

WM-AI



Supported by **UTMOST CAPACITY** of ISHIDA
(ALL ISHIDA)

WEIGH

INSPECT

SELL

PACKAGE

DISPLAY

Whatever you make, make certain.

The WM-AI design is the result of ISHIDA's extensive expertise, gained by a thorough analysis of global working environments, operational processes, operator ergonomics and production lines. "Weighing, wrapping and labelling" are integrated into one unit, creating a "Fully automatic wrapper" utilizing SMART & AI (Artificial Intelligence) features to improve field productivity to a maximum.

*AI (Artificial Intelligence) is the intelligence exhibited by machines or software. AI means the point where machine replaces the human behavior by using its own intelligence.



WM-AI AS2 JR

Small footprint
Width:100cm × Depth:112cm

Exterior body:
Crafted from stainless steel
providing superior rust-resistance

1 Fast, Attractive, Stable Weighing, Wrapping and Labelling

High-speed wrapping and labelling

► Up to 35 packs per min. from small to large trays

*Depending on product and tray size and labelling requirements

► Unique two-film roll mechanism

Instantly selects the correct film size and associated parameters from the machines' database, to create optimum wrap quality, using the minimum of film.

► High speed printing at 120 mm / sec

Up to
35
packs/min

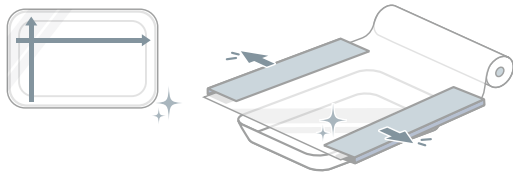
Clean and beautiful wrapping and labelling

► Automatic film selection and stretching

Clear, tight and wrinkle free wrap is accomplished by using the combination of either pre-stretching or ultra-stretching technologies together with the two-roll system whilst at the same time reducing film usage and cost.

Pre-stretching

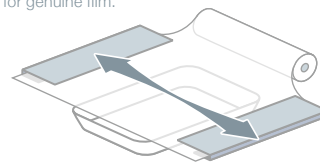
Eliminate loose and wrinkled film by using the Pre-stretch technology to tension the film before wrapping the tray.



Ultra-stretching

Ultra stretching together with a dedicated genuine film reduces film usage and running cost by stretching narrow film to wrap larger trays. This option may be used in combination with the two-film roll system to further optimize film usage.

*Contact Ishida agent for genuine film.



► Tray Centering

The CMOS camera system automatically identifies the tray as it is placed on the weighing area of the in-feed. Any tray misalignment is corrected by the pusher and the centering conveyor, ensuring the pack is always perfectly wrapped.



① Place the tray

② Centering unit movement

③ Transfer tray

④ Centering complete

► Label placement

Label placement must be accurate and consistent without causing damage to the product or the film. In the WM-AI this is managed by the tray detection system which knows the size and location of the tray together with the label placement co-ordinates.

Stable and steady wrapping and labelling

Unsealed and incorrectly wrapped trays are no longer a problem. The WM-AI eliminates unnecessary rewraps, inaccurate totals and film wastage.

► Fine-tuning pack parameters

Control the trays transit over the bottom sealing rollers ensuring film sealing, wrap integrity and retained stretch finish.

► Improved film loading and transport system

Consistently delivers the correct amount of film to produce a high quality wrap with the optimum use of film.

2 Accommodate with variety size tray by versatile wrapping ability

The WM-AI has been designed to overcome the need from the market geared to improving stability, reducing product disturbance and minimizing unnecessary reworking.

- ▶ **Increased wrapping size capacity to accommodate larger size trays**
- ▶ **Increased wrapping weight capacity up to 6 kg**
(Up to 4.5 kg for a pre-wrapped tray)
- ▶ **Designed to transport large awkward trays, with high center of gravity, without disruption and damage.**
- ▶ **Outstanding product and tray height detections system**
Works in conjunction with the pack wrapping parameters, recalled by the camera, to automatically adjust the film length and tension, ensuring over-filled trays are perfectly wrapped.
- ▶ **Innovative automatic wrapping torque control system**
Senses when the pack and its contents may become damaged, during the wrapping process, and modifies the wrapping parameters to ensure damage free outcome.

