



# Superforming Your Design!

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Superform

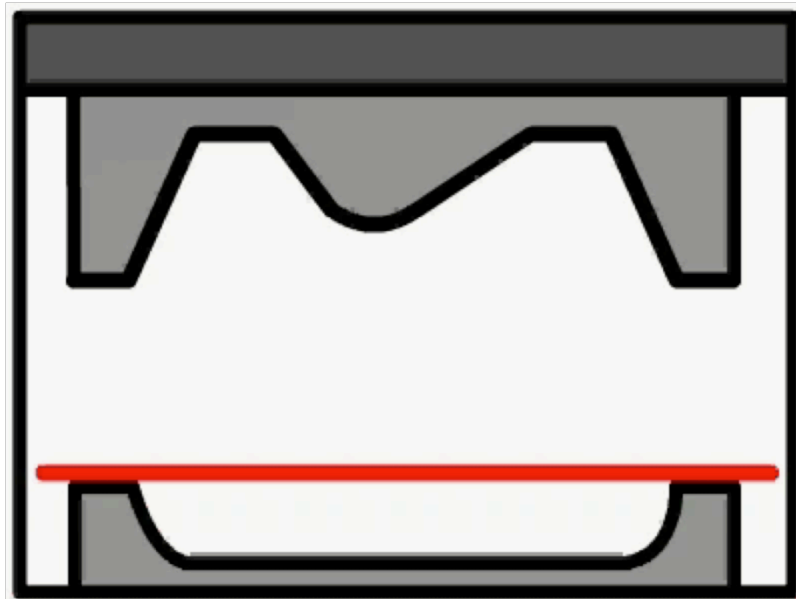




- The Superforming Process
- The Parts & Tool Designs
- Case Study : VLU Interiors
- Possibilities & Advantages

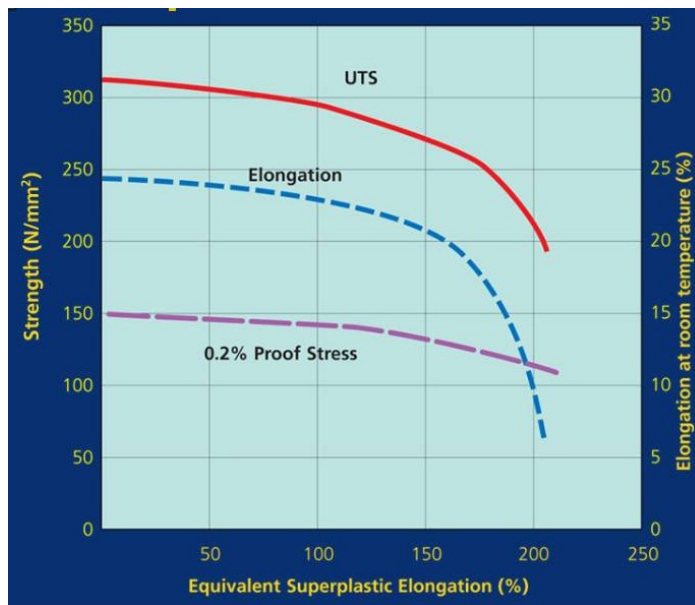


# The Superforming Process



1. Tool closed and sheet clamped
2. Tool chamber heated to 500°C
3. Heated sheet forced into female cavity using air pressure
4. Tool opened and part removed

