

Cross Cut Router Design

Kyocera Tycom Corporation 9/12/07

Abstract

Kyocera Tycom Corporation announces the product release of the Series 4100 Cross Cut router design.

Driving down the costs in drill and fab operations has been the value proposition of Kyocera Tycom since its founding twenty years ago. As part of this proposition, Kyocera Tycom introduces a revolutionary router design that outlasts previous router designs on a variety of applications. The new tool design combines the advantages of the classical Chip Breaker **and** Diamond Cut designs to provide a high strength, superior edge finish, long lasting router.

Product is currently available, depending on diameter and flute length; KTC will work with customers to transition to the new product in a timely manner.

KTC offers the improved router in a variety of diameters and flute lengths. The final product line will be: (shaded items represent an additional flute length offering for a given diameter.

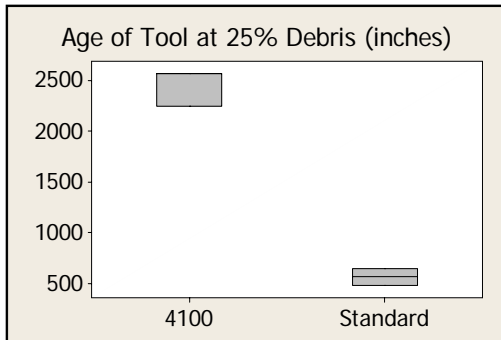
diameter (")	flute length (")	ringless	ringed
0.0315	0.177	4100-0315.177	4100.0315.177
0.0354	0.177	4100-0354.177	4100.0354.177
0.0394	0.177	4100-0394.177	4100.0394.177
0.0394	0.256	4100-0394.256	4100.0394.256
0.0433	0.177	4100-0433.177	4100.0433.177
0.0433	0.256	4100-0433.256	4100.0433.256
0.0472	0.197	4100-0472.197	4100.0472.197
0.0472	0.256	4100-0472.256	4100.0472.256
0.0512	0.197	4100-0512.197	4100.0512.197
0.0512	0.256	4100-0512.256	4100.0512.256
0.0551	0.256	4100-0551.256	4100.0551.256
0.0551	0.315	4100-0551.315	4100.0551.315
0.0591	0.256	4100-0591.256	4100.0591.256
0.0591	0.315	4100-0591.315	4100.0591.315
0.0630	0.256	4100-0630.256	4100.0630.256
0.0630	0.315	4100-0630.315	4100.0630.315
0.0630	0.354	n/a	4100.0630.354
0.0787	0.315	4100-0787.315	4100.0787.315
0.0945	0.394	4100-0945.394	4100.0945.394
0.1250	0.394	4100-1250.394	4100.1250.394

Lab and beta site tests were conducted to ensure the product performed at an improved level that is both reliable and repeatable. Test data is summarized below.

Distance to Debris

Design	Distance (inches)	
	Mean	StdDev
standard	560	80
Series 4100	2,453	184

p-value: 0.000



Distance to Breakage

Material: High Tg
Stack Thickness: 0.177"
Diameter: 0.0630"

Design	Distance (inches)	
	Mean	StdDev
standard	2,119	1,554
Series 4100	3,757	342

p-value: 0.030

