

Aluminium alloys yield high specific strengths and rigidity and are therefore indispensable in many applications, especially automotive industry. The demand for Al alloys has increased by 150% in the last 15 years which increased the cost of production and environmental footprint. CastQC aims to produce a more sustainable aluminium alloy that directly contributes to a 30% weight reduction and a 20% reduction in CO<sub>2</sub> emissions compared to the existing alloys. It is known that a 10% weight reduction in an ICE vehicle results in a 6-8% reduction in fuel consumption; or 100 kg weight reduction reduces fuel consumption by 0.3

to 0.5 l/100 km, which corresponds to an 8-11 g reduction in  $CO_2$  emissions. CastQC alloy will also contribute to excellent durability properties, including high corrosion resistance.

By using CastQC alloy, consumers will benefit from more efficient and safer vehicles, while manufacturers will benefit from the reduced weight of installed parts.

## Goals:

- a 30% weight reduction
- 20% CO2 reduction
- 6-8% fuel consumption reduction



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