Subros

Compressor Mounting Bracket for Air Conditioning System

The Subros applied the sand casting process to create an aluminum die cast compressor mounting bracket. This bracket, used to hold the air conditioning compressor in the desired position, is subjected to very high stresses due to thermal, static and dynamic loading, which requires the design to be robust enough to sustain the external excitation load coming from engine. Optimization of the bracket allowed for removal of the idler pulley, resulting in a 30% weight savings over the baseline.

Category: Module

Application: 2018 Subros Limited XYZ

Weight Savings: 53%
Lighter than baseline component

Methodology: Design Optimization