

- Process: High pressure die casting
- Material: Magnesium
- Advantages of this methodology:
 - ✓ Reduction of the development time✓ The mass target was obtained
 - \checkmark A result close to the final design
- Mechanical conditions: Compliance with standards: 18 cases of mechanical stress





Faced with increasingly technical and economic stakes, the design and sizing of structural components tends to become more complex.

Sokaris Ingenierie mobilizes skills and expertise for this kind of challenges in order to offer innovative and multi-material assembly solutions.

The keys to success: A precise development

Thanks to a first analysis of the components in their vehicle environment, their **functional specifications** are defined. These definitions are essential since it determines the scope of work. Henceforth, we can start **designing** and **dimensioning** each component that make up the **sub-assembly**.

From this step, the **constraints of the manufacturing process** are taken into account in order to maximize study time. Through our methods in **design**, **optimization** and **calculation**, we quickly end up with a **geometry ready for industrialization** that may combine various materials or processes when needed.

Besides, our team performs all the calculations (crash test) and advanced simulations to set and validate mechanical criteria at the earliest.

In parallel, material characterization and technologies of assembly are included in the development phase to quickly reach the right design and mechanical strength with optimal material and assembly method approved for industrialization.



What are your goals? Price, mass-reduction, performance. Focusing on your issue and your need, we help you to determine and reach your goals!

From preliminary design to industrialized part: Do you need turnkey project? We provide expertise for every stage of the process.