

# HIGH SPEED AUTOMATIC LABELLERS LS-4000+ SERIES

Automatic high speed equipment with dynamic weigh for labelling of fix or variable weight and price.



# **INFORMATION**

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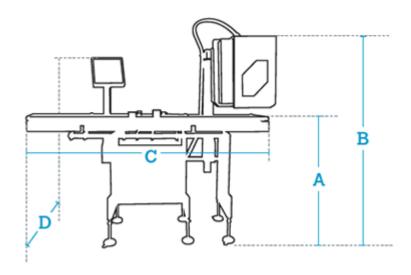








Dibal LS-4000+ automatic high speed weigh-price labeller allows the labelling of articles with fix or variable weight and price information, without stopping the production line due to dynamic weighing. For top, bottom, side, front, rear or on corner automatic labelling. It allows up to two simultaneous printheads (top + top or top + bottom).



#### Data in mm

- **A** 820 970 (adjustable legs)
- **B** 1,485 1,895 (adjustable legs)

- **C** 1,970 (with L400-L400-L400-L600 conveyors)\*
- **D** 630 (conveyors width + console width. For W280 conveyors)\*\*
- \* These measurements correspond to the sum of the separation, infeed, weighing and labelling conveyors. For other sizes, contacts us.
- \*\* For other sizes, contact us.

#### **OUTSTANDING FUNCTIONS**

- Labelling of fix/variable weight/price.
- Discrimination by weight checking.
- Orders management.
- Labelling of totals.
- Generic traceability on label.
- Adapted to comply with EU Regulation 1169/2011 referring to food information.
- Barcodes:
  - EAN-8, EAN-13, EAN-128, CODE 128, ITF-14, GS1 Datamatrix and GS1 Databar (up to 4 codes per label).

#### **WEIGHING**

- Weighing type:
  - Dynamic or static.
- Ranges depending on the dimensions of the weighing conveyor:
  - $\circ$  6 kg / 2 g or 10 kg / 5 g with conveyor of up to L400 x W400 mm.
  - $\circ$  15 kg / 5 g, 20 kg / 10 g, 30 kg / 10 g, 40 kg / 20 g or 60 kg / 20 g with conveyor of up to L600 x W500 mm.
  - ∘ 3 kg / 1 g or other, contact us.

#### **LABELLING SYSTEM**

- Printing type:
  - o Direct Thermal (DT) or Thermal Transfer (TT).
- Printhead:
  - ∘ Long-lasting 3" or 4".
- Resolution:
  - 8 dots/mm.
- Label applicator type:
  - ∘ Top labeller: "Air-jet®" (AA) or pneumatic piston.
  - Bottom labeller: by contact.
  - Side, front, rear or on corner (L) labeller: pneumatic piston.
- Position of the label applicator:
  - Top, bottom, side, front, rear or on corner (L) labelling.

#### **LABELS**

- Dimensions depending on the position of the label applicator and the inches of the printhead:
  - $\circ$  Top, side, front, rear or on corner label: from W30 x L35 mm, up to W80 x L100 mm (3"). Up to W102 x L150 mm (4").
  - $\circ$  Bottom label: from W30 x L55 mm, up to W80 x L100 mm (3"). Up to W102 x L150 mm (4").

#### **CONSTRUCTION**

- Structure:
  - AISI 304 stainless steel and anodized aluminium.
- Belts:
  - Material and characteristics: Polyurethane, rigid or elastic depending on the equipment range. With FDA approval.
- Console:
  - Material: stainless steel.
  - o "Qwerty" keypad and backlit graphic LCD display.
  - 15" TFT touch screen, optional.
- Height of top labeller regulated from console.

#### **COMMUNICATION TO PC**

- Ethernet TCP/IP.
- RS-232.

#### **PC SOFTWARE**

- RMS: For equipment configuration, production data management and back up (LBS).
- DLD: For graphic design of labels.
- Integration tools: See section on software.

#### **POWER SUPPLY & COMPRESSED AIR**

- Electrical: 230 V/50 Hz; 115 V/60 Hz.
- Air: max. 150 I/min (at 5-8 bar).

