108S6R01	CB135R02	2.402	3.307
	TD1400112S6R01	TD1400112C0R01	CB140R02	2.402	3.464
	TD1450116S6R01	TD1450116C0R01	CB145R02	2.559	3.622
	TD1500120S7R01	TD150012018R01	CB150R02	2.559	3.780
	TD1600128S7R01	TD160012818R01	CB160R02	2.716	4.055
	TD1700136S7R01	TD170013618R01	CB170R02	2.874	4.370
	TD1800144S1R01	TD1800144C8R01	CB180R02	3.031	4.646
	TD1900152S1R01	TD1900152C8R01	CB190R02	3.189	4.960
	TD2000160S1R01	TD2000160C8R01	CB200R02	3.346	5.276
	TD2100168S1R01	TD2100168C8R01	CB210R02	3.504	5.590
	TD2200176S1R01	TD2200176C8R01	CB220R02	3.661	5.906
	TD2300184S9R01	TD2300184B7R01	CB230R02	3.819	6.220
	TD2400192S9R01	TD2400192B7R01	CB240R02	3.976	6.535
	TD2500200S9R01	TD2500200B7R01	CB250R02	4.134	6.850
12	TD1200144S6R01	NA	CB120R02	3.425	4.764
	TD1250150S6R01	NA	CB125R02	3.543	5.000
	TD1300156S6R01	NA	CB130R02	3.661	5.236
	TD1350162S6R01	NA	CB135R02	3.780	5.394
	TD1400168S6R01	NA	CB140R02	3.898	5.630
	TD1450174S6R01	NA	CB145R02	4.016	5.866
	TD1500180S7R01	NA	CB150R02	4.134	6.102
	TD1600192S7R01	NA	CB160R02	4.370	6.535
	TD1700204S7R01	NA	CB170R02	4.606	7.008
	TD1800216S1R01	NA	CB180R02	4.843	7.440
	TD1900228S1R01	NA	CB190R02	5.079	7.913
	TD2000240S1R01	NA	CB200R02	5.315	8.386
	TD2100252S1R01	NA	CB210R02	5.551	8.858
	TD2200264S1R01	NA	CB220R02	5.787	9.331

