

Semi-Automatic Assembly Conveyor System for Automotive Radiators

This facility has been designed to provide a semi-automatic assembly process and comprises of a slip chain conveyor, which conveys 8 off pallets, which in turn have inter-changeable tooling to suit the radiator system being assembled.

There are 4 manual workstations, a leak test and an un-load station along the front edge of the conveyor, the opposite side of the conveyor is simply used to return empty pallets back to the start.

At each of the manual stations is located an electronic torque driver, tooling nest for drive bits and an operator interface panel.

The leak test station has a manually operated guard in front of the test to protect the operator; this is interlocked to the safety circuit.

Key Elements & Operating Parameters

- Flexible, configurable system.
- TAKT time of 120 seconds.
- Pallet tooling with features to allow lift and rotation of parts.
- Assembly tool stations.
- Leak test station.
- Intelligent power tools
- Local operator control boxes
- Standard Operating Procedure (SOP) display system with 6 PC screens.
- Barcode reading for part verification.
- Label generation
- Live assembly line data on screen
- System configured for over 100 different part numbers

