

ROHACELL® -

The Core for Sandwich Solutions

Shapes

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2008

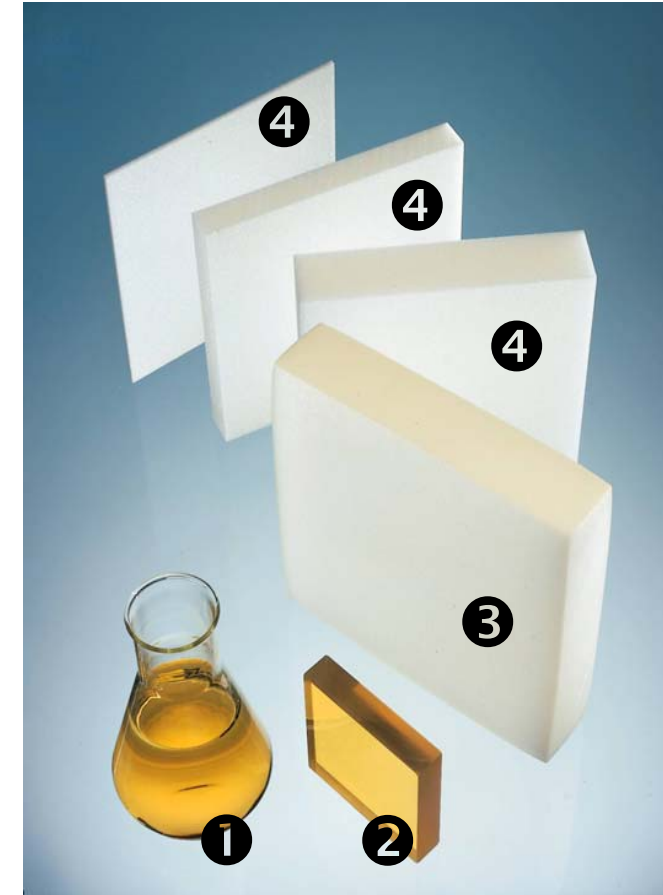


EVONIK
INDUSTRIES

Production Steps of ROHACELL®

Basic Monomeres : Methacrylic Acid / Methacrylonitrile

1. **Solution of liquid monomers**
2. **Co-polymer sheet = pre-product**
3. **Raw foam block**
4. **Cut-to-size foam sheets**
5. **ROHACELL® Shapes**

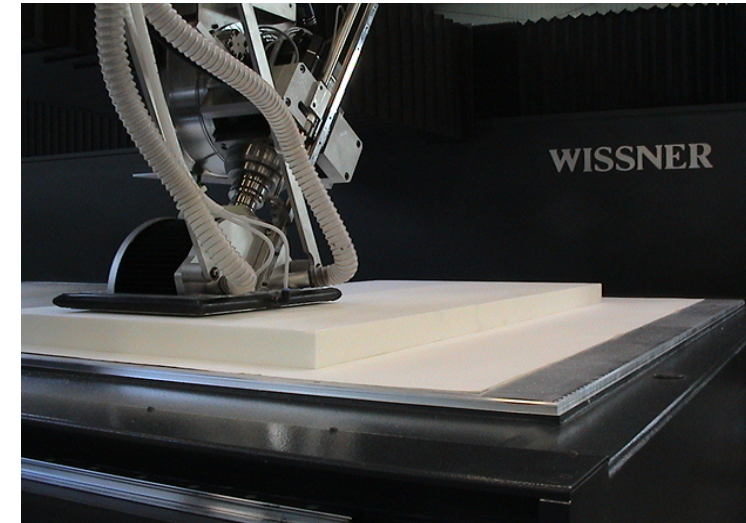


SHAPES Equipment



4-axes CNC machine

- Special vacuum table
- New routing tool-concept
- 3000 * 1500 mm²



Thermoforming oven

- Fast heat-up rates
- 3 individually tunable air-zones
- Low noise hot air blower
- Special loading concept
- 3100 * 1500 * 2300 mm³