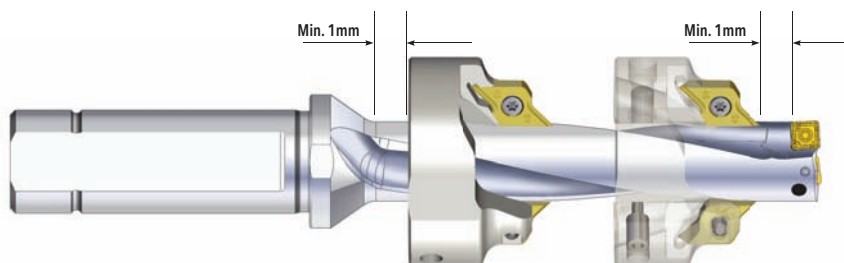


CHAMFERING RINGS

■ FOR **QUAD•TWIST™** & **QUAD•DRILL+™**

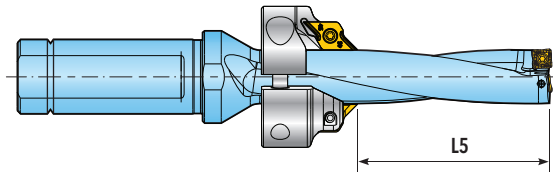


L:D	Body Designation		Ring Designation	L5 (min) inch	L5 (max) inch
	Quad•Twist	Quad•Drill+			
3	NA	Q0127038N5R01	CB125R02	0.630	0.630
	NA	Q0135041N5R01	CB135R02	0.669	0.709
	QR0143043N5R02	Q0143043N5R01	CB140R02	0.669	0.709
	QR0150045N5R02	Q0150045N5R01	CB150R02	0.709	0.748
	QR0159048N5R02	Q0159048N5R01	CB160R02	0.748	0.827
	QR0167050N5R02	Q0167050N5R01	CB170R02	0.827	0.945
	QR0175053N5R02	Q0175053N5R01	CB180R02	0.906	1.063
	QR0183055N5R02	Q0183055N5R01	CB180R02	0.906	1.024
	QR0191057N5R02	Q0191057N5R01	CB190R02	0.984	1.142
	QR0198059N5R02	Q0198059N5R01	CB200R02	1.024	1.260
	QR0206062N5R02	Q0206062N5R01	CB210R02	1.063	1.378
	QR0214064N5R02	Q0214064N5R02	CB210R02	1.063	1.378
	QR0222067N5R02	Q0222067N5R02	CB220R02	1.142	1.496
	QR0230069N6R02	Q0230069N6R01	CB230R02	1.181	1.614
	QR0238071N6R02	Q0238071N6R01	CB240R02	1.220	1.732
	QR0246074N6R02	Q0246074N6R01	CB250R02	1.299	1.850
	QR0250075N6R02	Q0250075N6R01	CB250R02	1.299	1.850
	QR0254076N6R02	Q0254076N6R01	CB250R02	1.299	1.850
4	NA	Q0127051N5R01	CB125R02	0.984	1.024
	NA	Q0135054N5R01	CB135R02	1.063	1.181
	QR0143057N5R02	Q0143057N5R01	CB140R02	1.102	1.181
	QR0150060N5R02	Q0150060N5R01	CB150R02	1.181	1.339
	QR0159064N5R02	Q0159064N5R01	CB160R02	1.220	1.457
	QR0167067N5R02	Q0167067N5R01	CB170R02	1.339	1.614
	QR0175070N5R02	Q0175070N5R01	CB180R02	1.378	1.772
	QR0183073N5R02	Q0183073N5R01	CB180R02	1.417	1.732
	QR0191076N5R02	Q0191076N5R01	CB190R02	1.496	1.890
	QR0198079N5R02	Q0198079N5R01	CB200R02	1.575	2.047
	QR0206082N5R02	Q0206082N5R01	CB210R02	1.654	2.205
	QR0214086N5R02	Q0214086N5R02	CB210R02	1.654	2.205
	QR0222089N5R02	Q0222089N5R02	CB220R02	1.732	2.362
	QR0230092N6R02	Q0230092N6R01	CB230R02	1.811	2.520
	QR0238095N6R02	Q0238095N6R01	CB240R02	1.890	2.677
	QR0246098N6R02	Q0246098N6R01	CB250R02	1.969	2.835
	QR0250102N6R02	Q0250102N6R01	CB250R02	1.969	2.835
	QR0254102N6R02	Q0254102N6R01	CB250R02	1.969	2.835

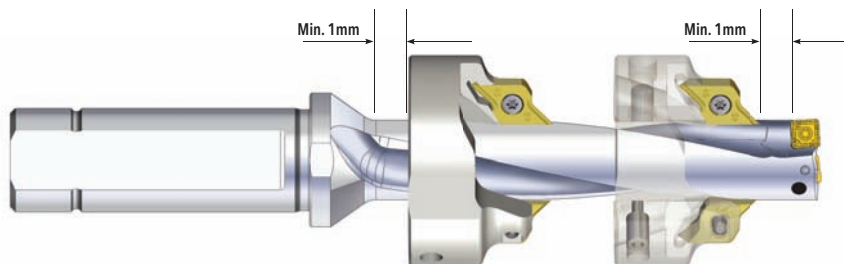


CHAMFERING RINGS

■ FOR **QUAD•TWIST™** & **QUAD•DRILL+™**



L:D	Body Designation		Ring Designation	L5 (min) inch	L5 (max) inch
	Quad•Twist	Quad•Drill+			
5	NA	Q0127064N5R01	CB125R02	1.220	1.535
	NA	Q0135067N5R01	CB135R02	1.339	1.732
	QR0143072N5R02	Q0143072N5R01	CB140R02	1.378	1.732
	QR0150075N5R02	Q0150075N5R01	CB150R02	1.496	1.929
	QR0159080N5R02	Q0159080N5R01	CB160R02	1.575	2.087
	QR0167083N5R02	Q0167083N5R01	CB170R02	1.614	2.283
	QR0175088N5R02	Q0175087N5R01	CB180R02	1.732	2.480
	QR0183092N5R02	Q0183091N5R01	CB180R02	1.772	2.441
	QR0191095N5R02	Q0191095N5R01	CB190R02	1.890	2.638
	QR0198099N5R02	Q0198099N5R01	CB200R02	1.969	2.835
	QR0206103N5R02	Q0206103N5R01	CB210R02	2.087	3.031
	QR0214107N5R02	Q0214107N5R02	CB210R02	2.087	3.031
	QR0222111N5R02	Q0222111N5R02	CB220R02	2.165	3.228
	QR0230115N6R02	Q0230115N6R01	CB230R02	2.283	3.228
	QR0238119N6R02	Q0238119N6R01	CB240R02	2.362	3.622
	QR0246123N6R02	Q0246123N6R01	CB250R02	2.402	3.819
	QR0250125N6R02	Q0250125N6R01	CB250R02	2.480	3.819
	QR0254127N6R02	Q0254127N6R01	CB250R02	2.480	3.819

