

Objective

In the aerospace sector rubber pad forming is regularly used to manufacture sheet metal components due to the limited tooling costs and the suitability for smaller series.

Today more and more parts are made from AA6013 T4, instead of AA2024, resulting in the need of the same level of experience in behaviour during forming operations of AA6013 T4.



Research topics

- Development of quantitative reference information on the spring back behaviour of alloy AA 6013 T4. Results of numerical modelling were compared with results of practical tests in which a variety of test dies was used.

Industrial benefits

- Shorter lead time in the application of the new alloy AA6013 T4 resulting in cost savings of 11%
- Reduction of rejects in the manufacturing process of parts due to higher accuracy by 12 %

