Automatic weigh price labeller WPL-A

Flexibility and maximum performance in weigh labelling

ⓘ Benefits

- ■ Simple and user friendly software
- ■ Space saving, modular design
- ■ Label design in accordance to global regulations
- ■ Full connectivity and product traceability

Easy Operation   Easy Installation

> *The new automatic weigh price labeller WPL-A contains reliable software in combination with the most advanced weighing and printing technologies, which ensure the labeller fully meets the processing requirements of today and for the future.*

The weigh price labeller WPL-A for product quality and food safety

ⓘ **Intuitive software** displaying live production data and dynamic visuals of current printed labels on the embedded 19″ Windows touch screen.

ⓘ Maximum **traceability** by pack number, product, lot, user and machine ID. ERP **connectivity** and E-mark software module available.

ⓘ The intuitive label design of the WPL-A follows the latest statutory labelling requirements. Native to all printer configurations, **no need for 3rd party software.**

ⓘ State-of-the-art **weighing and pressure compression technology** provide **high speeds** and **innovative options** on a **compact footprint**.

The right solution for all of these applications:

Weighing   Fill quantity control   Statistics   Classification   Statistical process control   Labelling

Powerful and user-friendly at the same time

The automatic weigh price labeller WPL–A is the new, fully automated standard to weigh, price, label and track your product line while increasing your throughput and productivity. It has been developed to comply with guidelines and standards such as MID and NCWM NTEP. Manufactured in Europe following the highest standards, the WPL–A offers maximum modularity, connectivity, and traceability. The system can be configured to suit your individual requirements, providing you with the ideal automatic labelling solution for any challenge you face.

Machine Construction

1   Colour touchscreen HMI
2   Weigher frame
3   Weigh cell
4   Weighing belt
5   Infeed belt
6   Pack guides
7   Labeller height adjustment
8   Top printer and labeller
9   Base printer and labeller
10 Labeller frame
11 Adjustable feet
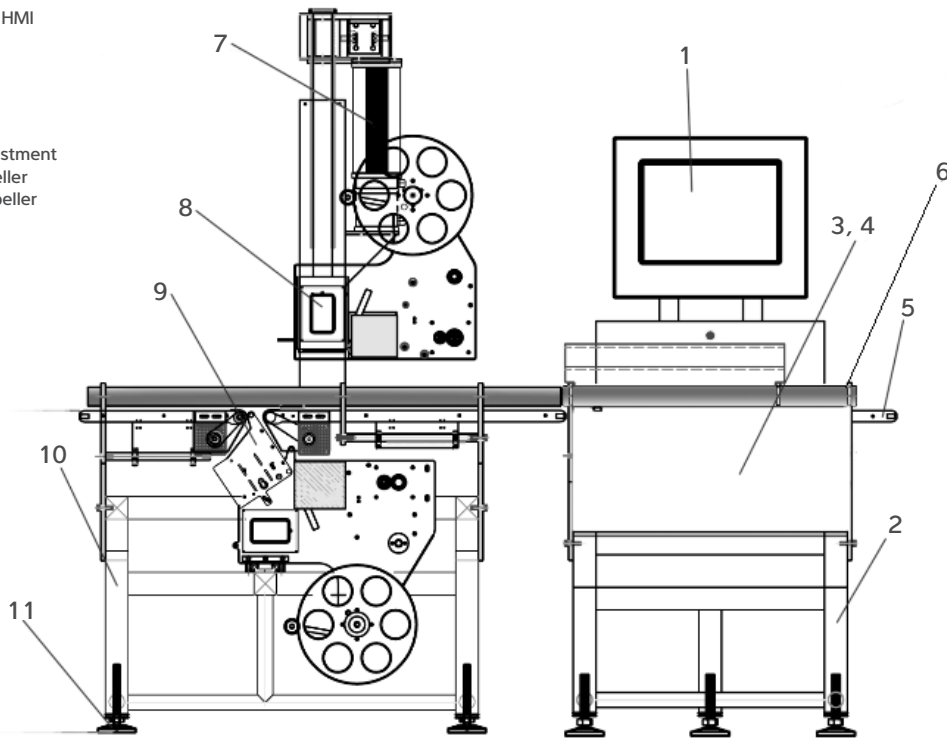
Technical specifications

Automatic weigh price labeller WPL-A

Create your individual automatic weigh price labeller from a wide range of options and function enhancements.

