Pacific Star

Design by Wayne A. Crabtree

Masters stone for 2007 USFG competition

The pavilion goes together pretty smoothly, just spend some time with center point and choose your rough big enough to cut the break angle at 51.00 degrees to center point and still have enough for the crown. When you cut P-3 make sure the meets for P-2 go together and you make meet point at culet. Transfer the stone after polish.

This crown is a little tricky as C-1 has no reference point or meet point to give the proper height. I will tell you how I did it, maybe you have a better way, but this worked well for me: I first cut the whole crown with a 600 and also cut the table with 600. Now I started over with a 1200 pre-polish with the breaks first at 44.89 setting my girdle at approximately .35mm. I then cut C-2 to meet point at the girdle line. C-3 will set the depth of C-1 and make the top meet points of C-2. Here is the tricky part: I cut the first C-3 to where I thought the height of C-1 was as per diagram. Now I made a template out of a little piece of plastic. On the USFG web site I will put a picture of it next to the stone. I then used this to cut all C-3's so the C-1 facets had approximately the same height. I say approximately because there is no way they will all be perfect, but you just want them as close as possible. Now pre-polish your stars in and pre-polish the table with a slight over cut. Polish your table, it is fairly large as t/w is .600 @ 12mm for the stone, this makes the table 7.2mm. I had to spend a half hour on the table to get it clean. Go back to the breaks and polish them by chaining around the stone and making .3 girdle thicknesses. Polish in C-2 to make meet point at the girdle line. Now I polished in C-3 a little differently. I polished 96 index @ C-3 33.14 using my template, just the 96 index, after the one index of 96 I didn't use the template anymore, I used putting in all the C-2 top meet points. I used this sequence: 96-12-84-72-24-36-60-48. Why? Because it divides any error by 2. In other words, if I would have went 96-12-24-36-48-60-72-84 I would have a full error and possibly a large step to make up with the cheater, but by going around from both sides I only had half the error to work out. My stone came out very well. Now all you have to do is work your stars in so all three meets come together. Watch out for unequal facets at this stage. If you are not experienced at using your stars to put your table meets in I would suggest only polishing them in three quarter of the way so you can cut for equal facets. Where you should be watching for this problem is on C-3 as you put C-4 (stars) in. C-3 will be the unequal facet. Make your stars center at the top of C-3.

Art Kavan