#### POSSIBLE INTEGRATION WITH OTHER EQUIPMENT

- Dibal LP-3000 manual weigh-price labeller.
- Dibal GS-3000 batch collector (+ LP-3000).
- Aligner.
- Misaligner.
- 90º deflector.
- Dibal MD-5000 metal detector.
- X ray inspection systems.

#### **CUSTOM SOLUTIONS**

At Dibal, we have professionals who work closely with our clients to design, develop and produce **customised solutions** in accordance with their specific needs. **Consult us!** 

### **MODELS**

# LS-4430+/350

- 1 separation, 1 infeed and 1 weighing L350 x W200 mm conveyor, and 1 labelling L600 x W200 mm conveyor.
- For products of up to L250 x W200 mm, and up to 3 kg (in dynamic weighing). Up to L300 x W200 mm in static weighing.
- 1 top labeller, direct thermal printing, 3" printhead and "Air-Jet®".
- **Performance\*:** 140 labels/minute (with labels of W60 x L60 mm, and products of up to L100 mm, and 1 kg). In MID conditions (M).

## LS-4430+/400

- 1 separation, 1 infeed and 1 weighing L400 x W280 mm conveyor, and 1 labelling L600 x W280 mm conveyor.
- For products of up to L300 x W280 mm, and up to 6 kg (in dynamic weighing). Up to L350 x W280 mm in static weighing.
- 1 top labeller, direct thermal printing, 3" printhead and "Air-Jet®".
- **Performance\*:** 150 labels/minute (with labels of W60 x L60 mm, and products of up to L150 mm and 2 kg). In MID conditions (M).

## LS-4430+/600

- 1 separation, 1 infeed, 1 weighing and 1 labelling L600 x W400 mm conveyor.
- For products of up to L500 x W400 mm, and up to 15 kg (in dynamic weighing). Up to L550 x W400 mm in static weighing.

<sup>\*</sup> Maximum performance will depend on the size, weight and morphology of the product, as well as on the regularity of the infeed of the products, dimensions and characteristics of the label, and MID conditions (M).

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- 1 top labeller, direct thermal printing, 3" printhead and "Air-Jet®".
- **Performance\*:** 100 labels/minute (with labels of W60 x L60 mm, and products of up to L350 mm and 2 kg). In MID conditions (M).

# **OPTIONS**

OPTION	CHARACTERISTICS	REF.
Touch screen console	TFT 15".	Contact us
4" printhead	Labels up to W102 x L150 mm.	Contact us
12 dots/mm resolution		Contact us
Thermal transfer printing	For 3" or 4" printhead.	Contact us
1 pneumatic piston applicator (to replace the "Air-jet®")		Contact us
Extra piston kit (in addition to the chosen applicator)	For the application of labels of different sizes, an additional piston may be required. Interchangeable with the chosen applicator.	Contact us
Bottom labeller (to replace the top labeller)	Label application by contact, 3" printhead and direct thermal printing.  Label dimensions: from W30 x L55 mm, up to W102 x L150 mm.  Performance*: 110 labels/minute (with labels of W60 x L60 mm, and products of up to L200 mm and 2 kg). In MID conditions (M).  * Maximum performance will depend on the size, weight and morphology of the product, as well as on the regularity of the infeed of the products, dimensions and characteristics of the label, and MID conditions (M).	Contact us

<sup>\*</sup> Maximum performance will depend on the size, weight and morphology of the product, as well as on the regularity of the infeed of the products, dimensions and characteristics of the label, and MID conditions (M).

