

COMPOSITE TOOLS

Shear bore Carbide Drills

FOR USE IN
KEVLAR,
FIBERGLASS, BORON,
PLASTIC, CARBON
& OTHER HIGHLY
ABRASIVE MATERIALS

Patented Shear Bore Drill For Kevlar

Recommended especially for Kevlar. The unique single flute tool geometry produces an outside - inside shearing action which allows each fiber to be cut individually, lessening drill pressure requirements and reducing heat build-up.

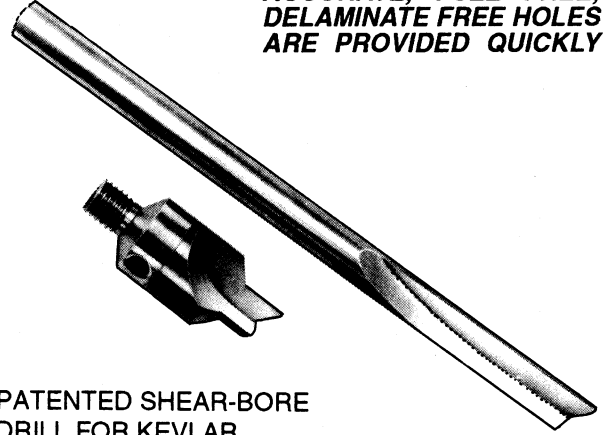
TECHNICAL INFORMATION:

- A. Speed & Feed - Best results are obtained with 200 - 600 S.F.P.M.
- B. T.I.R. - Drill should be run within .0015 concentricity. This is critical as it eliminates excessive heat.
- C. Drilling Procedure - This drill has to be run with some type of guide system ie: Bushing or Fixture.

SHEAR BORE DRILLS

PART # SIZE - RANGE

B00005	.098/ .1285
B00010	.129/ .1875
B00015	.188/ .201
B00020	.202/ .2187
B00025	.219/ .250
B00030	.251/ .281
B00035	.282/ .3125
B00040	.313/ .375



ACCURATE, FUZZ FREE, DELAMINATE FREE HOLES ARE PROVIDED QUICKLY

PATENTED SHEAR-BORE DRILL FOR KEVLAR

These drills are also available in a Drill + C'sink combination tool which allows for one step drilling & Countersinking operations.

8 FACET DRILLS

STANDARD PART # STUB PART # SIZE - RANGE

B02650	B02505	.098/ .125
B02655	B02510	.1285/ .1562
B02660	B02515	.157/ .185
B02665	B02520	.1875/ .199
B02670	B02525	.201/ .228
B02675	B02530	.234/ .250
B02680	B02535	.257/ .272
B02685	B02540	.2756/ .282
B02690	B02545	.290/ .315
B02695	B02550	.316/ .3438
B02700	B02555	.348/ .3594
B02705	B02560	.368/ .377
B02710	B02565	.386/ .3937
B02715	B02570	.397/ .4062
B02720	B02575	.413/ .4219
B02725	B02580	.4331/ .4375
B02730	B02585	.4528/ .4724
B02735	B02590	.4844/ .500

Solid Carbide 8-Facet Drills

For drilling composites when there is a metal layer sandwiched between composite layers. This multi-angle point allows drilling both materials while lessening the break out in the composite. Coolant should be used with this drill. Recommended SFPM for this drill is 150-200.

BRAD POINT DRILLS

STANDARD PART # STUB PART # SIZE - RANGE

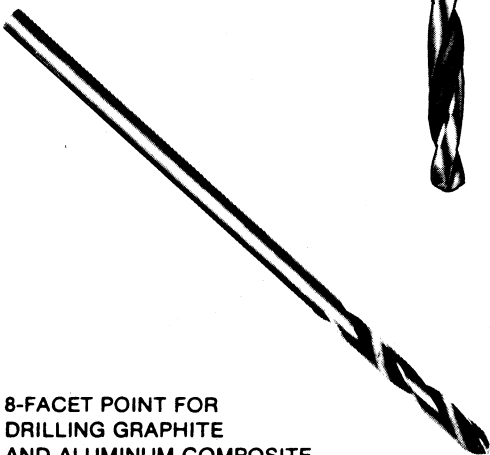
B02150	B02005	.098/ .125
B02155	B02010	.1285/ .1562
B02160	B02015	.157/ .185
B02165	B02020	.1875/ .199
B02170	B02025	.201/ .228
B02175	B02030	.234/ .250
B02180	B02035	.257/ .272
B02185	B02040	.2756/ .282
B02190	B02045	.290/ .315
B02195	B02050	.316/ .3438
B02200	B02055	.348/ .3594
B02205	B02060	.368/ .377
B02210	B02065	.386/ .3937
B02215	B02070	.397/ .4062
B02220	B02075	.413/ .4219
B02225	B02080	.4331/ .4375
B02230	B02085	.4528/ .4724
B02235	B02090	.4844/ .500

This specially designed point is for use in all thicknesses of Kevlar Laminates. The unusual geometry of this tool eliminates break-out and de-lamination of the material being drilled.

Brad Point Drill



Solid Carbide Drill 8-Facet Point



8-FACET POINT FOR DRILLING GRAPHITE AND ALUMINUM COMPOSITE

MATERIAL THICKNESS	0.060	0.125	0.180	0.250 & OVER
DRILL SIZE IN.	REVOLUTIONS PER MINUTE			
0.060	1350	1150	1000	100
0.125	1150	1100	1000	900
0.1875	1100	1000	900	800
0.250	1000	1000	900	800
0.3125	1000	900	900	725
0.375	900	900	900	725
0.4375	900	800	600	600
0.500	800	600	600	400
0.625	800	600	400	400

Recommended speeds without the use of coolants, if coolant is used adjust speed upwards.