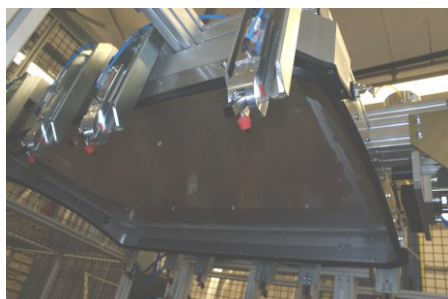


Battery Tray Leak Test Machine with Infeed & Outfeed



TQC have designed and manufactured a fully automatic solution to provide the final leak test to ensure an automotive battery tray is fit for purpose.



The tray is manufactured from pressed steel components welded together and then hand finished with a sealant to provide the leak tight chamber.

The leak test facility forms a chamber over the battery tray and clamps a seal down onto the flange area around the up turned lip of the battery tray. The seal is generated using a 'P' shaped neoprene seal.

The battery tray is transported around the conveyor system by a palletised system, each battery tray has it's own TQC designed and manufactured dedicated pallet.



The test pressure is 16mbar and once the test pressure has been achieved it stabilises and is held for 60 seconds. During the 60 second time period the test pressure must not fall below 14 mbar otherwise the part fails the leak test.

The system is controlled via a PLC with all leak test parameters editable through the HMI.

The system maximum cycle time of 3.75 minutes (225 Seconds), in practice the system throughput is nearer to 90 seconds.

