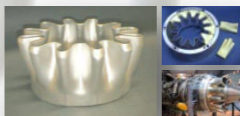


explosive forming **special shapes in sheet metal**

Any shape

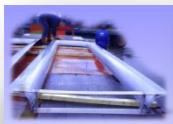


Gas turbine seal ring formed with undercut



Airplane engine exhaust mixer

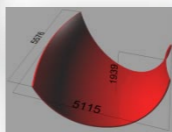
Any size



*Panel RES nuclear water (Cadarache) for nuclear water basin appr. 10x2 m
5 mm stainless steel*



Any thickness



Largest panel to be formed for nuclear fusion reactor ITER from 60 mm stainless steel



Gas turbine part from a cobalt alloy (Haynes 230). Many alloys from aluminium, steel, nickel, titanium are explosive formed

Any metal

Welded blanks



Welded shapes can be explosive formed, also with different thicknesses. Applied welding technologies are MIG, TIG, Laser, Electron Beam, Friction Stir, Explosive welding.

Unlimited possibilities...



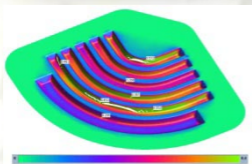
Research & Development

CAD/CAM



Rolls-Royce MT30 Exhaust Collector engineered for 15 explosive formed parts

Design and realization of an explosive forming die



Technical risks are identified and solved in an early stage of a project

Forming simulations

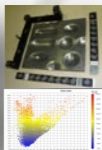
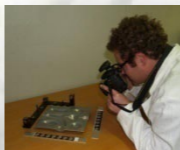


Deformation analysis

Process monitoring



Data acquisition system with strain gages, hydrophones, geophones etc. for on-line process monitoring



Deformation analysis by photogrammetry

Material analysis



Microscopic analysis

CMM



Welding jig set up for shape analysis by photogrammetry



Where special sheet metal shapes are needed:

Art, Gas turbines, Steam turbines, Nuclear, Aerospace, Architecture, Transport, ...