



SUCCESS STORIES

PARTS CONSOLIDATION DELIVERS GREATER ECONOMY

105 | PART REDUCTION CUTS COSTS

Limiting required fasteners for a next generation truck platform presents a challenge to all those involved in prototyping, but the rewards of an optimized Bill of Materials (BoM) are far reaching. Optimas Solutions offered design, sourcing and logistical expertise to help a heavy duty truck OEM overcome these challenges.

PROBLEM

A **global manufacturer of heavy duty trucks** was looking to **economize cap fasteners on a new model** of truck, while **still attaining high engineering standards**. The prototype contained a high number of cap fasteners, which **needed to be reduced to improve the BoM for the new vehicle platform**.

SOLUTION

Our design engineers were able to reduce the initial number of cap fasteners from 150 to 45 across the whole vehicle via a process of part reduction, consolidation and rationalization. Working closely with the customer, this fastener economization was conducted while still preserving the operational performance of the vehicle - a key proviso for a large commercial truck.

RESULT

The reduction of fasteners minimized the BoM for the project, providing increased value to the manufacturer. Furthermore, the decreased number of cap fasteners increased the speed of assembly, while simultaneously simplifying servicing for technicians when future vehicle maintenance is required.