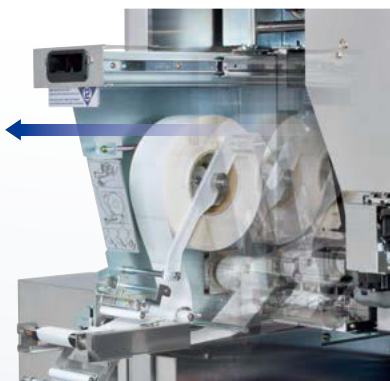


Up to
6 kg
for wrapping

3 Easy operation leads to reduced downtime

The WM-AI's user-friendly ergonomic design focuses on maximizing operational efficiency. Film or label roll exchange, daily machine cleaning, and error handling have been designed to minimize downtime. The operators need very little training and within a very short time become comfortable with the operation of the system.

- ▶ **Simple film-roll exchange**
The WM-AI has an automatic film loading and feeding mechanism. The operator simply loads the film roll onto the spindle and places the end of the film in the indicated location. The machine takes over from there, managing the process until operator input is required.
- ▶ **Easy & front-loading open access label roll exchange**
Front loaded printer mechanism allows for rapid label roll exchange without stress or contortion. The printer mechanism slides out to provide easy access to load the labels. Once the simple operation is complete, the printer is pushed back to the home position ready for the immediate resumption of production.



4 Variety information with impressive and eye-catching printing

The WM-AI will print true type font thanks to its PC based system. This provides attractive, clear and legible text in flexible label format designs. It will, of course, be able to print the mandatory regulatory information such as: product name, amount, bar code, nutrition ingredient labeling, allergy information, country of origin and food traceability information etc.

- ▶ **Uses high density thermal head**
- ▶ **Able to customize for additional true type font** *Contact Ishida agent for details.

Printing samples



Price label

Supports various fonts



Price and nutritional information label



Ingredients and meat traceability information label



Clear and vivid even for the smallest character

5 Improved hygiene and maintenance

Machine is designed to prevent accumulation of dust and debris. Those assemblies, located in areas of the machine where food contact is possible, are easily removed for cleaning and sanitizing, maintaining a food safe environment. The entire exterior body is crafted from stainless steel providing superior rust-resistance, stringent cleanliness and outstanding durability.

- ▶ **Hygienic design to reduce dust and debris accumulation**
The design incorporates inclined surfaces to eliminate accumulation of food debris. All mechanism, except the lift, are located outside the food contact area or protected by inclined covers. Easily sweep and clean under and in front of the unit due to the open interior design and generous clearance below.
- ▶ **Removable weighing platter**
Weighing platter may be taken out, washed and sanitized with an alcohol spray to preserve a high degree of hygiene.
- ▶ **Removable lift unit**
The lift can be removed by hand, without tools, for washing in warm water containing mild detergent.
- ▶ **Removable label applicator foot**
Simple, one-handed removal of the applicator foot allows for thorough inspection, cleaning or exchange.
- ▶ **Easy access to clean under weighing platter**
Cover below the weighing platter allows easy access to perform daily cleaning.





WM-AI-P

for secondary promotional labelling

Manually applying secondary promotional labels, to wrapped packs, always impedes the fluid automatic production process of a backroom. Now two labels may be applied to the top of the pack: the normal price label, and a promotional label. The WM-AI's ability to automatically, apply a second label to the pack, transforms a tedious routine into an efficient process.