Shapes Equipment



5-axes CNC machine

special vacuum table

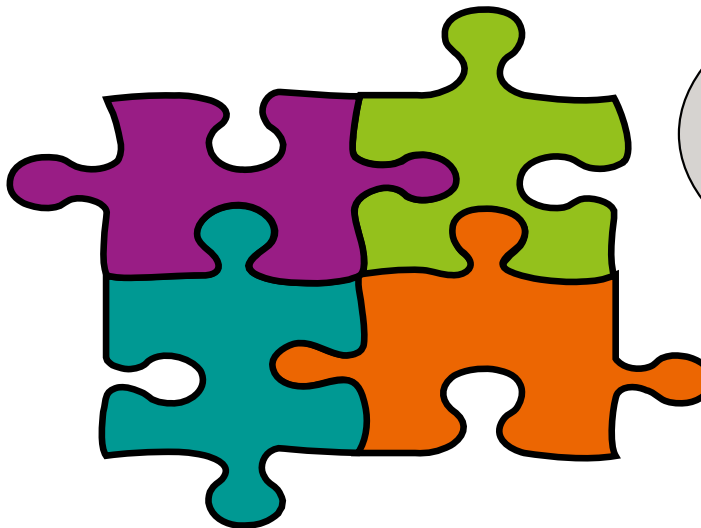
3600 (x) * 1800 (y) * 1200mm³ (z)

Machining size 3.020 x 1.220 x 910 mm



ROHACELL® SHAPES

“CORE” Competence



Engineering Service

- ftp.site data transfer
- CAD data transfer to NC data 2D/3D
- generate NC data
- Prototype and serial production

