

# Marel Marine Scales

Fast, stable and reliable



- On-board weighing, packing and labeling
- M1100e, M1100 and M2200
- Fast, accurate and flexible
- Robust, durable and hygienic
- 316 stainless steel design
- Water-resistant to IP67 & IP69K standards



# Designed to withstand harsh conditions

## Flexible range for different needs

The Marel Marine Scales offer flexible weighing and packing with motion compensation designed for use on board fishing vessels and factory trawlers. These cost-effective series of compact and flexible marine scales range from the simple efficient M1100e weighing units to the high-end M2200 packing scales and hopper controllers.



## User-friendly

With a touch-sensitive yet tough, hardwearing keypad, the Marel Marine Scales are easy to operate. The large easy to read displays ensure user-friendly operation. The scales come with either metric (kg, g) or avoirdupois (lbs, oz) weighing units, depending on the system required.



## Three different models

### M1100

Division from: 0.5 g ( 3kg scale)

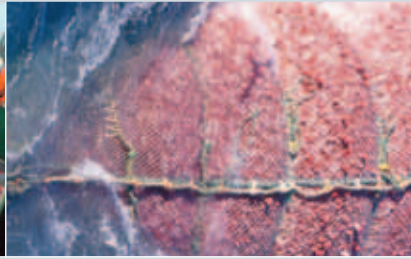
On-board weighing, packing and grading

Tree types of grading modes

Display with under/overweight indicator

Robust and hygienic 316 stainless steel design - IP67/ IP69K

Network connections via NS3 server – CAN open and RS232 port



“ We decided to go with Marel after looking into reliability and service and have used the Marel Scales for over a decade in the harsh trawler environment. Unlike scales from other manufacturers there have been no instances of malfunction.

”  
*Mr. Aleksander I. Pokotilo, Chief of Production, JSC TURNIF*

## Responsive and flexible

Super fast, stable and reliable, Marel Marine scales are capable of accurately registering and recording weights in 0.5 – 1 sec. Marel Marine Scales can be operated from 110 – 230 VAC, 24 VDC or, in the case of the M1100 series, also by D-type batteries.



## Hygienic

Marel Marine Scales are custom designed to withstand the harsh conditions of the wash down environment. Their compact AISI 316 stainless-steel housing protects an array of high-tech electronics. The scales are water-resistant to IP67 and IP69K standards, and its rounded edges and easy-to-clean surfaces are designed for maximum hygiene.



## Smart applications

The M1100 and M2200 offer a selection of built-in packing and grading memories that add positive and reverse grading to their array of user applications. The scales are available as both single and dual-range scales, allowing for more accuracy in weighing lighter pieces when necessary.



## Robust construction

Built from high-end components, the long-lasting construction of the Marel Marine Scales meets the strictest food processing industry standards. Sturdy and robust, the hygienic 316 stainless steel design is capable of enduring decades of daily wash down in the harsh conditions at sea.



# of motion-compensated marine scales

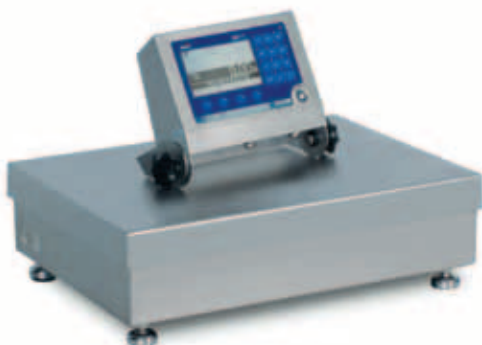


## M1100e

Division: 20 g (30 kg scale) & 50 g (60 kg scale)

Fast, stable and reliable on-board weighing

Robust and hygienic 316 stainless steel design - IP67/ IP69K



## M2200

Division from: 0.5 g (3kg scale)

On-board weighing, packing and labeling

Range of grading programs

Controls hoppers and conveyors.

Programmable on site.