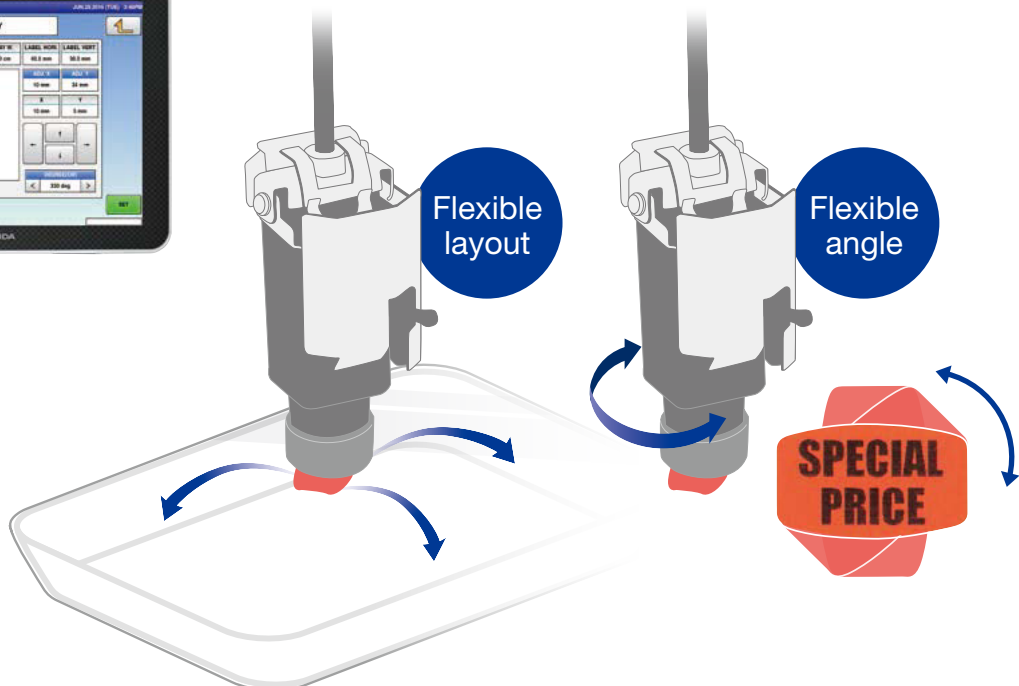
► Smart Printer

The printers' ability to print attractive promotional graphic images, and quality logos, onto sculptured labels, eliminates the requirement to hold numerous designs of similar sized preprinted labels.



► Automatic label apply

The robotic label applicator, uses stored location information to precisely apply the label to the top surface of the pack, consistently, irrespective of the angle of the surface. The rotation and application position may be altered, using the touch screen, to create maximum visual impact and appearance.





WM-AI-WF

for bottom labelling

Weighing, wrapping and labelling integrated into one unit, able to apply multiple labels to the top and bottom of the tray in one seamless operation, takes in-store productivity to a higher level. The "linerless label" bottom printer improves the efficiency of the fully automatic system and fulfills the growing requirement to provide more product information for customers.

► Linerless label

The length of the label can be varied automatically dependent on the amount of printed information required. The labels are precisely cut to optimize the use of label stock, resulting in lower cost of ownership, through lower material cost, reduction of downtime due to lower frequency of label replacement, and greater leverage when purchasing a single stock size.

*Contact Ishida agent for linerless label type.

Label on liner



Linerless label



Reduce empty space

More labels can be printed from linerless label rolls of similar diameter

Labels on liner



approx.
2628 labels on a label roll
with a 230 mm diameter

(assuming a label length of 85 mm and a gap of 2.5 mm)

Linerless labels



approx.
3233 labels on a label roll
with a 215 mm diameter

(assuming variable length labels are produced 50% at 85 mm long and 50% at 48 mm long)



Contributing, to improving the corporate environmentally friendly image and responsibility

Disposing of the backing paper of 1 million labels emits approx. 0.78 ton of CO₂. This is equivalent to the CO₂ emission created when disposing of 16,800 plastic bags and will require 56 trees to adsorb the same amount of CO₂.

► Works in conjunction with the unique tray centering mechanism ensures accurate and consistent labeling.

► Enhanced manual labelling capability

In manual labelling mode, the bottom printer presents the linerless label to the operator, creating a fluid process to collect and apply labels, when extra-long labels are required, or when large or awkward packs are processed.



Sixth generation of ISHIDA wrapper, each model developed using experience gained from market exposure and incorporating new technologies culminating in user friendly machine with high performance.

- A** Attractive tinted plastic cover encloses the printer and applicator, providing protection to the operator whilst at the same time allows a clear view to observe the labelling process.
- B** Intuitive 12.1 inch color LCD touch panel display permits simple method to review product data, select functions, recall training videos and display operator messages or instruction. With such a simple touch panel the operators need very little training and within a very short time become comfortable with the operation of the machine.
- C** Environment friendly system, 30% energy savings, compared to previous generations of ISHIDA wrappers, using sleep mode and an optional operator motion sensor. Solid State Drive (SSD) with no mechanical hard disk failure and consumes less battery power.
- D** Adjustable height stock conveyor with 3 incline angle positions.
- E** Requires only a single phase power supply, 200- 240V. No longer restricted to sites with 3 phase supply.
- F** Reduced number of electronic circuit boards, compared to previous generations of ISHIDA wrappers, where possible the PCBs are mounted vertically to improve pest control.
- G** Optional Wireless LAN kits available to create a system free from the burden of network cabling.
- H** The two film rolls are mounted above each other on the left hand side, a design that allows the machine width to be reduced. A stainless steel door protects the film from damage and forms an enclosure that can be heated in cold environments.



