



Two Stage Press Feed Mechanism

Description

Design and manufacture of an automated two stage press feed system for window hinge components to increase production from 13 parts per minute (for an existing manual process), to 90 parts per minute for the proposed automated solution.

The 35 tonne press feeding system had to cater for 8 different sizes of hinges and comprised a marshalling table, a two stage walking beam with guided pneumatic cylinders (for load / unload), a mis-feed detector, product lubrication system and a small output conveyor.

Disciplines Used

- Mechanical and pneumatic design
- Manufacture and assembly
- Test and commissioning

Specification Summary

- Cam control, mechanically linked to ramhead with two stage walking beams
- Angled component input chute with four deep capacity magazine, fed from a marshalling table
- Pneumatic pick and place system for product handling
- Integral oiler coupled to component feed
- Safety interlocked guarding



Press & Feed Table Assembly