Catch reporting and traceability

Packing registrations: catch area, box number, haul number

Display with under/overweight indicator

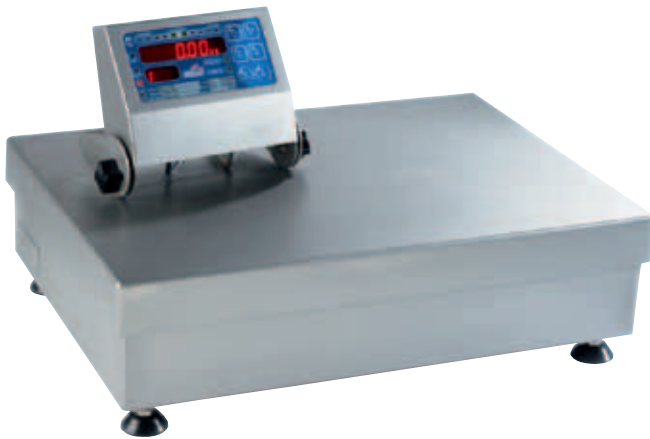
TCP/IP network connections via Ethernet - CAN open and RS232 port

Robust and hygienic 316 stainless steel design - IP67/ IP69K

# M1100e

## Simple, reliable on-board weighing

Fulfills official EU requirements for on-board weighing, and does it very competitively



The M1100e marine scale is the latest in a long line of scales and weighing equipment that Marel has designed and quality manufactured to meet precise processing needs.

Closely based on the M1100 general-purpose grading and packing scale, the new e-version is aimed specifically at the on-board market segment that wants simple yet high-quality functionality.

The robust M1100e ensures very stable, fast and reliable weighing at sea. It has a user-friendly interface, and incorporates a hygienic 316 stainless steel design that is water-resistant to IP67 and IP69K standards.

Platform dimensions (LxW)		PL3200	PL4200
Metric		296x396mm	400x550mm
Avoirdupois		11.7x15.6 in	15.7x21.6 in
Max capacity			
30kg	20g accuracy 30kg	x	
60kg	50g accuracy 60kg		x
Display			
Wall mounted		x	x



# M1100

## Fast, accurate and extremely durable



Versatile, accurate and incredibly fast, the Marel M1100 series general-purpose grading and packing scale is designed to meet the need for a flexible, extremely robust scale in on-board processing.

- Designed to withstand the harsh conditions of a marine environment
- Easy to clean
- Weighing range of 1.5 kg to 150 kg
- Compact design and small footprint
- Single or dual-range operation
- Water-resistant to IP67 and IP69K standards

The Marel M1100 series provide accurate on-board catch weighing that reduces give-away and decreases turn-around times. The scales ensure improved efficiency, greater weighing accuracy and, improved catch quality. Linked by Marel software to a label printer and PC computer, this compact and cost-effective system enables skippers to land catches weighed, graded, boxed and labeled, ready for sale.



Platform dimensions (LxW)			PL2210	PL2260	PL3200	PL3260	PL4200	PL6050	PL6038*
Metric			246x296mm	242x292mm	296x396mm	292x392mm	400x550mm	500x600mm	380x600mm
Avoirdupois			9.7x11.7 in	9.5-11.5 in	11.7x15.6 in	11.5x15.4 in	15.7x21.6 in	19.7x23.6 in	15x23.6 in
Max capacity									
	Lower range	Upper range							
3kg	0,5g up to 1,5kg	1g accuracy 1,5-3kg	x	x					
6kg	1g up to 3kg	2g accuracy 3-6kg	x	x					
15kg	2g up to 6kg	5g accuracy 6-15kg	x	x	x				
30kg	5g up to 15kg	10g accuracy 15-30kg			x				
60kg	10g up to 30kg	20g accuracy 30-60kg				x	x	x	x
150kg	20g up to 60kg	50g accuracy 60-150kg					x	x	
Display									
In platform/Portable				x		x			
Short pillars			x		x				
Long pillars			x		x		x		
Wall mounted			x		x		x	x	x
Column				x					

\*with manual hopper

# M2200

## High-end grading and packing scales

### Built to endure

Designed for minimal maintenance, the M2200 is accurate, robust and highly stable. Suitable for use with a wide variety of weighing platforms or hoppers, the scale is custom designed to withstand the harsh conditions of a wash down environment. The M2200 is water-resistant to IP67 and IP69K standards, while its smooth, rounded edges and easy-to-clean surfaces are designed for maximum hygiene.



### Complete control

The M2200 can easily be connected to external devices such as printers, barcode readers and labeling equipment as well as network computer systems. The CAN interface also makes it simple to control relays and air valves. The series TCP/IP networking capabilities offer complete overview of both weighing procedures and data as well as equipment control.

Suitable for a variety of packing operations the Marel M2200 is one of the fastest scales available. The versatile M2200 can control conveyors and packing hoppers. It connects to the industry standard CANopen network and has a built-in programming language for custom applications.

The M2200 connects to most types of label printers for labeling of catch products. Various label formats are stored in the scale or maintained from a PC computer. A variety of software applications are available for the M2200.

