

Sükosim

sheet metal extrusion

High strength components with integral fastening points

The innovative Sükosim Sheet Metal Forming Technology combines extrusion, deepdrawing and cold-forming in the production of complex, high strength structural components. If necessary specific, localised material thickening of the sheet metal can increase wall thickness to double the original size. The mechanical strength of deep drawn tubes is significantly increased by thickening of material and also through work hardening.

Due to the fact that weld or clinch nuts are no longer required, several previous failure modes can also be eliminated. The complex Sükosim components do not have any particular corrosion weakness points and require no further heat-treatment. An extra large wall thickness could also allow drilling out and re-tapping of the thread form as part of future service requirements.

Sükosim raises sheet metal forming to the next level – multiple component assemblies or multiple functions are simply combined into a single component. This offers benefits in terms of weight reduction and optimisation of component strength



Steel & aluminium sheet metal from 1.5mm to 3.0mm thick can be processed. This is the raw material thickness, it is possible to thicken / reduce localised areas of components as required.

Features

- Integrated internal or external threaded fastening points in a single component
- Material can be formed in such a manner that material thickness is removed from areas where strength is not critical, and increased in the areas where it is needed
- Components which require several different threaded fasteners can now be replaced by one single component
- Strength property class 10 can be achieved
- Future thread re-tapping, for service purposes is possible

Benefits

- One or more nuts can be integrated into one component
- Reduction in number of weld points
- Reduced component weight
- Reduced handling cost
- Increased strength of the component
- Reduction in the number of corrosion points
- Reduction in assembly time
- Reduction in overall assembly costs

F 3107 - A - EN 01.2008