

Defects In Molded Housing For Automotive Industry

PROBLEM:

The plant supplying components for a leading automotive OEM in Europe had complaints due to molding defects

BACKGROUND:

The plant in Hungary making molded components that went into the subassembly for a high-end car in Europe realized that there were manufacturing defects that could not be detected during production and subassembly processes. Field failures were on the increase and this severely impacted credibility of the company.

SOLUTION:

To begin with, day to day data was collected and analyzed using Multi-Vari study options. We had to identify and address high-level focus areas. Also, a measurement system analysis of the online pressure testing equipment was carried out to ensure that testing simulated real life situations. The Multi-Vari study helped us reduce the most probable variables that contributed to the defect. We setup a DOE (Design of Exponents) in order to understand key contributors for the molding issue. The DOE helped us to identify issues in mold as well as the machine set up.

RESULT:

The molding issue was completely eliminated. New test jigs were set up to screen all the parts that were produced previously and only that got sent to the subassembly.