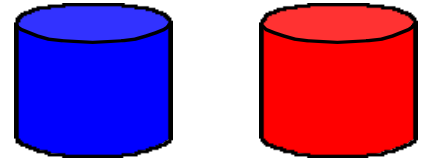


Cross Sectional Preparation of KA-160 7mm Catalyst Support

Process Outline:

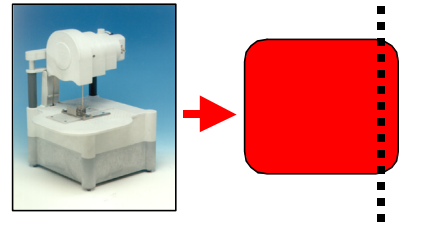
1. Embedment

Two catalysts of each type# 51708-13 & 51358-185 were epoxy mounted using the Acrylimet™ cold mounting system.



2. Sectioning

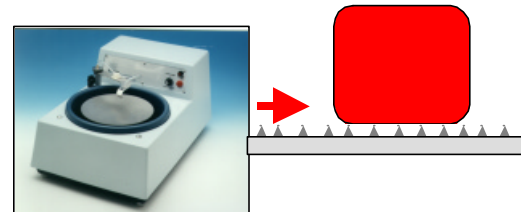
The embedded catalysts mounts are sectioned using the Model 865 Diamond Band saw to just slightly expose the 7mm spherical catalysts.



3. Grinding

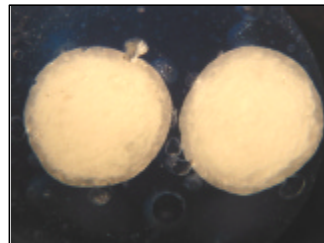
After sectioning the specimen mounts were hand-polished using the Model 910 Lapping Machine. Parameters & consumable utilized are:

Abrasive	Platen Speed	Time (min)
240	150-200	2-4
600	150	2-4
800	150	2-3
1000	150	2-3
1200	100	2

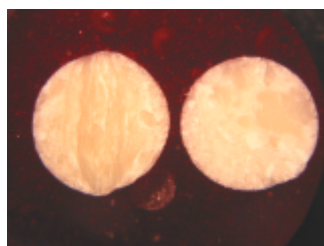
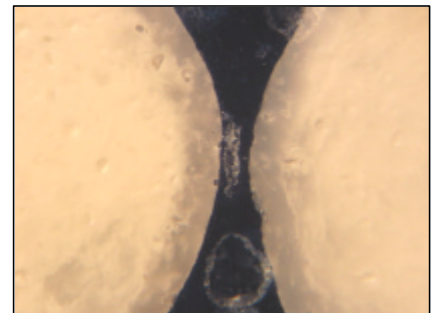


4. Results

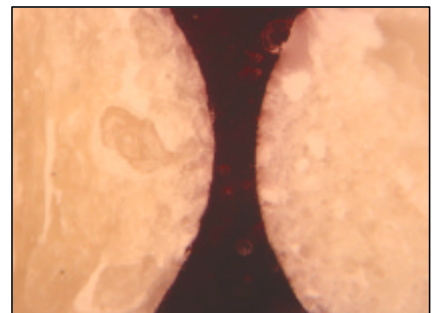
The images to the left were taken from a stereo microscope. They indicate a quality polish from the SiC paper process. If deemed necessary by SEM imaging results the process can be adjusted accordingly for an even finer polish.



Specimen # 51708-13



Specimen # 51358-185



5. Optional Accessories

To increase sample throughput larger mounting molds can be utilized. Additionally, accessories that will semi-automate the process include the Model 920L Lapping Machine w/ 92034L motorized workstation and Model 155 lapping fixture. The Model 920L allows for motorized rotation of the Model 155 lapping fixture thereby allow simplifying the process and minimizing operator supervision. The Model 155 lapping fixture will up to 2" diameter specimens.



Model 920L w/ Model 150 lapping fixture