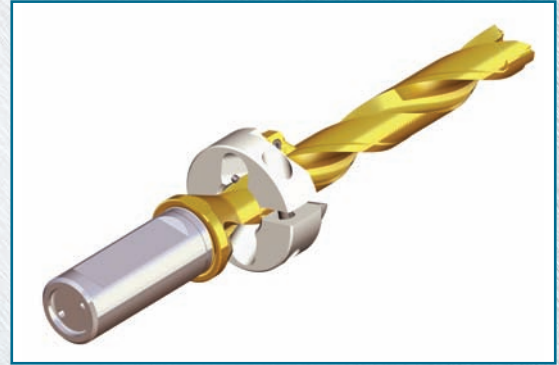


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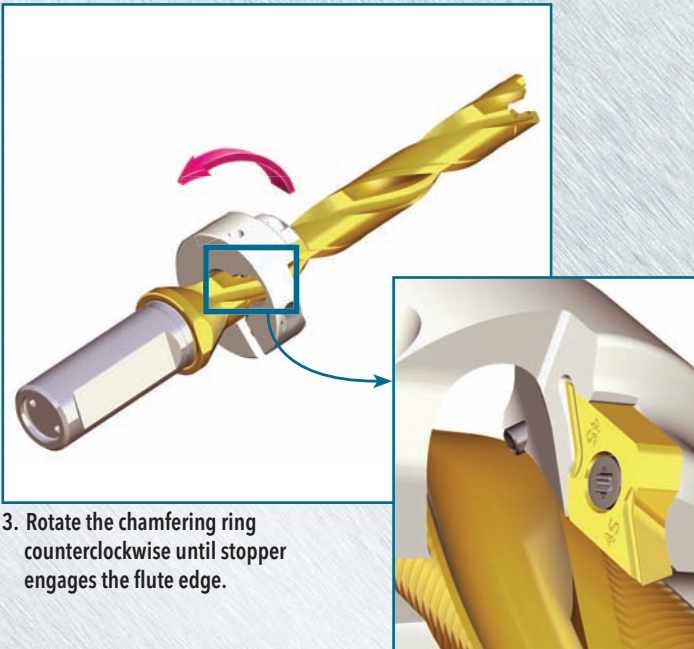
■ ASSEMBLY OF CHAMFERING RING FOR **GOLD®TWIST**



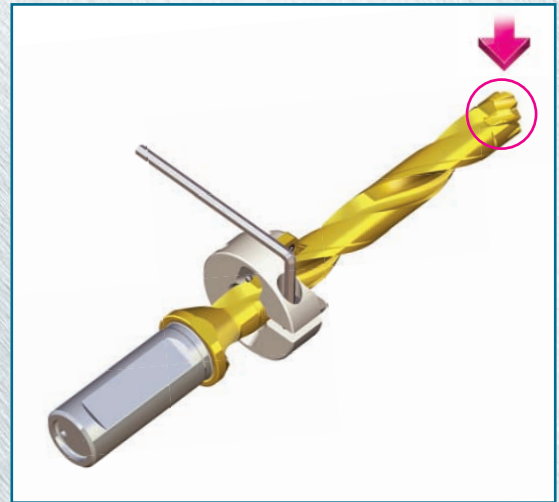
1. Insert the chamfering ring on to the drill body.
The stopper must be inside the flute.



