Optical Ground Support Equipment for space applications

Optical ground support equipment for characterisation of optical instruments and components

Complex spaceborne instruments pose demanding requirements on the corresponding measurement and testing technology. Jena-Optronik built up a profound expertise in such technologies - both for testing their own products as well as for offering devices and services to customers.

Jena-Optronik offers specific measuring services, which can be realised in our clean room (1900m²).

For testing of optical and opto-electronic devices of their own product family, Jena-Optronik has established a sophisticated measurement and testing technology in its clean room facilities. Such technologies base, to a significant degree, on in-house developments in view of specific requirements of the various types of Jena-Optronik products.

Jena-Optronik has built components for the Copernicus missions Sentinel-3, Sentinel-4 and Sentinel -5. For these it was required to precisely align the respective optics and to verify optical performance with respect to requirement specifications.

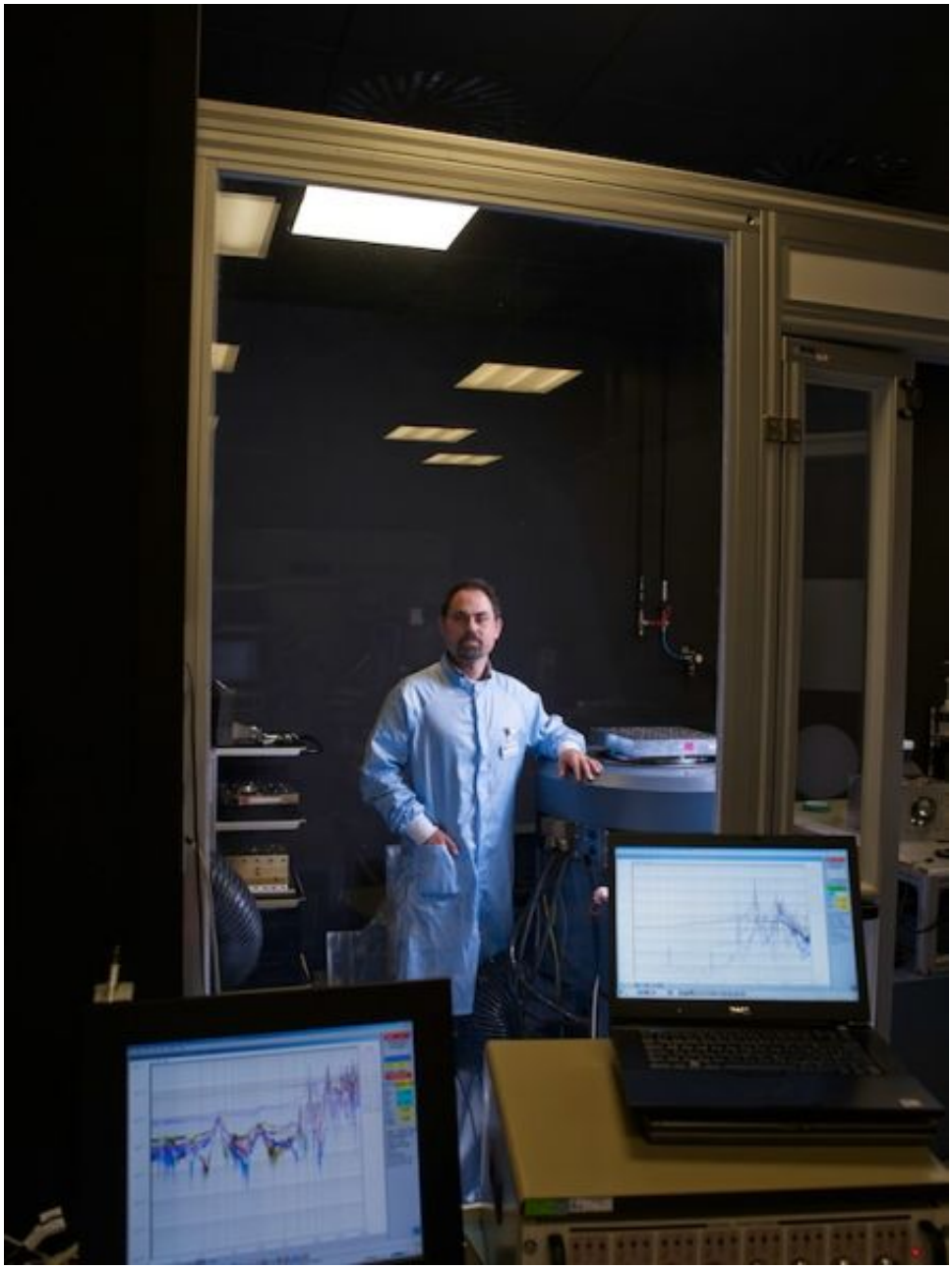
High-precision equipment utilising reference optics and optical measurement instrumentation were developed and produced by Jena-Optronik. Furthermore, specialised instrumentation have been realised in cooperation with partners from industry and research. In special application cases, such instrumentation have been designed for measuring optical properties under simulated space environment in vacuum condition at extreme temperatures.

Another crucial aspect of testing is the verification of function and durability of electronic control and data acquisition of spaceborne instrumentation. With respect to the serial production of some products, automated unit testers have been developed and are in routine use.

In general, the sophisticated measurement and testing equipment described above, together with the clean-room facilities to simulate environmental conditions and loads of a space launch, allows Jena-Optronik to offer measurement and testing services to

customers.

Moreover, Jena-Optronik is helping customers with its technologies and expertise to design and realise their own facilities.



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