

Optimization of steering knuckle with Aluminium Additive Manufacturing



Innovation at the heart of Sokaris Engineering: *Pushing the limits of design with Optimization*

With a real focus on innovation, Sokaris Ingenierie has designed and optimized a steering knuckle made of **Aluminium** with **Additive Manufacturing Process**.

Thanks to deep expertise in **global optimization product-process-material**, and despite the large dimensions of the part, our team succeeded in realizing an **optimal geometry design** that ensures **mechanical properties**.

30%

This is the **significant mass reduction** that was obtained with our final solution!



Our automotive DNA

We have been involved in the automotive sector for many years. Henceforth, we are able to provide technical support **from specifications to industrialization.**

Tell us about your project!



Our approach to meet your needs

- Optimized design
- Optimization
- Finite element calculation & System dynamics
- Crash validation
- Process simulation
- Material characterization
- Cost estimation of manufacturing unit
- Cost estimation of mass production part



Our scope

- Body in white: Bi-material assembly
- Structural parts
- Engine bay
- Chassis components
- Car cockpit



Sokaris, it is also...

15 years of experience in optimization and mass reduction for mechanical and structural parts.

Ready, get, set, Go!

<http://www.sokaris-ingenierie.com/>