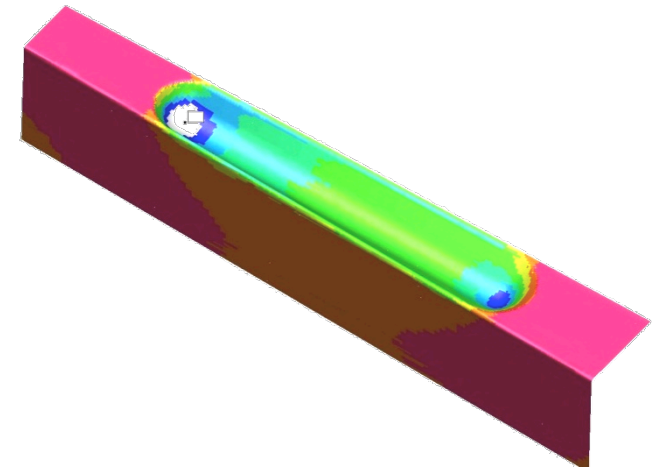
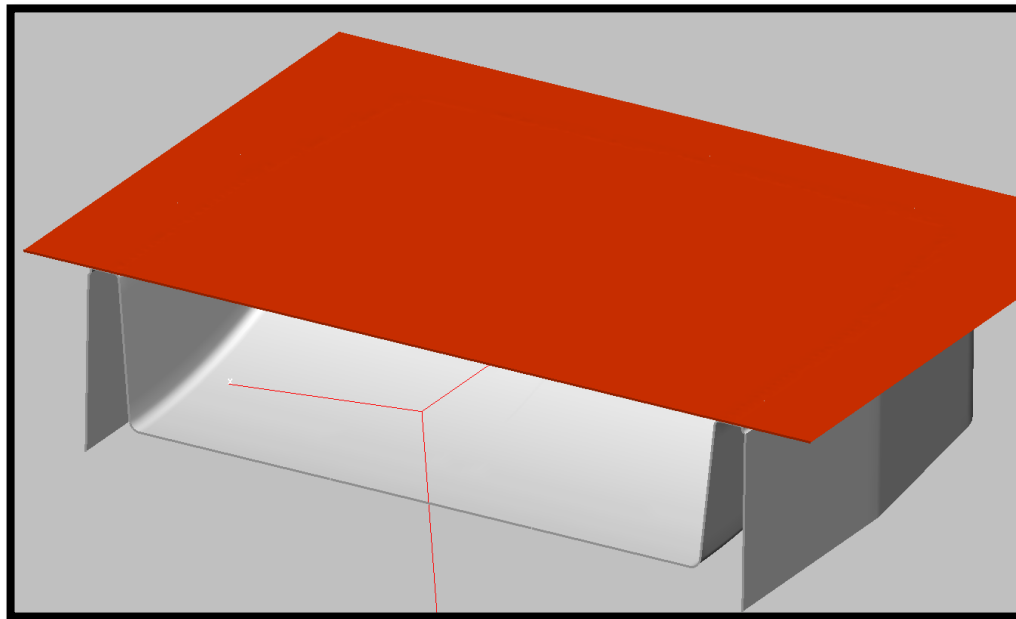
# 5083 Aluminium Alloy (AlMg4,5Mn)



- Excellent Strength & Durability properties
- High Corrosion Resistance
- Easily Weldable
- Ready base for coating / painting



