

FELT-TIP / POLISHING Continued from page 2

such a large piece of expensive material (but) perhaps the combination of luck and experience saved me. The difference between the square and oblong is more complex than in the normal Barions. The secret lies in the half moon which must be clearly understood as it differs from the long single or straight step of the Barion. The shape of each fragmented step must be clearly read and understood to to create maximum brilliance. The vertical rib lines of the pavilion halves must be strong and well defined ... this occurs when the halves are worked over evenly and well to the sides.

The diamond I cut weighed 31.90 cts and this new cut is a complete success. The fire and scintillation by far exceeds anything I have ever seen in a diamond of this size or larger. It simply lives when viewed from any angle. The reaction I received from the heads of this firm is greater than anything I have ever created for them over the past 40 years. This speaks for itself. " Such glowing words about a design from a person we respect, was like a challenge. This cut had to be quickly translated into the angle / bearing system so we could cut it ourselves and see if it was really that good in the colored stones we work with. Bob Long took on the task and when he was done I put his information into my computer and verified agreement with his results. It looked good so even though it had not been published before we added it to the INDEX TO FACET DESIGNS and decided to release it thru the SEATTLE FACETOR DESIGN.

A felt-tip marking pen is a regular part of my personal faceting equipment. I have mentioned this fact many times at seminars and symposiums such as the Northwest Faceter's Conference. Several club bulletins have reproduced "A Troubleshooting Guide to Facet Polishing" article e.g. Steele, M.W; FACETS, January 1978 which considerably expands on indications, problems, and remedy's which can be identified with the FELT / TIP POLISHING technique and some dealers have added the table to their catalogs. It is a procedure which should be available to every faceter ... certainly not new. However, it has been 10 years since we last put it in print and this application . . . to help verify an unknown design is so timely we hope subscribers and club members will overlook the excessive words and concentrate on results ... a technique you should know about and a new facet design to try.



Copy of Photograph Design 8.047

20.005 DEMI-MARQUISE Continued from page 4

PREFORM for Design 20.005 DEMI-MARQUISE

STEP	ANGLE	BEARING INDEX	REMARKS
PF1	35.0	70-26	Cut to crown centerpoint (CP)
PF2	36.8	68-28	Cut to centerpoint
PF3	38.4	65-31	Cut to centerpoint
PF4	37.5	62-34	Cut to centerpoint
PF5	34.9	59-37	Cut to centerpoint
PF6	42.7	96	Cut to centerpoint
PF7	90.0	96	Fix size/ Flat prism face is
PF8	90.0	59-37	0.362 x width from CP
PF9	90.0	62-34	Level false girdle
PF10	90.0	65-31	Level false girdle
PF11	90.0	68-28	Level false girdle
PF12	90.0	70-26	Level false girdle

-----End preform / start crown

A CAM (Centerpoint-Angle-Method) Preform is specified for this design so that a reproducible outline can be obtained early in the process without first cutting the pavilion (which has its problems with a good place to put the dop center during redopping).

According to the reference, the dopping axis passes through the low point on the pavilion (meetpoint P3-P6-P8) and on the crown near the extreme edge of the Table approximately 10 percent of the distance across the stone. Personally I would not put it there or recommend that anyone else put it there when a good alternative exists. Location of the DOP CENTER does not affect elevation angles or bearing indices in any direct way. Among the faceting machine controls only height adjustment is affected by moving the dop center. It could be a convenience feature if the design had several facets that COULD BE CUT AT THE SAME HEIGHT SETTING providing the dop center was truly "in the center". This is the case with ECED designs and most designs that have a high degree of symmetry about a CENTERPOINT. The directed distance from the dop center to each facet would not be constant if the dop center was not actually in the center. Consequently height adjustment would be would be different for facets not the same distance from the dop center. In this situation however, placing dop-center so far toward one side of the stone would probably limit the size of dop that could be used and would make the lever arm so long that the stone would be likely to pop off when even light pressure is applied. Who needs such an unnecessary problem!