System configuration

ScaleLink Pro 5 (SLP-5) is a powerful server/client PLU management Windows based PC software. It completes the WM-AI series and takes it to new heights. The SLP-5 software, the 5th generation of the ScaleLink family software, is freely configurable to make it as simple as possible to the end-user to keep data up-to-date and synchronized on all scales in the system. Supporting mdb or SQL type databases, the GUI is by far one of the most user-friendly software in the retail scale business.



Related Products

IP-AI : Manual Scale Printer

Ideal for manual weigh price labelling. The IP-AI has the same touch screen panel and large label roll capacity. It also shares the same user interface so it can easily be integrated into the same working area as the WM-AI without the need for additional operator training.

Manual Scale Printer **IP-AI**



Design and specifications are subject to change without notice.



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SPECIFICATIONS

Model Name	WM-AI Type		AS1 JR	AS2 JR	AT1 JR	AT2 JR	
Scale Unit	Weighing Capacity *1	0 - 3kg × 0.001kg / 3 - 6kg × 0.002kg		○			
		0 - 6kg × 0.002kg / 6 - 15kg × 0.005kg		○			
		0 - 15lb × 0.005lb / 15 - 30lb × 0.01lb		○			
	Weighing Accuracy	1/3000 (Dual range standard)		○			
Wrapping Unit	Packs Per Minute	Up to 35ppm		○			
	Wrapping Capacity	0.02 - 6kg / 0.01 - 13lb (Up to 4.5kg / 9.9lb for a pre-wrapped tray)		○			
	Wrapping Size *2	Width: 95 - 380mm (3.7 - 14.9inch)			○		
		Depth: 80 - 260mm (3.1 - 10.2inch)			○		
		Height: 10 - 130mm (0.4 - 5.1inch)			○		
		Tray Height: 70mm max. (2.7inch)			○		
	Film Type	Polyolefin / PVC (type for machine use)		○			
	Film Size	250, 300, 350, 400, 450, 500, 533mm (21inch)		○			
Film Outside Diameter	φ200mm or less		○				
Number of film Roll	Automatic film selection available (two rolls only)		1	2	1	2	
Controller Unit	Display Console	Backlit 12.1-inch color LCD touch-panel (SVGA: 800×600dots)			○		
	Tactile Keys	19 Keys			○		
Printer Unit	Print Head	3inch direct thermal (960dots), 12dots/mm, 80mm wide head			○		
	Printing Speed	120mm/sec			○		
	Print Area	Width: Up to 76mm (3.0inch)			○		
		Height: <Printer #1: Left> 27 - 105mm (1.1 - 4.1inch) <Printer #2: Right> 27 - 60mm (1.1 - 2.4inch)			○		
	Label Size	Width: 35 - 80mm (1.4 - 3.2inch)			○		
		Height: <Printer #1: Left> 27 - 105mm (1.1 - 4.1inch) <Printer #2: Right> 27 - 60mm (1.1 - 2.4inch)			○		
	Number of Upper Printer		1	1	2	2	
	Label Roll Size -Inner Core Diameter	φ76mm (3.0inch)			○		
		-Outer Core Diameter	φ230mm (9.0inch) or less		○		
	Label Storage Capacity	6,000labels/roll (at 37mm (H) and 2.2mm gap)			○		
Interface	Ethernet	RJ45 x 1, 1000B-T			○		
	Wireless	802.11b/g *3			○		
	USB	x 4, USB 2.0			○		
	Scanner	via USB interface			○		
Others	Power Supply	Single phase, AC 200 - 240V (+5% / -10%), 50/60Hz, 10A			○		
	Power Consumption	Standby: 360W or less, Maximum: 1800W *4			○		
	Sleep Mode	90W or less			○		
	Memory Capacity	2GB			○		
	Dimensions	1215 × 1120 × 1635mm (Width × Depth × Height)			○		
	Foot Print	1000 × 1120mm (Width × Depth)			○		
	Occupied Space -Width	1365mm with film cover opened			○		
		-Depth	1550mm with stock conveyer or film cover opened		○		
	Weight	Approx. 382kg			○		
	Noise Level	74.6dB or less			○		
	Operation Environment	Temperature: 5°C - 35°C, Humidity: 20% - 85% (No condensation)			○		
Standards	ETL, CE, EU type approval			○			

*1: Factory fitted option

*2: Maximum dimensions cannot be used in combination.

