Ermaflex labeller with connected printing

ErmaFlex #6

Communicative printing and labelling system

CAP CIP - Bac PRO PLP / MELEC / MSPC
BTS CRSA / Electrical engineering / MS
IUT - Universities - Engineering schools

Functional description

✓The Ermaflex Labeller with connected printing (Ref.: EQ30) is integrated into the Ermaflex automated line which manufactures, packs and palletises cosmetic products in jar or bottle format.

✓It is positioned on the conveyor at the exit of the Checkweigher (Ref.: PF30), followed by a counter-roller to allow the printing and application of adhesive labels on the containers.

✓The Ermaflex labeller (Ref.: EQ30) is connected, powered and controlled via the Checkweighing system Pots/Vials (Ref.: PF30). It is therefore inseparable from it. It is therefore factory-installed on the PF30 and must be ordered at the same time.

✓The Ermaflex labeller is communicative: the label format can be set via the Checkweigher console, status and monitoring information is fed back to the Checkweigher PLC and is used to inform the operator about the status of the labeller. This information will be available via the Checkweigher Console and on the Supervisory PC (PCVUE32), if the option has been ordered.

✓This training system is mainly intended for **activities in the fields of operation, system control, industrial maintenance, electrical engineering, automation and mechanics**.

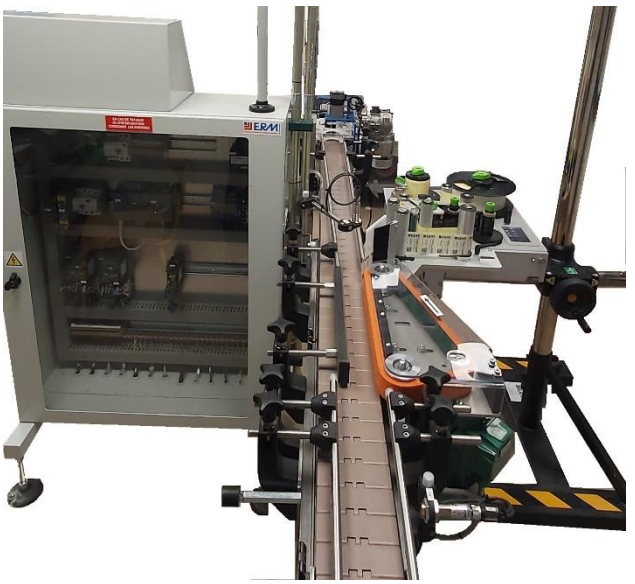
✓This product is accompanied by a technical and educational file in digital format.

Main Themes

Industrial Maintenance
Production Control
Multi-technology Systems Design
Electrical Engineering and Automation

Highlights & Key Activities

- ✓ Labeller settings and parameters using the PF30 checkweigher operator panel and the labeller control unit
- ✓ Quality control
- ✓ Printing and applying labels
- ✓ Height and depth adjustable foot
- ✓ Label configuration software supplied
- ✓ Communicating system supervised by PCVue (option UC20)



Special components

✓ Communicative printing and labelling system consisting of :
- 1 print head
- 1 labelling system
- 1 adjustable support foot

✓ Counter-roller driven by a three-phase asynchronous motor and a variable speed drive (mounted in the PF30 cabinet)

✓ Product presence detection cell and jamming detection cell

✓ Consumable kit supplied:
- 2 rolls of labels on a roll, W=40mm, H=30mm, core diameter 76mm, 2800 labels per roll
- 2 rolls of labels on a roll, W=55mm, H=35mm, core diameter=76mm, 3400 labels per roll
- 2 rolls of wax transfer film
- 2 rolls of wax/resin transfer film

General characteristics

- ✓ W x D x H: 1000 x 1000 x 1500 mm
- ✓ Electrical energy: 230V supplied by the Checkweigher control cabinet (Ref. PF30)
- ✓ Weight: 100kg

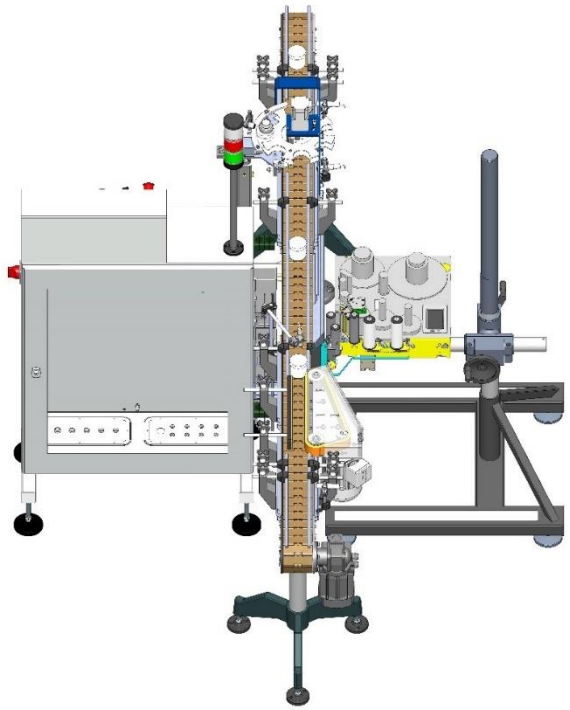
Colour graphic control panel

1. **Affichage par LED :** mise sous tension
2. **Ligne d'état :** réception de données, enregistrement du flux de données, pré-alarme ruban, clé USB / carte SD connectée, Bluetooth, Wi-Fi, Ethernet, USB esclave, horloge
3. **Statut de l'imprimante :** prête, pause, nombre d'étiquettes imprimées par tâche d'impression, étiquette en position de pré-décollement, attente signal Start externe
4. **Port USB** pour clé de service ou clé USB, pour enregistrer des fichiers dans la mémoire IFFS
5. **Fonctionnement**

Imprimante tournée de 90°

Printing characteristics

- ✓ Thermal transfer printing with trnasfert ribbon
- ✓ Direct thermal printing without transfer ribbon
- ✓ Standard paper / Polypropylene / Polyester
- ✓ Wax / resin transfer tape
- ✓ Resolution: 300 dpi
- ✓ Maximum print speed 300 mm/sec
- ✓ Print rotation 0, 90, 180, 270°.
- ✓ Maximum print width 56.9 mm
- ✓ Maximum media width 58 mm
- ✓ Maximum outer label diameter 205 mm
- ✓ Can be connected to a computer running at least Windows 8
- ✓ Distribution direction to the left



Example of a printed label

Educational activities

✓ Activities developed and included in the technical and pedagogical dossier
- Functional analysis
- Identification of elements
- Identification of electrical connections
- Identification and roles of sensors
- Analysis of electrical distributions
- Analysis of speed parameters for label bonding optimisation
- Custom label design and printer setup
- Study of the different types of printing

✓ Other activities that can be carried out on the system
- Preventive maintenance and servicing
- Corrective maintenance on labelling defects