

Fusee of an agricultural machine

Redesign of a welded construction into an ADI sand-casting

Point of departure

All of our clients are experts in their own industry. Together with the client, EDS is able to design a component that fits the needs and wants of the client. This project was commenced for a client in the agricultural industry.

The clients' engineers were aware that the current welded steering knuckle hub was overengineered and EDS-Casting was asked to reduce weight, production costs and ease of assembly. The challenge was to combine multiple components in a single casting.







Topology optimization

Topology optimization was used to aid in our mission: Only apply material where needed. An estimation is given by the software of the most weight efficient solution.



36%

Weight reduction
From 126 kg in steel to 84 kg in ADI



21%

Cost reduction

Reducing risk by sourcing in EU



100%

Fit into requirements

Three configurations in one casting