Thermoforming

- cold/hot forming
- thermoforming tool concept

Pre-Process Management

- Moisture management
- Drying and/or Heat treatment

Logistics

- just in time
- ready to use
- optimized packaging concept

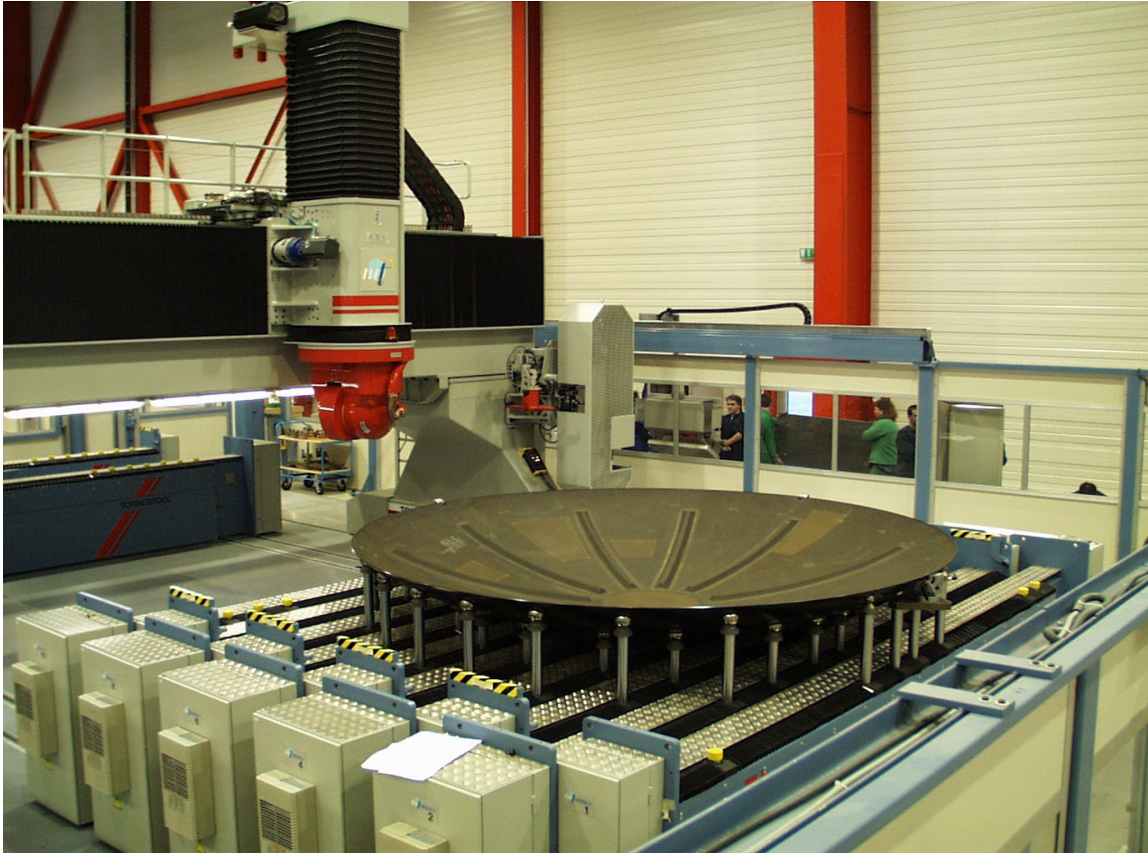
Quality management

- FAI (first article inspection)
- Certificate of Conformity for each delivery
- Digital measurement with “FARO” arm
- Process control documentation
- reproducible quality

NC machining

- 4 Axis / 5 Axis

Thermoformed and NC-machined ROHACELL®



Pressure bulkhead A 340-600



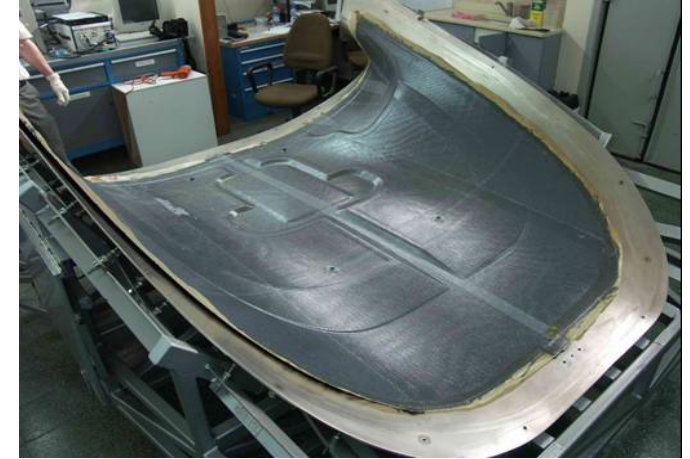
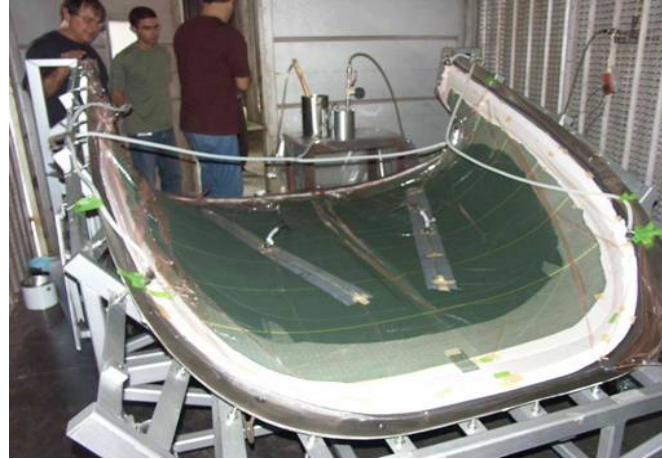
Precisely machined and
thermoformed profiles