Platform dimensions (LxW)			PL2210	PL3200	PL4200	PL6050	PL6038*
Metric			246x296mm	296x396mm	400x550mm	500x600mm	380x600mm
Avoirdupois			9.7x11.7 in	11.7x15.6 in	15.7x21.6 in	19.7x23.6 in	15x23.6 in
Max capacity							
	Lower range	Upper range					
3kg	0,5g up to 1,5kg	1g accuracy 1,5-3kg	x				
6kg	1g up to 3kg	2g accuracy 3-6kg	x				
15kg	2g up to 6kg	5g accuracy 6-15kg	x	x			
30kg	5g up to 15kg	10g accuracy 15-30kg		x			
60kg	10g up to 30kg	20g accuracy 30-60kg			x	x	x
150kg	20g up to 60kg	50g accuracy 60-150kg			x	x	
Display							
Wall mounted			x	x	x	x	x

\*with manual hopper

# Networking – system integration



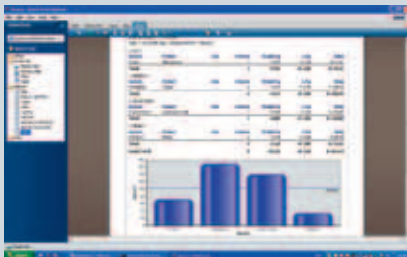
## M1100

The Marel M1100 can be connected to a PC via an RS-232 port, or through a CAN network, using an NS-3 Network Server. The NS-3 Network Server connects the industrial CAN network to the computer network. Up to 64 scales can be connected on each CAN network, where the same cable is used for power and data communication.

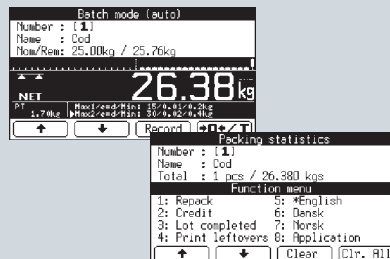


## M2200 MarinePack

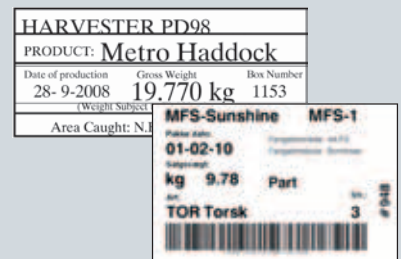
With the Innova MarinePack system all EU fishing control regulations are complied with. The system comprises as a minimum a scale, an M2200 indicator, a printer and Innova MarinePack software. The system registers info about all fish species and grades, harbour, fishing gear and other information relevant for either a report or a label. It is possible to make reports that provides an overview of such as catch value, packing history, e-log report, etc. The M2200 indicator has a set-up supporting manual and automatic tare setting, recording of box weight, handling weight into tubs, etc.



It is possible to make reports in Innova MarinePack that provides an overview of such as catch value, packing history, cargo report, e-log report, etc. Below report shows catch value with a graphic view.



The M2200 indicator has a set up supporting manual and automatic tare setting, recording of box weight, handling weight into tubs, filter option to select species, repacking a part box for completion, simple data export, etc.



The Innova MarinePack comes with predefined label designs (two as default). Labels can be designed according to need and traceability requirements.

# Accurate, robust on-board weighing

Marel has over two decades of experience in the manufacture of high-tech, robust scales and weighing equipment. Behind the deceptively simple lines and user-friendly interface of the Marel Marine Scales lie years of research and development. Extensive trials and user experience have shown the user-friendly scales to be as at home in the heaving hold of an ocean trawler as in the controlled conditions of a factory floor.

Accurate weighing and packing on-board increases yields, maintains peak quality, minimizes handling and requires fewer on-board workers. Vessels can land products that are graded, boxed, labeled and ready for delivery.



## Compatible with Innova – Intelligent production control system

### Innova - Intelligent production control

Innova is the software from Marel that ties all processes in a production environment together. It can be applied as a complete IT solution covering the complete value chain in the production cycle, providing all key performance indicators for each stage and traceability from catch to despatch. Innova integrates seamlessly with Marel processing equipment to ensure the best possible performance and provide management with important new opportunities for greater efficiency.



## Marel

The leading global provider of advanced equipment and systems for the fish, meat and poultry industries.

**Marel, Stork Poultry Processing and Townsend Further Processing** – Our brands are among the most respected in the fish, meat and poultry processing industries. Together, we offer the convenience of a single source to meet our customers' every need.

For further information please visit [www.marel.com](http://www.marel.com)

