

TPL-30 Series

Semi-Automated AI Pen Labeller

■ ■ ■ Multi-Format Pen Labeller with C02 Laser Printer

Robotic Packaging Solutions



Multi-Format Auto Injector Pen Labeller - Typical Configuration

Pens are manually loaded by an operator into the machine, labelling up to 30 pens/min. Batch data is manually entered via the HMI or automatically downloaded from an MES/ SCADA system. The C02 laser prints three lines of data (LOT, MFG, EXP) onto the label.

Vision inspection cameras verify label position, presence, and variable batch data. Pens with non-conforming labels are rejected into a bin, with reject verification, machine stoppage after three consecutive rejects, or bin full alerts. Verified pens are either manually removed or transferred to a buffer area holding up to 30 pens.

Features and Benefits

- Full wrap or c-wrap pen labelling capability
- Ergonomic design within a compact footprint
- Easy access for line clearance, cleaning and maintenance
- Colour touch screen operator HMI
- Gentle product handling via servo control
- OCR and 2D data matrix verification of variable data
- Vision inspection of label position/ presence with reject
- CE marked and issued with CE cert of conformance



Technical Information

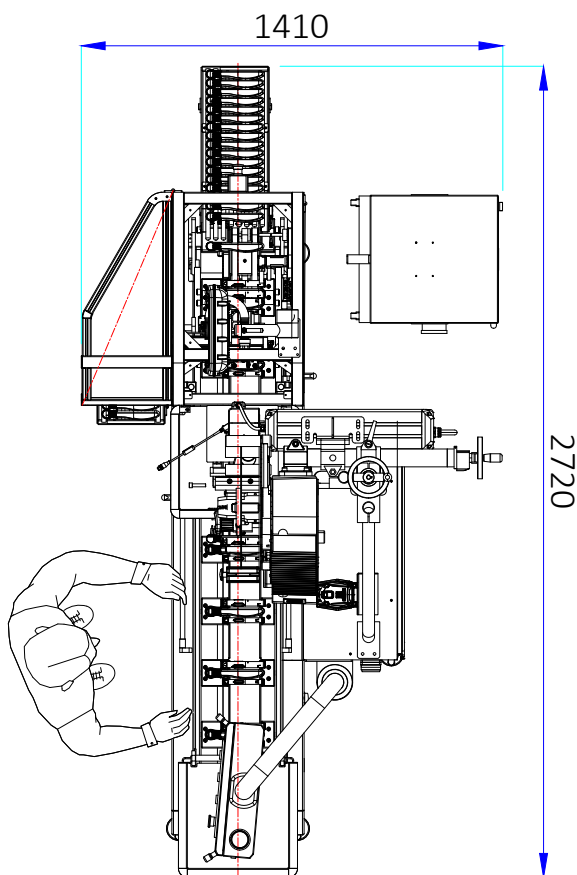
Base Machine Modules	<ul style="list-style-type: none"> - Control Panel – AISI 304L, IP66 - Servo Controlled Transfer Conveyor - Auto Injector Pen Carriers - Laser Printer, Label Applicator & Hand Scanner - Vision Inspection and Verification System - Integrated Reject Bin with Reject Verification
Machine Frame	<ul style="list-style-type: none"> - 304 Stainless Steel with Polished Finish - Anti-Vibration Support Structure - GMP Features to Prevent Contamination
Control System	<ul style="list-style-type: none"> - Allen Bradley, Schneider or Siemens Options
Software Functions	<ul style="list-style-type: none"> - Format Control Settings List/ Data Location - Connection to MES/ SCADA - Verification of Batch Data and 2D Matrix - 21 CFR Part 11/ EU Annex 11 Ready
Safety	<ul style="list-style-type: none"> - E-Stop On The Main Operator Panel - Power Isolator With LOTO

Operator Interface

HMI Display	<ul style="list-style-type: none"> - Colour Touch Screen with Intuitive Interface - HMI Mounted on Swivel Arm
Operator Controls	<ul style="list-style-type: none"> - Alarms, Warnings, Operator Prompt Messages - I/O Status Check - Machine State (Ready, Running, Alarm, etc.) - Counters (Throughput Rate, etc.) - Standard Password Protected Local Machine Access Levels

Service Specifications

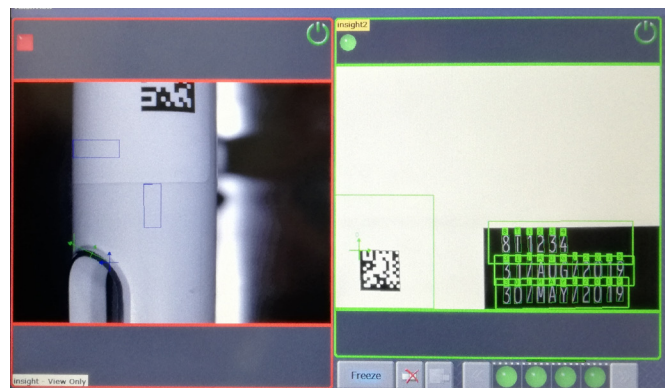
Electrical Supply	- 400v, 50Hz, 3 Phase, Neutral + Earth
Compressed Air	- 6 Bar Clean Dry Compressed Air
Control Voltage	- 24 V DC (Internal)
Pneumatics	- Festo, SMC or Bosch Rexroth



2D Layout of Auto Injector Pen Labeller - Typical Configuration



Custom Transfer Carriers for Handling Multiple Pen Formats



2D Matrix, OCR & Label Position/Presence Inspection and Verification



Customised Engineering & Integration



24/7 Technical Support