Weighing system construction

Material	Stainless steel, anodised aluminium and food grade plastics
Infeed conveyor	Gating start/stop, 50W brushless DC motor Detachable for easy cleaning IP65
Weighing conveyor	Servo motor Detachable for easy cleaning IP65
Pack guides	Manual (standard), manual (centralized) Auto position metal guide option Auto position driven belt guide with spring centralising mechanism option
Product sensors	Capable of detecting opaque and clear packaging
Weigh cell technology	Electromagnetic force compensation (EMFC) IP65
HMI	19" Colour touchscreen industrial PC IP65
Supplies	Main supply 220V 50Hz A.C. / 120V 60 Hz A.C. Standard lockable mains isolator on cabinet side Air supply 5 bar, clean, dry air
Operating temperature range [°C]	0°C to +40°C

Weighing module specifications

Conveyor configurations	Infeed conveyor 440 mm (long) x 300 mm (wide); Weighing conveyor 400 mm (long) x 300 mm (wide) Infeed conveyor 540 mm (long) x 300 mm (wide); Weighing conveyor 500 mm (long) x 300 mm (wide) Other configurations available for special applications
Weighing configurations	1.5 kg x 0,5 g (min 20 g) 3 kg x 1 g (min 20 g) 6 kg x 2 g (min 40 g) 15 lb x 0,01 lb (min 0,20 lb) (US) Other configurations available for special applications
Standard throughput [pcs/min]	400 mm weighing conveyor → up to 125 pcs/min 500 mm weighing conveyor → up to 100 pcs/min Other configurations available for special applications Speeds depending on application
Transport direction	Left to right Right to left
Working height [mm]	850 mm to 950 mm (standard) Adjustable feet +/- 50 mm Other configurations available for special applications
Device interfaces	Up to 4 print and apply labellers in top and base or formats Multiple flash labeller support in top or base formats Optional side and wrap around labellers including C-wrap and F-wrap (narrow edge-leading packs) Up to 4 diverters External running/run enable signals External emergency stop loop capability Ravenwood Nobac interface SureService Flexiwrap interface Ethernet

Labeller module construction

Materials	Stainless steel, anodised aluminium and food grade plastics
Conveyor	Single or multiple 50 W brushless DC motors 300 mm wide
Transport direction	Left to right Right to left
Working height [mm]	850 mm to 950 mm (standard) Adjustable feet +/- 50 mm Other configurations available for special applications
Top labeller	Top labeller lift – Manual adjust (standard) – Electrical adjust (option) – Auto position (option) Top labeller transverse – Manual adjust (standard) – Auto position (option) Top labeller rotate (blow apply labellers only) – Manual adjust (standard)
Base labeller	Base labeller side out mounting – Manual adjust

Print and apply labeller module specifications

LP500 blow (top labeller)	Direct thermal printer 12 dots/mm (300 dpi) 105 mm print width Up to 300 mm/s print speed Label application by advanced blow box apply system Label roll, maximum outside diameter 300 mm, core 76 mm Label dimensions: – Length 35 to 110 mm; Width 35 to 110 mm XL blow apply options available to facilitate larger labels for special applications. IP20
LP500 vacuum belt (base labeller)	Direct thermal printer 12 dots/mm (300 dpi) 105 mm print width Up to 300 mm/s print speed Label application by advanced vacuum belt apply system Label roll, maximum outside diameter 300 mm, core 76 mm Label dimensions: – Length 35 mm to 110 mm; Width 35 mm to 110 mm IP20
LPX500 blow (top labeller)	Direct thermal printer and thermal transfer label technology 12 dots/mm (300 dpi) 105 mm print width Up to 300 mm/s print speed Ribbon save capability Label application by advanced vacuum belt apply system Label roll, maximum outside diameter 300 mm, core 76 mm Label dimensions: – Length 35 mm to 110 mm; Width 35 mm to 110 mm IP20
LPX500 vacuum belt (base labeller	Thermal transfer ribbon / direct thermal printer 12 dots/mm (300 dpi) 105 mm print width Up to 300 mm/s print speed Ribbon save capability Label application by advanced vacuum belt apply system Label roll, maximum outside diameter 300 mm, core 76 mm Label dimensions: – Length 35 mm to 110 mm; Width 35 mm to 110 mm IP20

Flash labeller (apply only) specifications

LA400 blow (top labeller)	Label application by advanced blow box apply system Label roll, maximum outside diameter 300 mm, core 76 mm. Label dimensions: – Length 25 mm to 110 mm; Width 25 mm to 110 mm Adjustable web speed up to 50 m/min IP20
LA400 wipe (top or base labeller)	Label application by wipe apply system Label roll, maximum outside diameter 300 mm, core 76. Label dimensions: – Length 20 mm to 300 mm; Width 20 mm to 120 mm Adjustable web speed up to 50 m/min Dipping wipe on top applicator option IP20

