LS5000

WEIGHING
DYNAMIC OR STATIC

4" PRINTER
300 mm / s

LABELLING
IN MULTIPLE POSITIONS

8,000 PLUs
MEMORY

ETHERNET

M
METROLOGICAL VERIFICATION
OPTIONAL (EU)

Outstanding functions

- High speed weighing:
  - > W60 x L60 labels and L100 mm product, top labelling with air application: up to 150 ppm.
  - > W60 x L60 labels and L100 mm product, top (with air application) and bottom labelling: up to 140 ppm.
  - > W100 x L80 labels and L200 mm product, top labelling (with piston application): up to 100 ppm.
  - > W100 x L80 labels and L600 x W400 mm conveyorons, piston-applied labelling: up to 30 ppm.
  - > C-labelling: L240 mm labels up to 50 ppm and L300 labels up to 40 ppm.
- Possibility to label fixed / variable weight-amount.
- Discrimination by checkweighing.
- Generic traceability on label.
- Adapted to comply with EU regulation 1169 / 2011 regarding food information.
- Bar coding: EAN-8, EAN-13, EAN-128, CODE 128, ITF-14, QR code, GS1 Datamatrix and GS1 Databar (up to 4 codes per label).
- Air applicator: maximum productivity.
- Latest generation PC electronics.
- MID certificate: approved equipment.

Weighing

- Weighing type:
  - > Dynamic or static (automatic).
- Weighing ranges according to the dimensions of the weighing conveyor:
  - > 1.5 kg / 0.5 g with conveyors L300 x W200 mm.
  - > 3 kg / 1 g with conveyors of L300 x W200 mm, L400 x W280 mm and L600 x W280 mm.
  - > 6 kg / 2 g with conveyors L400 x W280 mm, L600 x W280 mm, L600 x W400 mm and L800 x W280 mm.
  - > 15 kg / 5 g with slides of L400 x W280 mm, L600 x W280 mm, L600 x W280 mm, L600 x W400 mm, L800 x W280 mm and L800 x W400 mm.
  - > Other ranges on request.

Labelling system

- Printing type:
  - > Direct Thermal or Thermal Transfer.
- Print head:
  - > 4" long life (historical control).
- Resolution:
  - > 8 or 12 dots / mm.
- High speed printing:
  - > Up to 300 mm / s.
- Label applicator type:
  - > Pneumatic piston. On top labeller also possibility of 90º rotating applicator, "Air-jet" air blowing, multi cup and plate.
  - > C-labelling.
- Label applicator position:
  - > Top or side (front or rear, please consult).
  - > Under.
  - > C-shaped.

Labels

- Label dimensions:
  - > From L30 x W30 mm, up to L150 x W102 mm (depending on applicator).
- Maximum width of backing paper: 110 mm.
- Maximum label roll diameter: 300 mm.
- Inner diameter of the cardboard core of the label roll: Ø76 mm (the cardboard edge must have the same width as the backing paper).

Construction

- Structure:
  - > AISI 304L stainless steel and anodized aluminium.
- Bands (all FDA approved):
  - > Standard.
  - > High speed: super adherent.
  - > Slippery: for rejection areas.
  - > Hygienic.
- Guides:
  - > AISI 304L stainless steel, anodized aluminium and cestilene.
- Console:
  - > TFT 15" touch screen.
  - > Height adjustment of the top labeller from the console and from the head itself.

Communications to PC

- Ethernet TCP / IP.
- 2 RS-232.
- 4 USB (3.0).

PC software

- Communications and management of the equipment from any PC in the network (web server integrated in the equipment without the need to install any extra application). The equipment can be accessed from any web browser and therefore from any platform (Windows, Android...)
- Data exchange systems:
  - > Dibal API: based on webservices for loading / reading data from the LS5000 and its operation.
  - > Sending of information in real time (websocket) (Ethernet or serial port): sending of weights from the LS5000.
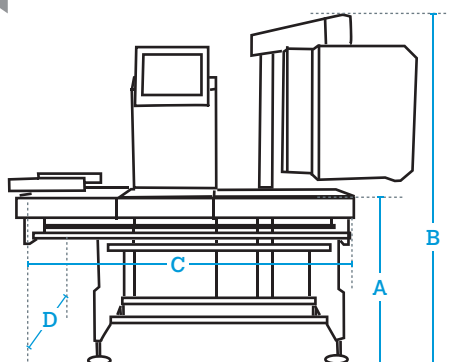 - > File exchange with upload / download of information (Excel or CSV).