# The Superforming Process



# The Superforming Process



## 1. Formed Panel



## 2. 5-Axis Laser Trim



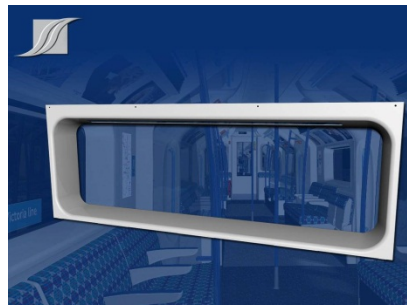
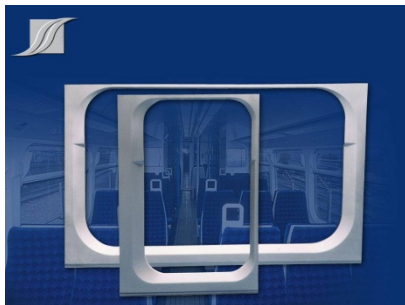
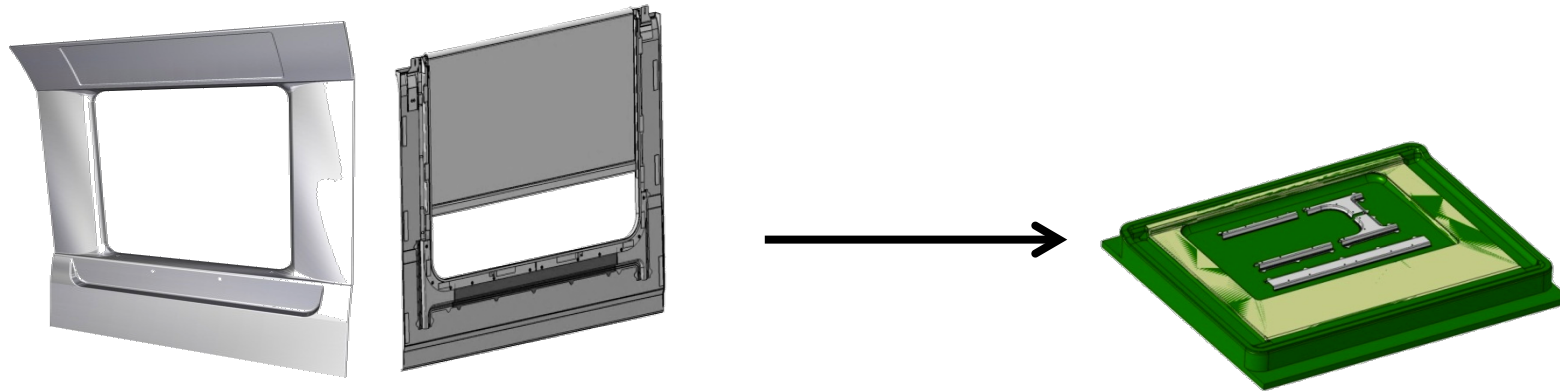
## 3. Trimmed Panel



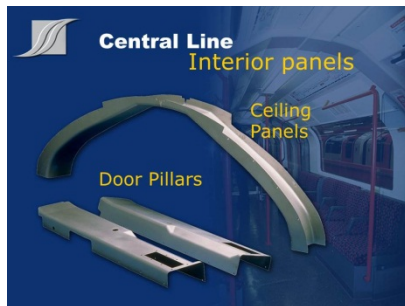
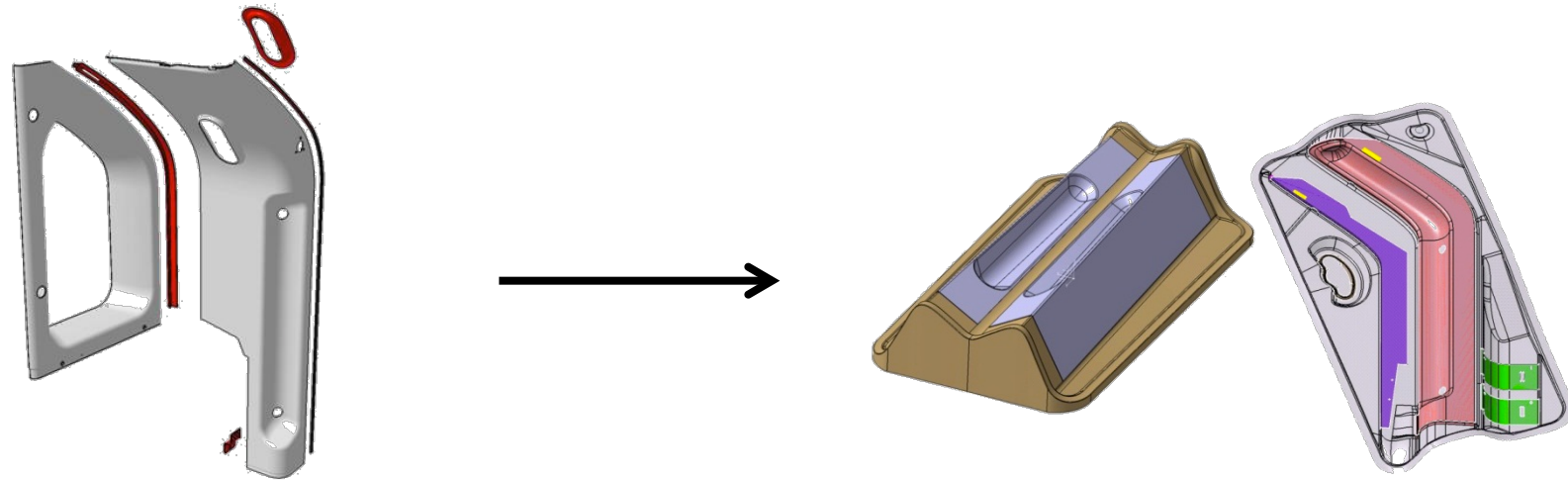
## 4. Paint & Assembly



