

Objective

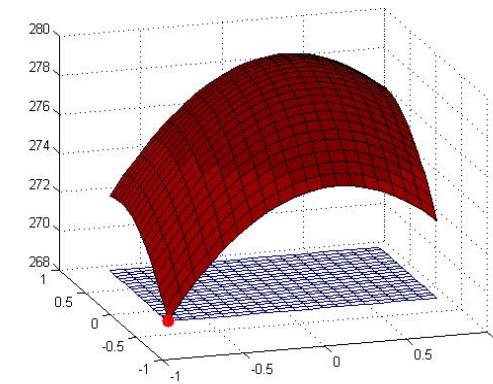
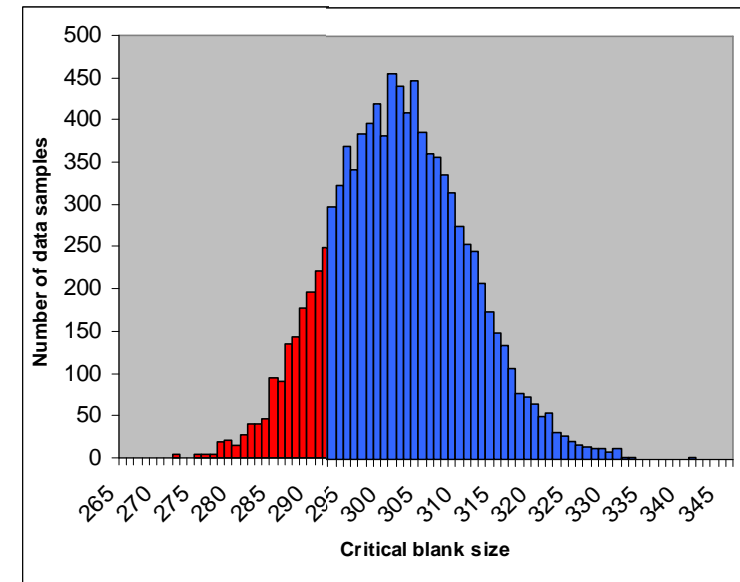
OPTFORM provides an optimisation algorithm for metal forming processes using time consuming Finite Element (FE) simulations. It utilizes meta modelling techniques like Response Surface Methodology (RSM) and Design and Analysis of Computer Experiments (DACE)

Research topics

- Numerical prediction of the variation in maximum feasible blank size due to variations in material properties
- Prediction of stamping process robustness

Industrial benefits

- A virtual study showed that for a required blank size of 295 [mm] a scrap rate of 15% is to be expected. (red part in histogram)
- Corus' support to stamping robustness will enable its customers to increase their competitiveness.



Response surface with quadratic interactions