FIRST 8.6-M GLASSY MENISCUS BLANK FOR THE VLT!

This picture shows the first 8.6-m glassy ZERODUR-meniscus blank after machining at the SCHOTT factory in Mainz, Germany. This blank has been annealed, lifted from the mold, turned in a specially designed turning device and put on the 8-m CNC grinding machine. The blank is illuminated from below by two lamps; the yellowish colour is that of the glass. The yellow band around the blank is for protection during the machining.

The ceramization to achieve the zero expansion coefficient of ZERODUR is in preparation and will last 8 months. A second 8.6-m blank has also passed the annealing process and is now being machined. A third 8.6-m blank is at present in the annealing oven.

After ceramization each blank will receive a central hole and will be ground to near the final shape it must have to become a VLT meniscus-mirror blank of 8200 mm diameter and 177 mm thickness.