Supply

- Electrical: 230 V and 50 Hz.
- Air: max 150 l / min (at 6-8 bar).

Possibility of integration with other equipment

- Dibal LT5000 total labelling equipment.
- Dibal GS5000 (+LT5000) batch collector.
- Dibal MD-5000 metal detectors.

DIMENSIONS

DATA IN mm

A	850 - 950 (adjustable legs). (Working height between 350 and 1,600 mm, please consult)
B	1,550 - 1,850 (adjustable legs)
C	1,560 (with L400-L400-L600 conveyors)*
D	1,045 (For W280 conveyors)**

* These dimensions correspond to the sum of the infeed, weighing and labelling conveyors. For other dimensions, please consult us.

** For other dimensions, please consult us.

Models with top labelling

LS5000
400/400/600x280

- 1 infeed and 1 weighing conveyor L400 x W280 mm, and 1 labelling conveyor L600 x W280 mm.
- For products up to L350 x W280 mm, weighing up to 15 kg.
- 1 top labeller, direct thermal printing, 4" head and piston applicator.

(M) optional

LS5000
600/300/600/600x200

- 1 infeed conveyor L600 x W200 mm, 1 weighing conveyor L300 x W200 mm, and 1 labelling conveyor L600 x W200 mm.
- For products up to L200 x W200 mm, weighing up to 3 kg.
- 1 top labeller, direct thermal printing, 4" head and piston applicator.

(M) optional

LS5000
600/600/800/800x280

- 1 infeed and 1 weighing conveyor L600 x W280 mm, and 1 labelling conveyor L800 x W280 mm.
- For products up to L550 x W280 mm, weighing up to 15 kg.
- 1 top labeller, direct thermal printing, 4" head and piston applicator.

(M) optional

LS5000
600/600/800/800x400

- 1 infeed and 1 weighing conveyor L600 x W400 mm, and 1 labelling conveyor L800 x W400 mm.
- For products up to L550 x W400 mm, weighing up to 15 kg.
- 1 top labeller, direct thermal printing, 4" head and piston applicator.

(M) optional

LS5000
800/800/800x280

- 1 infeed and 1 weighing conveyor L800 x W280 mm, and 1 labelling conveyor L800 x W280 mm.
- For products up to L750 x W280 mm, weighing up to 15 kg.
- 1 top labeller, direct thermal printing, 4" head and piston applicator.

(M) optional

LS5000
800/800/800/800x400

- 1 infeed and 1 weighing conveyor L800 x W400 mm, and 1 labelling conveyor L800 x W400 mm.
- For products up to L750 x W400 mm, weighing up to 15 kg.
- 1 top labeller, direct thermal printing, 4" head and piston applicator.

(M) optional

Applicator options for LS5000 (except C-labelling)

Option	Type	Ref.
Replaces the piston type applicator included in the LS5000 models under consideration.	Air applicator	Consult
	90º rotating applicator	Consult
	Multi cup applicator	Consult
	Plate applicator	Consult

Other models and dimensions: please consult us.

DIBAL

Models with C-labelling

CLS5000 C LABELLING
400/400/400/1,000x280

- 1 infeed conveyor, 1 weighing conveyor and 1 separating conveyor of L400 x W280 mm and 1 C-labelling conveyor of L1,000 mm.
- For products up to L350 x W280 mm, weighing up to 15 kg.
- 1 C-labelling equipment, direct thermal printing, 4" head and C-applicator.

Ⓜ optional

CLS5000 C-LABELLING AND TOP
400/400/800/1,000x280

- 1 infeed conveyor and 1 weighing conveyor L400 x W280 mm, 1 top labelling conveyor L800 x W280 mm and 1 C-label conveyor L1,000 mm.
- For products up to L350 x W280 mm, weighing up to 15 kg.
- 1 top labelling equipment, direct thermal printing, 4" head and piston applicator and 1 C-labelling equipment, direct thermal printing, 4" head and C-applicator.

