ESO, the European Southern Observatory, was created in 1962 to . . . establish and operate an astronomical observatory in the southern hemisphere, equipped with powerful instruments, with the aim of furthering and organizing collaboration in astronomy... It is supported by eight countries: Belgium, Denmark, France, the Federal Republic of Germany, Italy, the Netherlands, Sweden and Switzerland. It operates the La Silla observatory in the Atacama desert, 600 km north of Santiago de Chile, at 2,400 m altitude, where thirteen optical telescopes with diameters up to 3.6 m and a 15-m submillimetre radio telescope (SEST) are now in operation. A 3.5-m New Technology Telescope (NTT) will become operational soon and a giant telescope (VLT=Very Large Telescope), consisting of four 8-m telescopes (equivalent aperture = 16 m) is under construction. Eight hundred scientists make proposals each year for the use of the telescopes at La Silla. The ESO Headquarters are located in Garching. near Munich, FRG. It is the scientifictechnical and administrative centre of ESO, where technical development programmes are carried out to provide the La Silla observatory with the most advanced instruments. There are also extensive facilities which enable the scientists to analyze their data. In Europe ESO employs about 150 international Staff members, Fellows and Associates; at La Silla about 40 and, in addition, 150 local Staff members.

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A Slice of Swiss Cheese Made Out of Steel . . .

is suggestive of the main supporting structure of the EMMI spectrograph/imager for the NTT shown in these two photographs taken at two phases of the manufacturing at the De Pretto-Escher Wyss factory in Schio, Italy. The left-hand picture, taken before welding of the covering plate, shows the inner structure with the complex net of ribs to increase the rigidity. The long poles were inserted temporarily to align the apertures. The right-hand picture shows the welded, cleaned piece mounted on a measuring machine for the check of the dimensions. The openings correspond to the main optical components to be inserted: collimators, filter and grism wheels, folding mirrors, etc.

The dimensions of EMMI's main structure are 240 cm in length, 160 in height and 28 only in depth; the weight is about 800 kg.

The structure will arrive at ESO in February. Mounting of the different functions (now being integrated and tested in Garching) on the main body and testing of the overall instrument will take place within the summer of this year. S. D'ODORICO, ESO

ontante

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