OPTION	CHARACTERISTICS	REF.
Front or rear side labeller (to replace the top labeller)	Recommended for boxes.	Contact us
Side labeller (to replace the top labeller)	Recommended for boxes	Contact us
Corner labeller (to replace the top labeller)	Recommended for boxes.	Contact us
Second top labeller (in addition to the top labeller)	Application of two labels on the top of the product. 3" printhead, direct thermal printing and application of the label by "Air-Jet®".  A second labeller means you can combine 3" and 4" printeheads, direct thermal and thermal transfer printing, as well as "Air-Jet®" and piston applicators.  Maximum performance is provided by the lowest speed applicator, reduced by 10% (approximated data to be confirmed in each case).  Note: Maximum performance will depend on the size, weight and morphology of the product, as well as on the regularity of the infeed of the products, dimensions and characteristics of the label, and MID conditions (M).	Contact us
Second bottom labeller (in addition to the top labeller)	Label application by contact, 3" printhead and direct thermal printing.  Maximum performance is provided by the lowest speed applicator, reduced by 10% (approximated data to be confirmed in each case).  Note: Maximum performance will depend on the size, weight and morphology of the product, as well as on the regularity of the infeed of the products, dimensions and characteristics of the label, and MID conditions (M).	Contact us
L600 x W280 mm conveyor (to replace L400 x W280 mm	For model Ls-4430+/400.	Contact us

conveyor)

OPTION	CHARACTERISTICS	REF.
L800 x W280 mm conveyor (to replace L400 x W280 mm conveyor)	For model LS-4430+/400.	Contact us
L800 x W280 mm weighing conveyor, 4 load cells, not MID (to replace L400 x W280 mm conveyor)	For model Ls-4430+/400.	Contact us
L800 x W280 mm llabelling conveyor (to replace L600 x W280 mm conveyor)	For model LS-4430+/400.	Contact us
L400 x W400 mm conveyor (to replace L600 x W400 mm conveyor)	For model Ls-4430+/600.	Contact us
L800 x W400 mm conveyor (to replace L600 x W400 mm conveyor)	For model LS-4430+/600.	Contact us
L800 x W400 mm weighing conveyor, 4 load cells, not MiD (to replace L600 x W400 mm conveyor)	For model LS-4430+/600.	Contact us
Split belt	For transparent packs or irregular shape/cylindrical products.	Contact us
Vertical detector on arch	For transparent packs or irregular shape products. Infeed conveyor with split belt necessary.	Contact us
Right to left operation	Standard operation: left to right.	Contact us
iP65 protection kit	Protected engines, bearings with lock, packaging gland, special load cell and heated detector.	Contact us

OPTION	CHARACTERISTICS	REF.
DIS software	Equipment configuration and production data management. (See section on software).	Contact us
RMS Software	Equipment configuration, production data management and back up (LBS). (See section on software).	7340R1U3 / 7340RNU3
DLD Software	Graphic design of labels. (See section on software).	7340L1U3 / 7340LNU3
Wi-Fi	Wireless communications.	Contact us
Packed in phytosanitary wood case	Necessary depending on the destination.	PEEC080F
Metrological verification (M)	According to EU weighing directives (MID).	Contact us

# **ACCESSORIES**





**MOTORISED CONVEYOR** 

Infeed/output conveyor L1,000 x W280 mm, with smooth belt.



DIBAL VISION ARTIFICIAL VISION CAMERA

Contact us about applications.



**BARCODE READERS** 

Contact us about applications.



**ROLLERS** 

Rollers conveyor for transporting or accumulating products.



**ROTATING TABLE** 

To collect wrapped and/or labelled products.



**REJECTORS** 

Rejection system.

Options: pneumatic piston, "Air-Jet®", rotating blade or folding conveyor.



PRODUCT GUIDING SYSTEM IN INFEED CONVEYOR (STANDARD)

For special guides, contact us.



**W200 MM EXIT RAMP** 

Non-motorised PVC rollers for W200 mm conveyor.



**W280 MM EXIT RAMP** 

Non-motorised PVC rollers for W280 mm conveyor.



**W400 MM EXIT RAMP** 

Non-motorised PVC rollers for



PRODUCT TURNING DEVICE

To change the position or



LABEL FIXERS

For a better application of

orientation of the products.

labels on products with irregularities on the application surface.

Options: brush roll, foam roll, foam piston, etc.



POLYCARBONATE PROTECTOR FOR WEIGHING CONVEYOR

To avoid external disturbances during the weighing process.



**4 WHEELS WITH BRAKES** stud included.



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