Grading and batching

Gain more, giveaway less

- Extensive industry knowledge

- Individual project consulting

- State-of-the-art grading and batching

> "We're now running the TargetBatcher nine hours every day with a number of different retail jobs and we're very happy with it. It's accurate and effectively reduces giveaway. It's a very stable and reliable piece of equipment that doesn't need much maintenance and is easy to use–just like the other Marel equipment we have."
>
> **Ricardo Figueiredo, production manager at Gelpeixe**

TargetBatcher

This compact, semi-automatic batcher is ideal for processing many small product series, where fast changeovers from one product to the next are crucial. It is suitable for small and large packages alike.

Rework costs both labor and time, and the TargetBatcher is a uniquely efficient and compact solution for most rework problems.

The TargetBatcher is available in two versions: one for fresh and frozen fish products, and one specifically for glazed products.

- Small footprint
- Simple installation
- Easy to operate and clean
- Reduces rework
- Typical applications: whole fish, fillets, steaks

Max. product size (mm)	330 x 190
Max. batches/minute*	30
Max. batch size (kg)	2
Equipment dimensions (L x W x H, mm)	2,147 x 793 x 1,636
Equipment weight (kg)	330

*Depending on batch size and product type.

Compact Grader

Marel's Compact Grader is designed for simple grading and is ideal for temporary or seasonal overflows. It is compact and robust and is suitable for a variety of products.

- Easy to install and operate
- Accurate performance
- User-friendly
- Simple and bestfit batching to lower giveaway
- Small footprint
- Typical applications: fillets, steaks, whole fish

Compact Grader model	CG450	CG600	CG900
Max product length	250 mm/10 in	400 mm/16 in	700 mm/28 in
Max product width	250 mm/10 in	250 mm/10 in	250 mm/10 in
Weight range	40-1,500 g	40-3,000 g	40-3,000 g
Raw material	non-sticky product		
Max throughput	160 pcs/min	120 pcs/min	80 pcs/min
Gate division	475 mm/18.7 in	475 mm/18.7 in	650 mm/25.6 in

*Depending on batch size and product type.

SpeedBatcher

The SpeedBatcher is uniquely capable in creating bulk batches consisting of many individual pieces, such as for export and catering batches.

There are three versions of the SpeedBatcher, each dedicated to products of a specific size.

- Fully automatic from input to delivery
- Stand-alone or part of a complete production line
- Automatic and manual bagging
- Easy to operate and clean
- Typical applications: whole fish, fillets

	SB-3000	SBL-3000
Max. product size (mm)	270 x 150 x 60	270 x 170 x 75
Max. batches/minute*	14	12
Max. batch size (kg)	30	30
Equipment dimensions (L x W x H mm)	2,790 x 1,482 x 2,187	2,928 x 1,478 x 2,463
Equipment weight (kg)	548	574

*Depending on batch size and product type.

Marine batch packing

The onboard batching and packing system for pelagic freezer vessels is comprised of the Marine SpeedBatcher and the Marine Bag Packing Unit.

The Marine SpeedBatcher outperforms all conventional hopper systems in both speed and accuracy by automatically weighing fish into sub-weights that are selectively combined to form the optimum batch weight.

- Efficient data collection and reporting
- Equipment control from the PC
- Product setups
- Traceability from supplier to customer
- Compact design
- Typical applications: mackerel, herring (whole and fillets), capelin, blue whiting

Hopper volume	18.8 L
Batch size	4-25 kg*
Max piece length	500 mm
Max throughput	10-11 batches/min**
Bag size (opening)	591 mm

*Defined for each product.
**Dependent on batch/product size and flow.

Multihead weigher for seafood

Designed to handle a wide variety of batch sizes, the versatile multihead weigher can process products into a variety of different packs. Utilizing Marel's renowned weighing techniques, the multihead weigher minimizes giveaway and ensures batch reliability.

- Consistent, maximum-capacity product flow
- Easy to operate
- All-time low maintenance costs
- Open, easy-to-clean construction
- Typical applications: shrimp, mussels, seafood mixes

	MHW 14 h, 2 lz	MHW 18 h, 2l
Max. product size (mm)	80 x 30 x 30	80 x 30 x 30
Max. batches / minute*	95	120
Max. batch size (kg)	2	2
Equipment dimensions (H x W mm)	1,548 x 1,395	1,548 x 1,395
Equipment weight (kg)	550	600

*Depending on batch size and product type.

SmartLine graders

SmartLine graders offer the speed and accuracy of previous generations of Marel graders, with greatly enhanced hygiene and serviceability.

Available in both single and dual lane with a completely modular design, the SmartLine can be configured to meet most grading needs.

- Unique hygienic design with an IP69K rating
- Speed and accuracy combined
- Real-time reporting function
- Ideal for catering and retail applications
- Typical applications: whole fish, fillets, seafood

			MWs1000	MWs1450	MWs1900
Maximum throughput*		pcs/min	250	250	250
Product size (belt width 50 mm)	Length**	mm	220	680	1050
	Height	mm	20-150	20-200	20-250
Weight range		g	10-3,000	20-6,000	20-15,000
Scale interval	Max 0.6 kg	g	d=0.5		
	Max 1.5 kg	g	d=1.0	d=1.0	d=1.0
	Max 3.0 kg	g	d=2.0	d=2.0	d=2.0
	Max 6.0 kg	g		d=2.0	d=2.0
	Max 15.0 kg	g			d=10.0
Accuracy***		g	0.5 for 1st dev	1.0 for 1st dev	

* Depending on platform size.
** At 1.3m/s with largest platform.
*** For 10-600g product, weighing accuracy depends on environmental condition, product shape and behavior, and transportation speed.

Innova Food Processing Software enables you to monitor and control every step of the production process, from receiving the raw material to dispatch of the final product.

Innova can control single devices or a full range of equipment across the plant floor. It is built from separate modules, making it highly flexible and able to support both large and small operations. The software "communicates" with other systems, such as an existing ERP system, to provide a powerful interconnected management system.

Innova for batching

For the best batching performance, Innova software provides a complete overview of all aspects of the batching process and the results. The graphical user interface allows the user to see and change the programs and products running on the equipment and generate reports on critical factors such as giveaway, throughput and efficiency.

- Real-time control of batchers
- Real-time monitoring that enables quick intervention and a reduction in give-away
- Storage of lot/batch data for customer verification of batch results
- Historical reports for analysis of raw material and results
- Built-in traceability support
- Easy, fast and cost-effective implementation

With the insights gained from Innova, smart decisions can be quickly made on how to optimize grading and batching results, while ensuring that production meets the highest quality and conforms to food safety standards.

INNOVA
Food Processing Software

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

ADVANCING FOOD PROCESSING

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