Thermoformed and NC-machined ROHACELL®



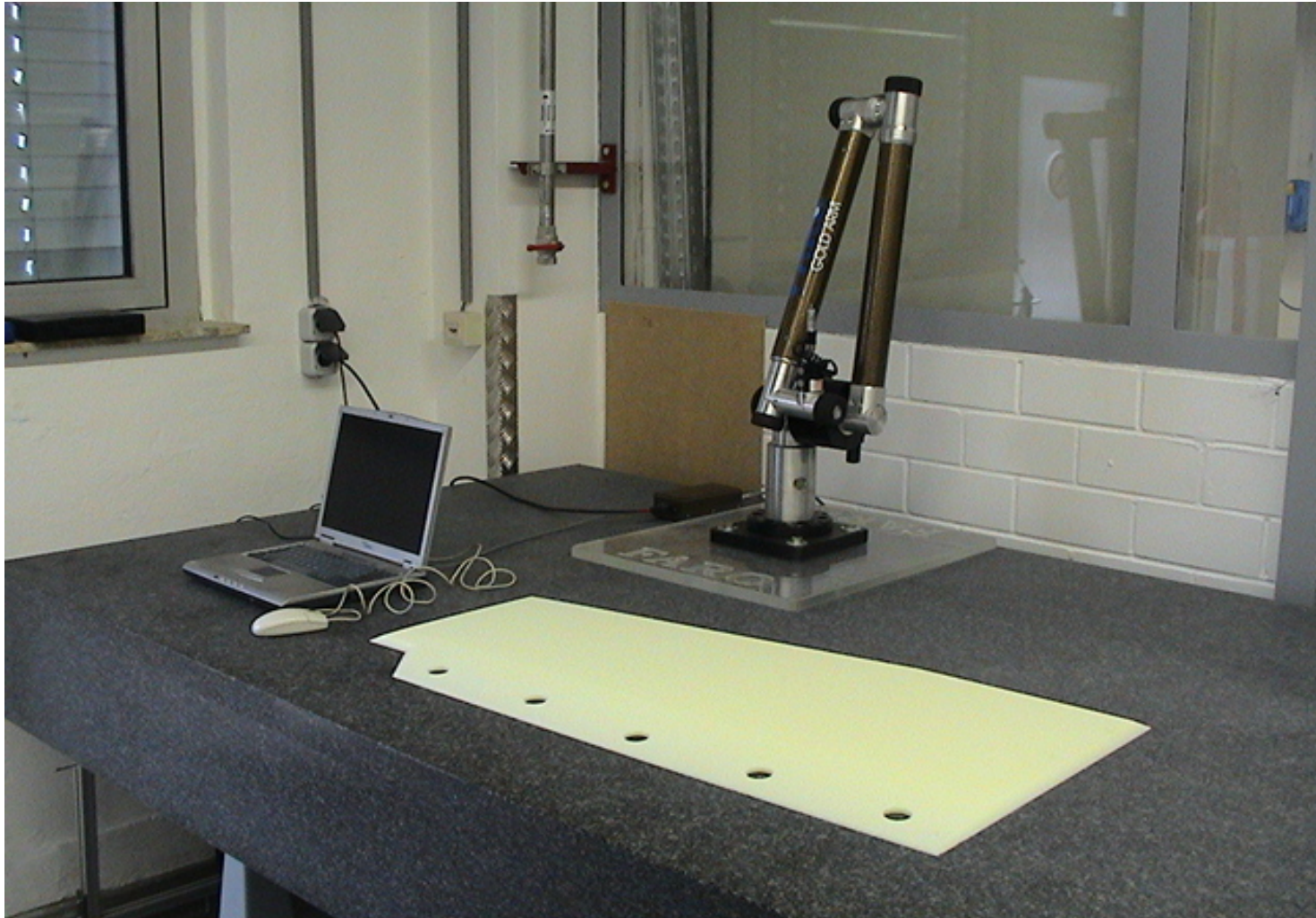
Pressure bulkhead A380

Thermoformed and NC-machined ROHACELL®



Belly fairing Gulfstream G150, IAI

Documentation with FARO Measurement Device



NC-Machined ROHACELL®



NC-machining with vacuum assisted negative tool

NC-Machined ROHACELL®

