



Emerald Glitter

by Nancy Attaway

Pre-Master stone USFG 2003 competition

I test cut this stone in light blue synthetic quartz, the published cutting sequence works out fine. I cut the stone 11 X 14.6 mm. I started with a 360 and cut P1 P2 P3 to center point then cut the 90 @ the 96-48 & 24-72 only leaving a good MM to spare. I then put on the 600 lap and repeated the above leaving .3 of a MM big on size. Now I put on the 1200 lap and took a lot of time cutting P1 to center point then put in P2 to center point and then P3, on P3 you want to have a very light hand on 27 & 75 as they will over cut quickly. These are the facets(P1-P2-P3) that determine the correctness for the whole stone so spend some extra time on them. I now cut the girdle in to the exact size using the L/W of 1.327 and then cut the corners to match P1 facets in my stone it worked perfectly. Now I cut P7 & P8, then I polished the girdle as I don't want to come back to it. P9 through P13 is a bit tricky as they don't go to the center point, you have to be a little arbitrary and follow the diagram plan view, just make sure you put together good meets. You have some fudge room as to how wide you make the lines, but try to stay in proportion. Now do the polish by starting over again with P1. I used a brown cerium ultra lap on the stone.

After I turned the stone over using a 600 lap I cut the first row at 45 all the way around, by this I mean I cut 96 changed my elevation and cut 12-24-36 without a change, then change to 48, change again for 60-72-84, 84 should meet 96 perfectly if not make a cheater correction and go around again. I was OK as mine met perfectly. I followed this procedure up through 35 and 25 degrees. In step cutting you have to use your own judgment for distance, try to make it look like the diagram. The above was completed with a 600 lap, I also cut the table in using $T/W=0.827$ and $T/L=0.623$ that worked out to 6.85 MM X 9.097 MM. Now I got a look at how my step cuts worked out and put the 1200 hundred on to set my .3 girdle thickness, I basically followed the same procedure above. If you take $6.85 \times 1.327 = 9.089$ it is proper. I used gem print to print out a copy of this cut and it gave a figure of 0.507 that worked out to a table of 5.57 X 9.1 that's the table I ended up putting on the stone and I liked it, you will have to use what the diagram published is. After I pre polished up to the table I then pre polished the table and polished it. I used a brown cerium ultra lap and a little slurry of some French optical grade cerium and the polish came up beautiful within five minutes. It surprised me as it is a rather large table. I then went back to the 45 degrees and 96 index and polished in the same sequence I cut the stone. I spent seven and a half hours on this stone, I would estimate for competition it would take five to six days of six hour days.

Co-Chair USFG Competition Committee

Art Kavan

