

Project Summary:

Analysis of Electrical Connections in a Pressure Transmitter

By performing a comprehensive design and manufacturing review of a pressure transmitter, DfR Solutions was able to recommend several design changes to prevent electrical connection failure for a major process instrument manufacturer. DfR recommended the elimination of hand-soldering, discontinuation of Au-plated connector leads, and the use of connection alternatives to minimize failure. By placing an emphasis on the integration of interconnections into the overall system design review, the connection failures could be solved at an earlier stage in the design process thereby eliminating the frustration and extra cost of failures at a later time.

Keywords: pressure transmitter, design review, manufacturing review, failure, electrical connection, connectors, interconnection, interconnectors. elimination of hand-soldering, gold embrittlement, package solution, glass diode cracking, solder creep, packaging, crimp, through hole, terminal excess solder, flex circuit