



SOLUTIONS DRIVEN:

Full Design Verification and Production Validation on Interior Trim for Vehicle Manufacturing

Without the experience or in-house knowledge of DV (Design Verification) and PV (Product Verification) test plans, a UK based vehicle manufacturer approached **CSA Group Leyland** for assistance in developing and executing a full DV and PV test plan to suit a new model range interior trim.

CSA Group started by reviewing and refining the test procedures and methods currently in use, enabling them to define a comprehensive DV and PV test plan to suit the customer's specific requirements. The critical components and interfaces were then identified and an assessment of the test items was undertaken. In the absence of a Body in White (BIW), complex fixtures were designed and built on-site in Leyland to mount the components in the correct orientation and spatial relationship with mating components. Environmental (chamber-based) testing including thermal cycling and solar loading was then carried out, with a post-test evaluation completed to analyze gaps, flushness, photogrammetry and test sample degradation. This was followed by durability testing of the critical components including actuation, cyclic loading, static loading, impact and abuse testing.

The materials were then validated including resistance and emissions testing. Finally, full reports were produced with pictorial and data evidence of the testing completed. All testing and, where necessary, re-testing was performed within a planned time slot allowing the client to meet critical deadlines. The client returned for further DV and PV testing on subsequent models due to CSA Group's efficiency and thorough attention to detail.