*3: Optional

*4: Power consumption varies dependent on site conditions and machine setup.

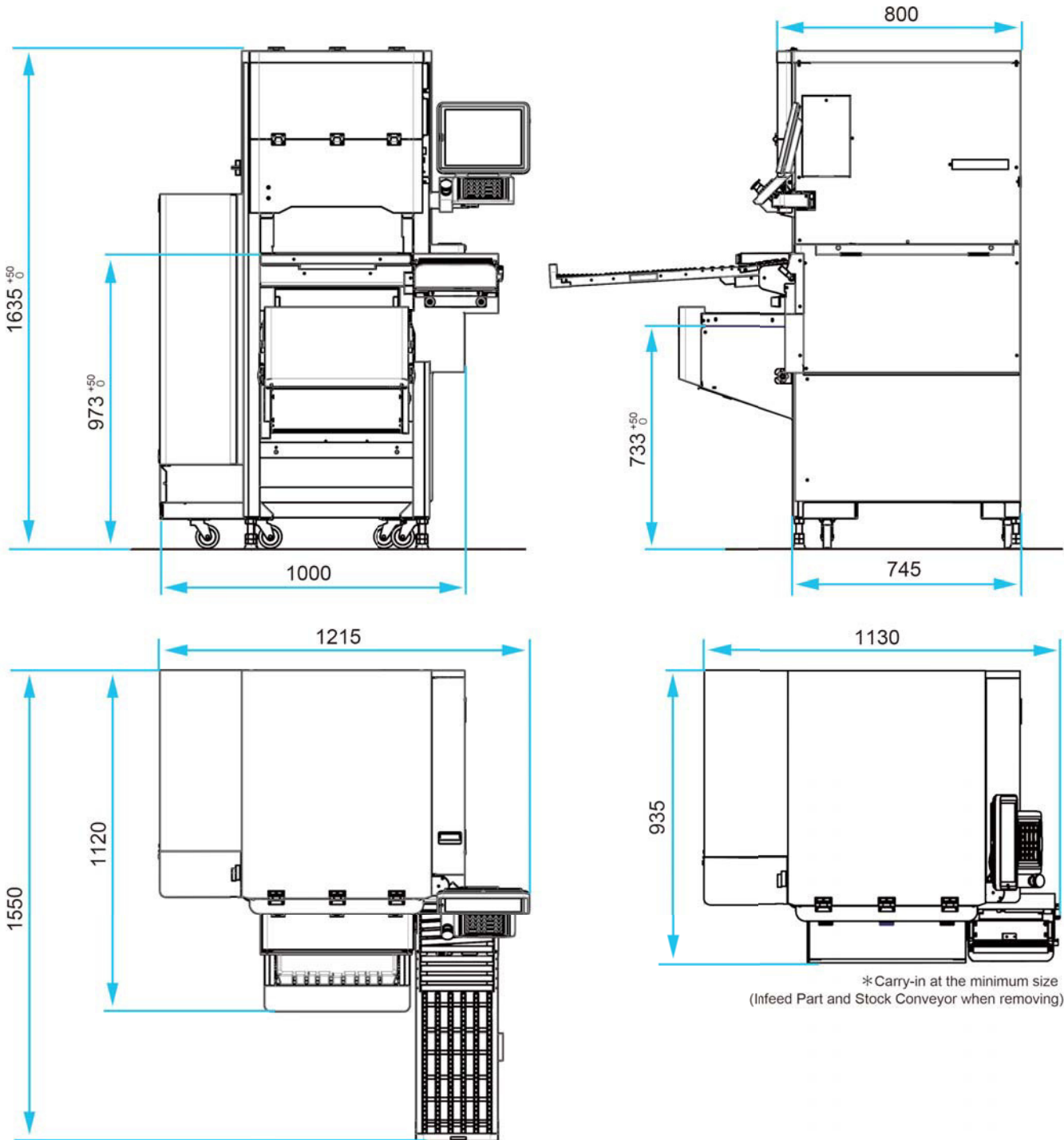
Specification subject to change without notice.



<WM-AI AS2 JR>

DIMENSIONS

(mm)



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