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European SL-9/Jupiter Workshop

On February 13–15, 1995, a Workshop on the SL-9/Jupiter collision took place at the ESO Headquarters in Garching. More than 100 astronomers from all continents discussed the various aspects of this unique event, from the numerous multi-wavelength observations on the ground and in space to the subsequent difficult interpretation of the complex physical and chemical processes that took place in Jupiter's atmosphere.

On page 19 of this Messenger issue, we bring the summary of the concluding round-table discussion. It reflects well the present status of the ongoing, hard labour by many groups around the world. While there has undoubtedly been significant progress within several areas, it is also obvious that it will still take quite some time before a coherent, detailed understanding emerges.

The Workshop Proceedings are already at the printer and will become available by mid-April 1995. (See announcement on page 47.)

TELESCOPES AND INSTRUMENTATION

Manufacturing and Assembling the VLT Main Structure

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The final design of the main structure was completed in May 1994. Since then, great progress has been achieved in building the components of the first two main structures, and the remaining two main structures have already been ordered. The large mechanical components, like azimuth tracks and centrepiece, are at present being manufactured. All the components of the first Main Structure (MS) to be erected and tested in Milan before the end of 1995 have been built. Some of them are undergoing the final machining, and they will reach the European erection site in Ansaldo Energia in Milan by August 1995, to allow the

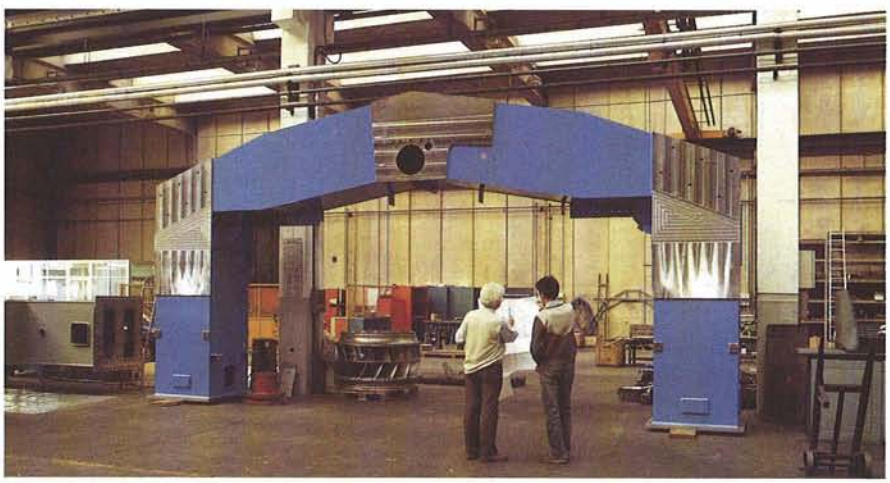

Figure 1.

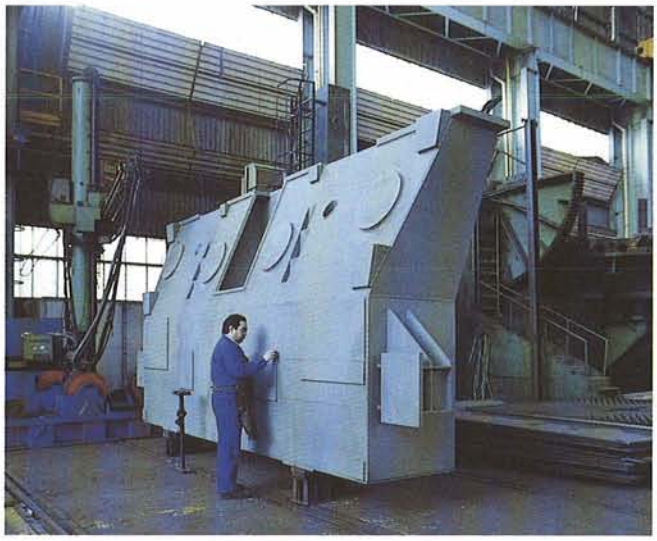

Figure 2.

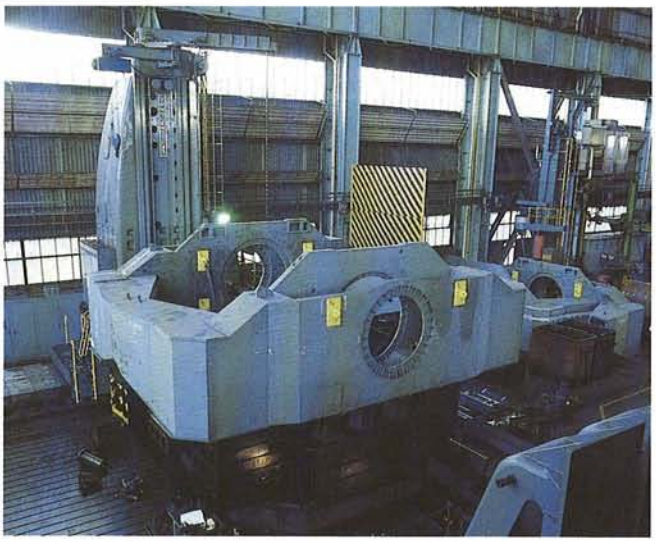

Figure 3.

complete erection before the end of November 1995. Figure 1 shows one of the four parts of the base frame of the MS 1 painted in the final colour. The base frame is about 20 m long, 9 m wide and 1 m high and weighs about 60 tons. Figure 2 shows a picture of one of the pedestals in upside-down position holding the altitude hydrostatic bearings. The centrepiece during the machining of the seats of the altitude shafts installed on the machine is shown in Figure 3.

As already mentioned before, the erection of the Main Structure number 1 will take place in one of the buildings of Ansaldo Energia located in Milan. Figure 4 shows the concrete pier in which the steel plates composing the interfaces to the telescope, have been embedded, creating a surface planar within 0.4 mm. This operation has taken about two months and great care has been applied in pouring the shrinkless mortar, to avoid any permanent deformation in the steel plates, which could have jeopardised the planarity of the interface. The azimuth tracks, which compose the bearing journal of the azimuth thrust bearing system and the centring journal of the radial azimuth bearing system, have been installed on the steel plates. They are aligned with such a precision that they create a virtually perfect plane. The planarity is about 0.08 mm and the run out of the centring journal of the inner track, which defines the run out of the telescope azimuth axis, is less than 0.1 mm.

The motors and the encoders have been built and are now on the way to Milan for integration. The tests carried out on the prototypes have shown that their performance is within specification.

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Figure 4.