News – 10.03.2017

LSST Camera Structure passed Acceptance Review

10.03.2017, the fully ceramic camera structure for the LSST telescope had successful, the acceptance review in Germany prior to shipment to Stanford Linear Accelerator Center (SLAC).

All the acceptance criteria, which were mainly the flatness requirement of 4 µm over the 75 isotactic mount ball centers were met and even slightly exceeded. The SLAC review team was very much satisfied with the finally achieved performance of the camera structure.

During the final measurements, the excellent performance of the camera grid was demonstrated with dedicated manufacturing metrology device. This devise has a submicron accuracy.

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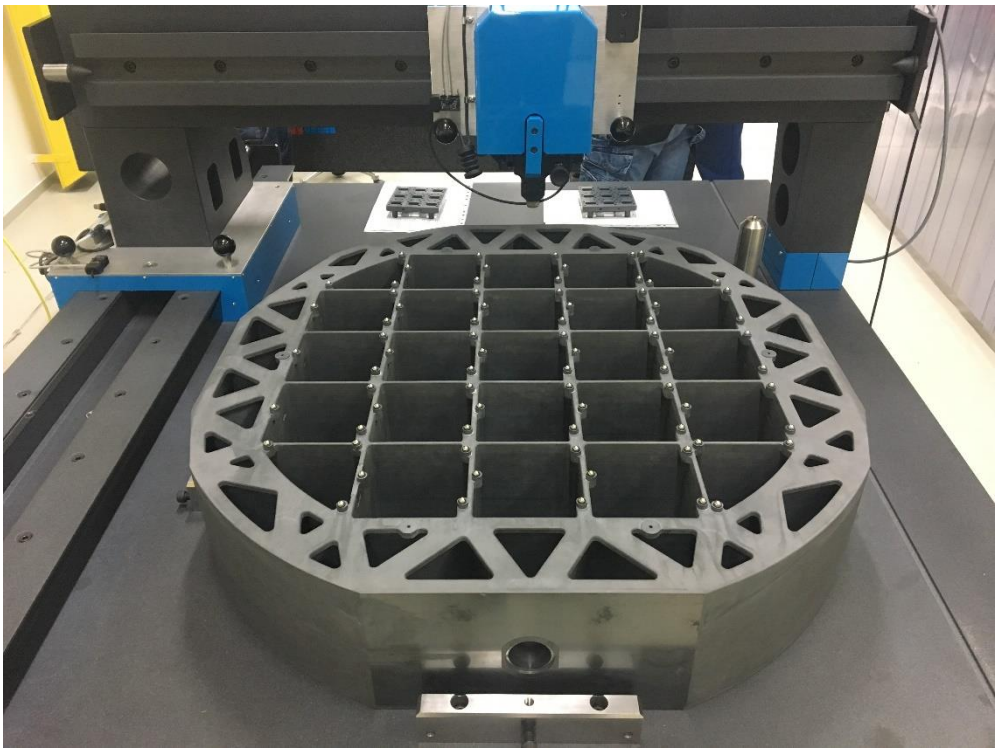

Fig. 1 LSST Camera Grid Structure on metrology devise for flatness measurements of the 75 balls

For final confirmation, several real sensor baseplates were mounted each of 3 balls to confirm also on the sensor raft surface the very challenging flatness requirements of this camera structure. Finally, over 5 sensor rafts we measure a 2 µm surface flatness.

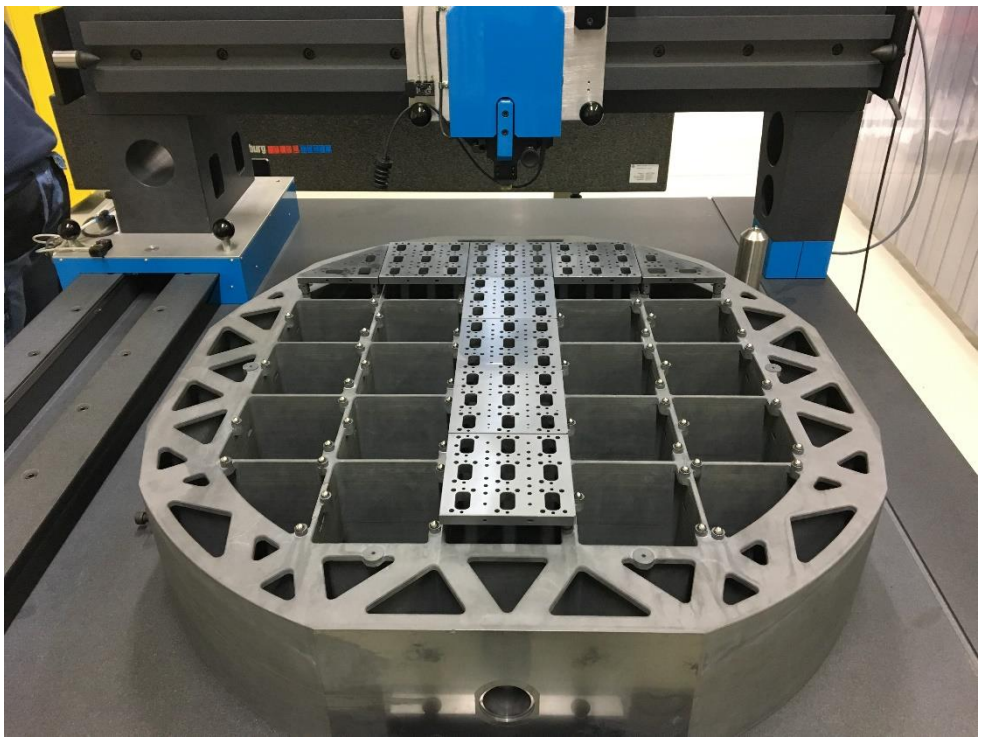

Fig. 2 LSST Camera Grid Structure with 9 sensor baseplates

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After 3 ½ days acceptance review our customer was satisfied very much with the work performed by ECM and JFA (Johann Fischer Aschaffenburg).

JFA was responsible for the manufacturing of the granite high precision metrology device as well as for the final machining of the ceramic structure.

Directly after acceptance the camera grid was placed into the dedicated shipment container and provided to our carrier for the shipment to San Francisco on 14.03.2017.

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