

# PRODUCTS IN ACTION

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## Simulator Cabin



*Simulator Cabin for STN Atlas Electronics GmbH*

Multiplex GmbH is developing and manufacturing a simulator cabin for STN Atlas electronics GmbH. The cabin can be adapted for different training roles like road or rail transport or military vehicles.

The simulator structure is in an all sandwich construction consisting of glass fibre reinforced polyester faces on each side of a DIAB core material. The requirements on the deflections due to angular and linear acceleration are very tight in order not to exceed specified limits during operation.

The solution was to use FE-analysis and Divinycell H-grade core material to optimise the stiffness of the sandwich.

Also the construction is able to cope with higher loads without breaking and the eigen-frequency of the construction is higher than 15 Hz in order not to interfere with the imaging devices.

### Core material:

**Divinycell® H-grade**

Height:

2.4 m

Width:

6.2 m

Sandwich weight:

500 kg

Face material:

Glass fibre / Polyester

Manufacturer:

Multiplex GmbH

Structural Design:

DIAB Technical Services

