**Magnesium inner door**

**Exhibit description**
Inner part of a car door made of Magnesium wrought alloy

**Function**
Inner door panel

**Concrete benefits**
Weight reduction of more than 50 percent compared to a conventional steel design

**Exhibit-related competences**
Technology development for machining Magnesium flat products (forming, cutting, joining), detailed determination of parameters and FEM for tempered processes

**Unique selling proposition**
Handling of the continuous process chain, tempered processes (deep drawing, stretch drawing, tube bending, edge rolling, hydroforming) for Magnesium

**Target industry/target group**
Automotive suppliers, container construction, Aerospace industry

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**Hybrid car door**

**Exhibit description**
Hybrid-car door (plastic inner part, hydroformed frame made of steel, stainless steel or aluminum); side collision protection reinforced with aluminum foam

**Function**
Self-carrying car door with new concept

**Concrete benefits**
Weight reduction of approx. 15 percent compared to conventional design

**Exhibit-related competences**
Design of complex units adapted to load, using different materials

**Unique selling proposition**
Hybrid design using different materials (steel, aluminum, plastics) and innovative processes (hydroforming joining, aluminum foam, gluing etc.)

**Target industry/target group**
Automotive suppliers