Ⓜ optional

CLS5000 C AND UNDER LABELLING
400/400/600/400/1,000x280

- 1 infeed conveyor and 1 weighing conveyor L400 x W280 mm, under labelling conveyors L600 x W280 mm and L400 x W280 mm and 1 C-labelling conveyor L1,000 mm.
- For products up to L350 x W280 mm, weighing up to 15 kg.
- 1 under labelling equipment, direct thermal printing, 4" head and bottom applicator and 1 C-labelling equipment, direct thermal printing, 4" head and C-applicator.
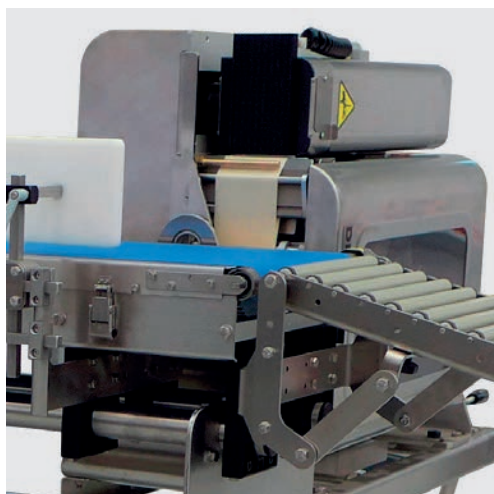
Ⓜ optional

> Module with C-labelling

Specific options for equipment with C-labelling

Option	Type	Ref.
Additional top applicator to work with "C" or top labels	Piston applicator	Consult
	Air applicator	Consult
	Multi cup applicator	Consult

Printing and labelling options

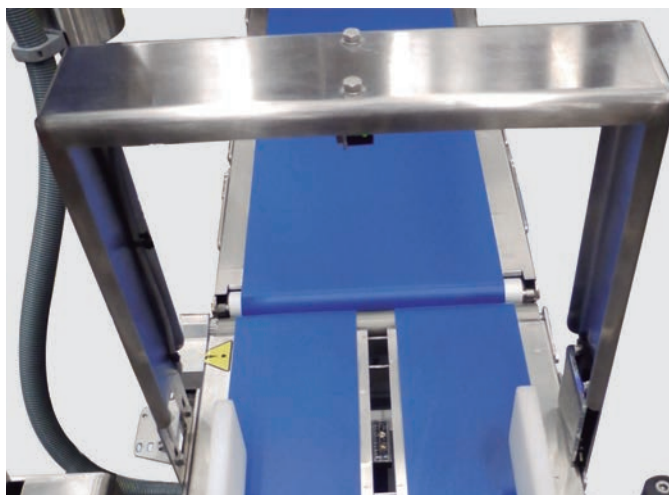| Option	Features	Ref.
Thermal transfer printing		Consult
12 dots print resolution	Replaces 8 dots resolution.	Consult
Side labeller for all models		Consult
Under labeller (replaces top one)	For models: > LS5000 400 / 400 / 600 X 280 * > LS5000 600 / 600 / 800 / 800 X 280 * > LS5000 800 / 800 / 800 / 800 X 280 * > LS5000 600 / 600 / 800 / 800X400 ** > LS5000 800 / 800 / 800 / 800X400 ** * Including additional 400 x 280 labelling conveyor. ** Includes additional 600x400 labelling conveyor (additional to the top one).	Consult
Under labeller (additional to the top one)	For models: > LS5000 400 / 400 / 600 X 280 * > LS5000 600 / 600 / 800 / 800 X 280 * > LS5000 800 / 800 / 800 / 800 X 280 * > LS5000 600 / 600 / 800 / 800X400 * > LS5000 800 / 800 / 800 / 800X400 ** * Including additional 400 x 280 labelling conveyor ** Includes additional 600x400 labelling conveyor (additional to the top one)	Consult
Top labeller (additional to the top one)	For models: > LS5000 400 / 400 / 600 X 280 * > LS5000 600 / 600 / 800 / 800 X 280 * > LS5000 800 / 800 / 800 / 800 X 280 * > LS5000 600 / 600 / 800 / 800X400 ** > LS5000 800 / 800 / 800 / 800X400 ** * Including additional 800 x 280 labelling conveyor ** Includes additional 800x400 labelling conveyor	Consult
Additional module with C-labelling	Includes additional 1,000 mm length labelling conveyor.	Consult