# Window Surround Assemblies

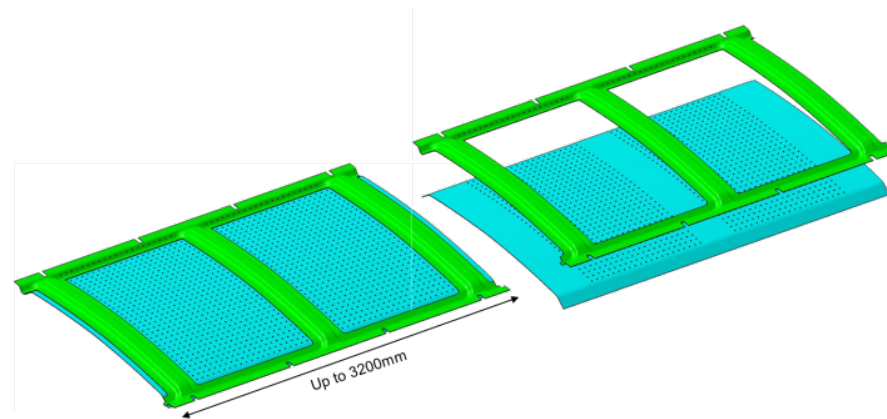


# Door Pillar Assemblies





# Ceiling Panel & Interior Solutions



## Case Study – VLU Interiors

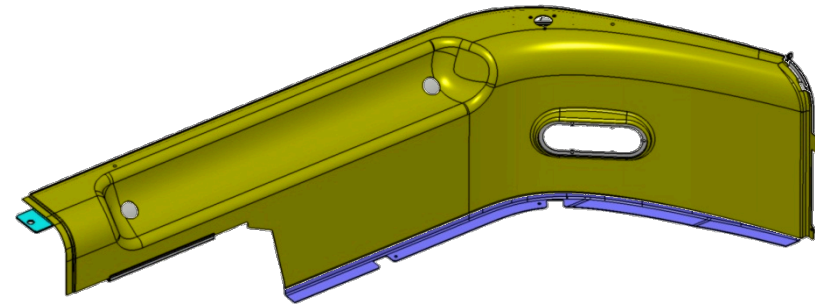


### **Before**

- Designed as separate parts
- Surface mounted handle
- Fixings bonded onto rear of part

### **After**

- Single piece solution
- Organically recessed handle
- Some fixing points designed into part





## Allows you to maximise

- Design proportions
- Reflection of light
- Branding
- Design in 3 dimensions

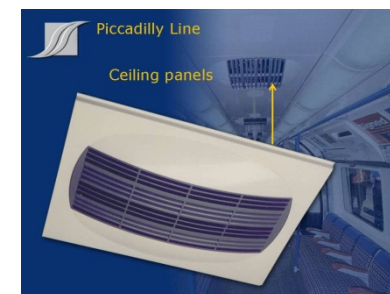






## Allows you to

- Organically include items such HVAC ducts within the panel
- Incorporate several panels into one
- Engineer a panel which has inherent structure.
- Design panels 2.0 mm thickness and under
- Comply with EN45545



# The Complete Life Cycle



## Design      Purchasing      Development      Production      Maintenance

A blue arrow pointing from left to right, starting under 'Design' and ending under 'Maintenance', indicating the sequence of the life cycle stages.

Full CATIA V5 Design and feedback capabilities

Choice of 3 high performance materials

Greater design flexibility and styling

Reduced Piece Price

Reduced Part Count

EN45545

Full Assemblies direct to build

High Supply Rate Possible

Reduced Assembly time

Excellent Repeatability

Higher Accuracy fit-up

Easy Repair

Weight saved

100 % Recyclable

Low Maintenance

100% Fire Resistant

Easy Production & Supply of spare parts

Questions?



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***View our sample panels @ Stand 9950***