Hardware options

Hardware options	Swivel mount touch screen display Handheld barcode scanner – for PLU selection or data input Labeller mounted barcode checker Labeller mounted match code barcode checker Chaotic operation, also for pack barcode scanner Reject/divert: – Air jet reject options – Pneumatic pusher reject options – Additional reject integrity options available by request External traffic light options Supermarket BRC COP reject, including plastic cover, air pressure monitor, bin full and reject confirmation Metal detector ce incl. full supermarket & BRC COP

Software options

Networking options	– WPL-A cortex suite: Network application software that facilitates centralised control of PLU, label design and data libraries across multiple WPL-A machines at a customer's site. Optional modules for User management, production data collection and reporting, and for live equipment production and status monitoring – SQL database interface: application that uses the production server interface to collect production data from machines and populate a customer's Microsoft SQL server database – Command server protocol: Ethernet interface which allows external systems to load PLU's, set data and control production on the equipment, and allows machine status monitoring – Production server interface protocol: Ethernet interface which allows external systems to interrogate the machines and collect historic & live production data – WPL-A observer: Software application that allows fully customisable presentation of live running data. Typically used to present line monitoring screens in the production area for each line – WPL-A reaper: Entry level tool for collecting production data from a connected WPL-A machine in XML or CSV format for subsequent analysis – Remote support and diagnostic tools
Modules	E-weigh software Batching software (box, pallet totalisation and label printing) Metal detector interface with product lookup Fast Switch PLU Chaotic processing software using multiple PLUs, printers and label templates. labelling decisions based on weight or other discriminatory criteria Master/slave operation Scheduled update Event scripting

Operator interface

| Interface	Display clear 19″ icon driver touch screen
	Local or remote Product Look Up (PLU) and label template creation
	Full pack and operational traceability data
	Background image support (BIS)
	Label and product images on screen for Quality Assurance (QA) purposes
	Current information about
	– Machine status
	– Throughput
	– Totals
	– Diagnostics
	– Live batch mean on average weight products
	– Pack, pox, pallet and consignment counts
	Configurable user access levels
	Various languages available, linked to each operator login

Label design

Label design	Integrated NEXUS label design software
	Background image support (BIS) for easy label layout
	Various on-screen editing tools
	Full support for Windows true type fonts
	Arabic/Chinese support from English setup machine
	Field types – text, system variables, date/time, images, symbols, HTML text, rich text, formulas, bar codes including GS1 DataBar, full range of 1D and 2D symbols
	Nutritional panel capability in full compliance with EC requirements

Metrological approvals

	European MID approval
	United States NCWM NTEP approval

Technical diagrams

2150.3

440

800

400

440

810

Motor Height Adjustment

850 ~ 950 mm
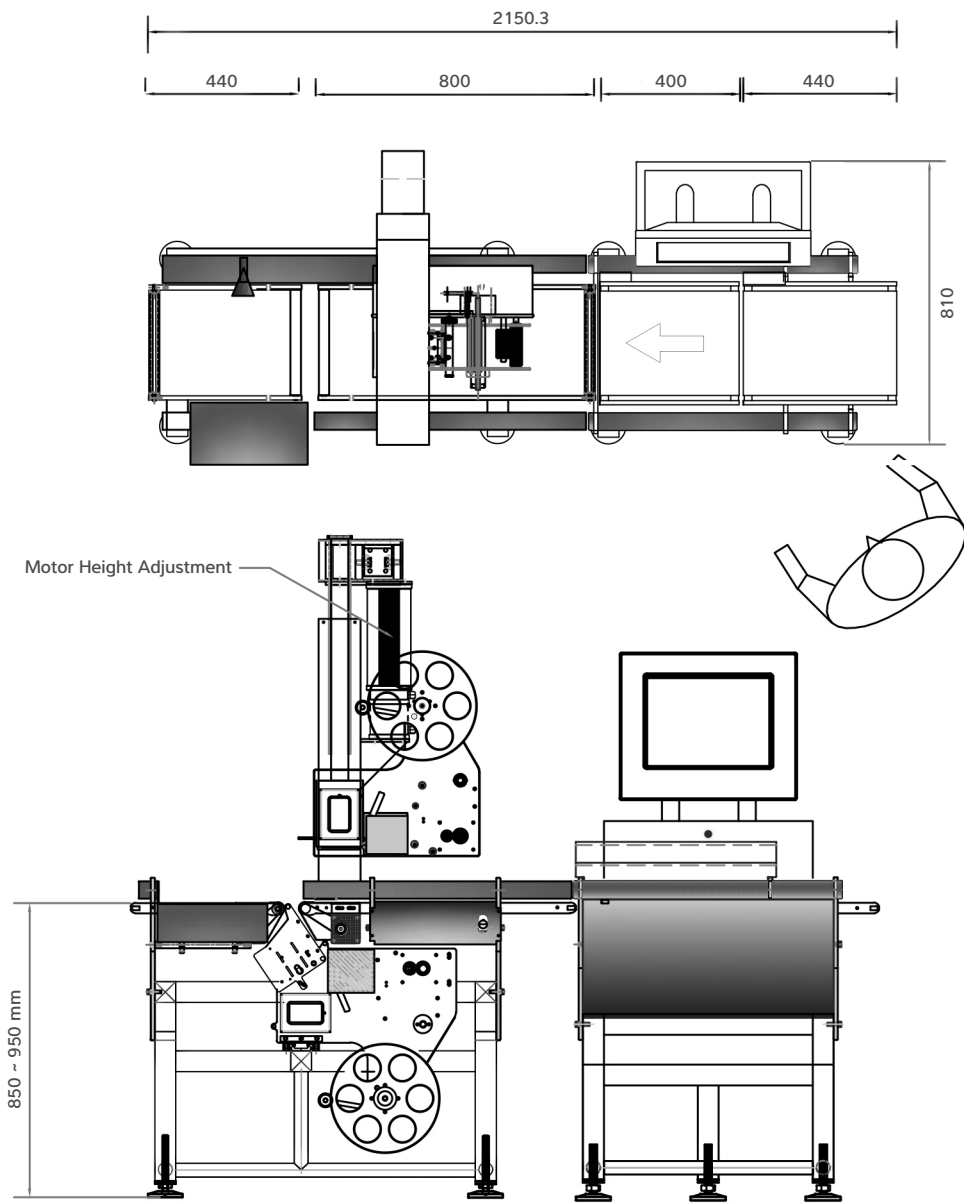
The scale drawing shows the WPL-A with top and base printer and a right to left configuration. All measurements are in mm.

