

Reference

## PLEXIGLAS®

### Submarine Lula 1000



#### Market segment

Industrial Construction & Architecture,  
Specialty glazing

#### Product

PLEXIGLAS® GS Block

#### Operating company

Foundation Rubikoff-Niggeler,  
Faial, Azoren

#### Fabricator

Heinz Fritz Kunststoffverarbeitung  
[www.heinz-fritz.de](http://www.heinz-fritz.de)

#### Selection criteria

- The patented manufacturing process of Evonik Performance Materials guarantees the highest optical purity.
- PLEXIGLAS® block material is available with a very high light transmission.
- Certificates of the Germanischer Lloyd are available
- Beside the excellent product properties the supply reliability of Evonik Performance Materials is a further selection criteria.

#### Description of the application

The cockpit for Lula1000 required a 1,000 kg block. The thinnest section of the finished viewing dome has a thickness of 14 centimeters. The concave design allows for a viewing angle of 150 degrees. In deep water, the pressure on the cockpit is enormous. At a depth of 1,000 meters, there is a pressure of 1,000 tons on each square meter, the equivalent of 1,100 Smart cars stacked on top of a mid-sized flat TV screen. Glass would not be able to perform under these extreme conditions.

The finishing work of the PLEXIGLAS® block was done by a specialty firm in Baden-Württemberg, which took care of grinding the cockpit.

The viewing dome of the Lula1000 has a diameter of approx. 1.40 meters. Another PLEXIGLAS® dome with a diameter of 61 centimeters seals the entry hatch at the top.

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