> Side labeller

Other options

Option	Features	Ref.
Column for 15" TFT display	Independent of the electrical cabinet.	Consult
Independent rack module for sequencing / rejection conveyors		Consult
Rack add-on module to main frame	Rack extension required when equipment length + sequencing conveyor and / or rejection conveyor is more than 1,500 mm.	Consult
Additional sequencing conveyor L300 x W200 mm*	Rack extension not included.	Consult
Additional sequencing conveyor L400 x W280 mm	Rack extension not included.	Consult
Additional sequencing / rejection conveyor L600 x W280 mm*	Rack extension not included.	Consult
Additional sequencing / rejection conveyor L600 x W400 mm*	Rack extension not included.	Consult
Additional sequencing / rejection conveyor L800 x W280 mm*	Rack extension not included.	Consult
Additional sequencing / rejection conveyor L800 x W400 mm*	Rack extension not included.	Consult
Additional rejection conveyor L1,000 x W200 mm*	Rack extension not included.	Consult
Additional rejection conveyor L1,200 x W280 mm*	Rack extension not included.	Consult
Air rejection system**	Rejection system valid according to the characteristics of the product to be rejected.	Consult
Pusher piston rejection system**	Rejection system valid according to the characteristics of the product to be rejected. Includes polycarbonate protector.	Consult
Rejection system by shovel**	Rejection system valid according to the characteristics of the product to be rejected. Includes polycarbonate protector.	Consult

Note: All rejection systems (pneumatic piston, air blowing, etc.) depend on the type of product / packaging, required speed, collection system, etc.; therefore they should always be consulted with Dibal.

> Gantry detector (horizontal + vertical)

Option	Features	Ref.
Horizontal barrier detector**	Replaces the horizontal detector.	Consult
Detector on gantry (horizontal + vertical)	Replaces the horizontal detector. For products with low height (e.g.: envelopes).	Consult
Additional horizontal product detector for second labelling		Consult
Database integration API access	Access to database integration API.	73601043
Standard packaging		Consult
Wooden cage packaging	Essential depending on destination.	Consult
Crate packing (sea)	Essential depending on destination.	Consult
Metrological verification (M)	Conforms to EU weighing directives (MID).	Consult
Metrological verification (M) classes X + Y	Conforms to EU weighing directives (MID).	Consult
ENAC calibration		Consult

* Option of separate rack module or additional rack module to the main frame is required whenever the equipment length exceeds 1,500 mm.
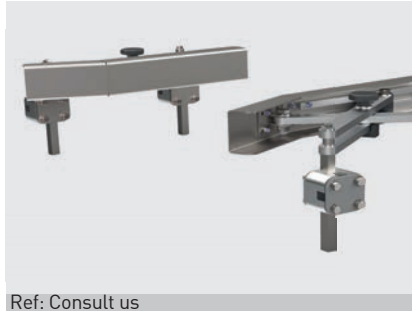
** Requires frame extension and additional conveyor.

Accessories

Ref: Consult us

Cestilene product guides

Ref: Consult us

Stainless steel product guides

A200 mm – Ref: Consult
A280 mm – Ref: Consult
A400 mm – Ref: Consult

Exit ramp

Non-motorized PVC rollers for conveyors.

A400 mm – Ref: Consult
W600 mm – Ref: Consult

Rejection ramp

Non-motorized PVC rollers for conveyors.

A400 mm – Ref: Consult
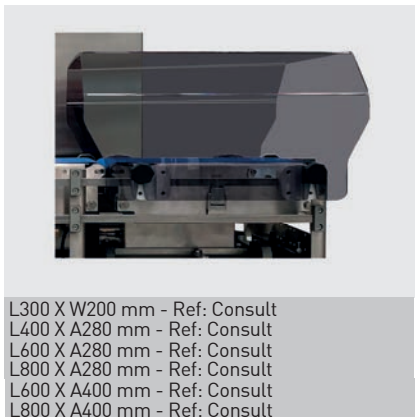W600 mm – Ref: Consult

Rejection ramp

Stainless steel ramp.

A350 mm – Ref: Consult
A500 mm – Ref: Consult
W600 mm – Ref: Consult

Rejection container

Includes stainless steel ramp and access with key.

L300 X W200 mm – Ref: Consult
L400 X A280 mm – Ref: Consult
L600 X A280 mm – Ref: Consult
L800 X A280 mm – Ref: Consult
L600 X A400 mm – Ref: Consult
L800 X A400 mm – Ref: Consult

Polycarbonate protector for weighing conveyor

Required for range 1.5 kg / 0.5 g.

Ref: Consult us

RGB light and sound alarm

Ref: Consult us

Auxiliary applicator for very irregular products

Ref: PE52144

**Protective cover for electrical
cabinet**

Ref: PE51536

**Protective cover for 15'' TFT screen
on column**

Ref: Consult us

**Protective covers for top, lower and /
or lateral heads**

(Photo: Cover for top head).