Product description

A multi stage conveyor belt system transports the products. All conveyors in the system run at the same speed to ensure that products are transferred smoothly from the weighing frame into the labeller frame and into the customer's system. The weighing and labelling process is carried out dynamically and automatically without intervention from the operators. The price is calculated automatically based on the weight and other information such as batch number, expiring date, cooking time etc. The system is compatible with top, base, side and wrap around labellers.

The weighing frame and labeller frame are separated to provide a modular and highly configurable construction which can be adapted to suit different customer applications at initial build or later if requirements change.

Weigh cell
The weighing device is a monolithic, electro-magnetic force compensation weigh cell (EMFC). This delivers maximum precision, extremely short settling times and long-term stability in a stainless steel housing.

Transport system
A conveyor belt is used as the transport medium.

The belt frame is equipped with a belt quick-clamping device and a hinged, removable transport system. This allows the conveyor belts to be removed/fitted and replaced quickly without tools. The infeed and labeller module conveyors are driven by brushless DC motors, and the scale conveyor uses a precision DC servo motor.

- The infeed belt takes products from the upstream machine, automatically uses its Start/Stop function to introduce the correct spacing between product pieces for weighing if necessary, before transporting them to the weighing belt.

- The weighing belt takes the products from the infeed belt. As the products travel along the weighing belt, they are weighed while they move. Using advanced compression technology the image is sent to the printer together with the information selected by the customer (price, cooking time, etc.).

- The outfeed belt takes the products and moves them on to the labeller system

Labellers
The label is placed onto the package by means of blow (top), vacuum belt (base), or wipe (flash label), C-wrap and Full-wrap including Ravenwood (linerless) and Flexiwrap interfaces. The label can either be thermally printed or by ribbon transfer technology. Label templates and formats are native and do not require additional 3rd party software (e.g., Clarisoft)

Control electronics
The system is based on an industrial PC with a powerful 32 bit multitasking operating system with data storage on an internal wear free solid state drive. The housing is made from polished stainless steel. The control cabinet is opened to the rear with fasteners allowing easy access for maintenance. The lockable mains isolator is mounted on the side of the control cabinet.

Reject systems
Air jets or pneumatic pushers are offered as options for rejection/diversion of packages that have different or are out of weight tolerances. Full BRC and supermarket Code of Practice (COP) is available.
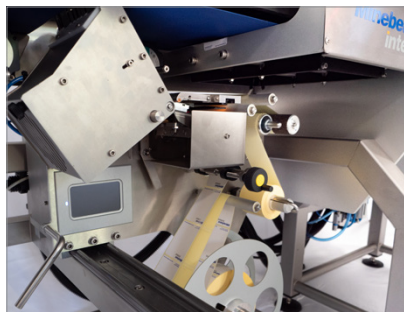
The products and solutions presented in this data sheet make major contributions in the following sector:

Food
and beverages