2. Slide the chamfering ring to the desired position.

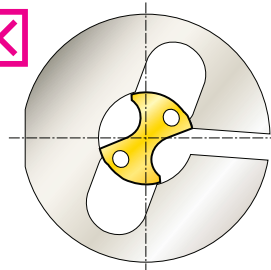
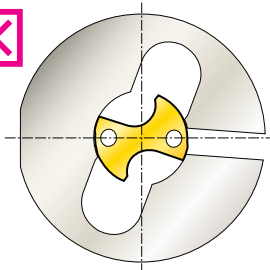
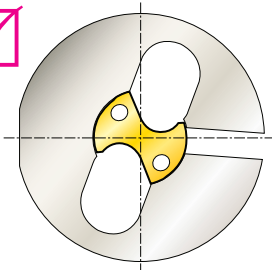


3. Rotate the chamfering ring
counterclockwise until stopper
engages the flute edge.



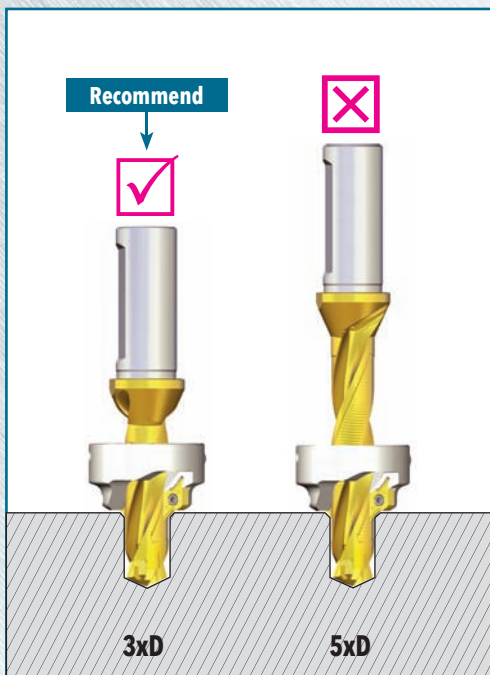
4. Tighten the chamfering ring and clamp the drill head.

**When the chamfering ring is clamped correctly,
the drill flute will be aligned with the chamfering ring flute.**



CHAMFERING RINGS

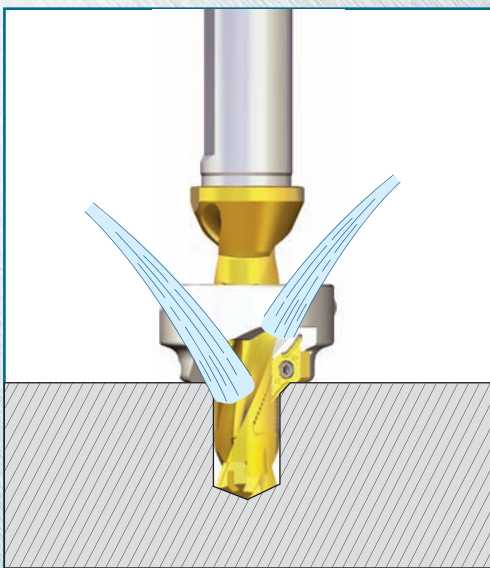
RECOMMENDATIONS FOR STABLE MACHINING



1. If possible, always use a short holder.
If not, reduce the cutting speed to minimize vibration.



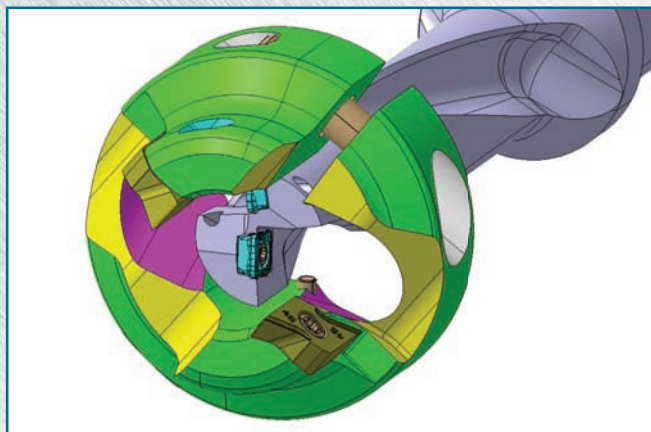
2. Mount the chamfering ring as close as possible to the drilling shank.



3. For better insert life, apply external coolant to the insert and internal coolant to the drill tip.

CHAMFERING RINGS

■ ASSEMBLY OF CHAMFERING RING FOR **QUAD•TWIST™** **QUAD•DRILL+™**



When using the chamfering ring with Quad•Drill+ and Quad•Twist drills, position the Guide Pin in the flute of the Center Insert.

