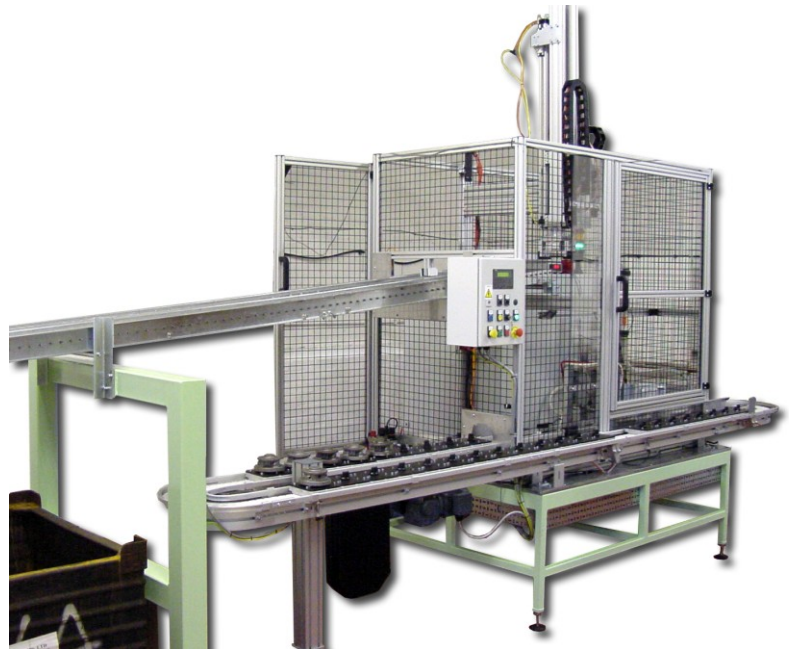


Platen Based Flow Test Machine

The customer required a 100% production flow test for the water cavity with a turbocharger centre housing to ensure sufficient flow passes through.

The flow test uses an air flow correlated to a minimum water flow value at a pressure drop of 0.1bar. The test checks for total or partial blockage of the water cooling cavity.

This TQC system allows manual loading of parts into an infeed buffer and then automatic flow testing of the parts. At the test station the part is lifted clear of the platen, the open ports are sealed and air is used as the test medium. The air flow is measured and if sufficient flow is achieved, the part is marked as a pass. All parts are automatically unloaded by a 2-axis pick and place system, passed parts into one lane, failed parts into another. The empty platens are recirculated ready for manual re-loading.



Key Elements

- Flexlink conveyor & platen part transfer system
- Flow test station using a rotameter and digital display with minimum flow alarm trip point
- Impact marking of passed parts
- Automatic unload
- 30 second cycle time, 10 minute infeed buffer

