

2008 SSC Novice Stone Cutting Review
Tris de Garnet by Tom Herbst, 2001

The author mentions cutting a CAM preform with respect to P1 & P2 at 22.5 & 34 degrees respectively then cutting the P1 & P2 at 90 degrees to establish the girdle. In GemCad this does work out cutting the preform at these angles and the indices of P1 & P2. The CAM is later removed with the P3 – P4 – P5 sequence. One of the test cutters did try this and noted the angles for P3 were not quite according to the pattern for some reason.

An alternate method was tried where P5 was cut in first then P4 to the meet. The girdle was then established by cutting in P1 & P2 just a bit over the target for the finished size. This was followed with a clean up on a 1200 lap then the P1 & P2 facets brought in by chain cutting to just the high side of the tolerance. At the point the cutter could choose to polish in the girdle and facets cut so far, e.g., P1, P2, P4, & P5 Note that there is three possible width dimensions to keep in mind. P3 was roughly placed with a light touch on a 600 lap, because of the size of the stone a 1200 could also be used. Cut P3 just a little short of meeting the girdle and note how the meets are coming together with P4 & P5. Now go back and polish P3, but note that some cheating (both radial and angle) will most likely be necessary to land all of the meets perfectly.

After the transfer cutting the crown should be fairly straight forward, again the best way to keep the meets under control would be by chain cutting. Go ahead and cut in C3 but leave it a little short of meeting the girdle. Cut and polish the table next, again leaving just a little room to cheat in C3 after the table is polished.

One thing that was noted,,,, watch which way your index gears a labeled, i.e., CCW or CW and how this translates to your stone. The pattern is labeled CCW looking at the table, but if you cut by the numbers with a Facetron the stone will be a mirror image from the plan view. Cutters are cautioned to make the finished stone look like the printed pattern.

This stone was test cut in glass, YAG, and syn Spinel. Everyone was impressed how well this little 25 facet beauty performs. The stone was test cut and reviewed by Keith Wyman, Jim Clark, and Jeff Ford.

