



INSPECTION AND CONTROL

## Essentia Checkweighers Eliminate invisible waste

Turn weight control into efficiency and measurable value: less overfilling, fewer setup errors, and greater compliance.



## Checkweighers

# Eliminate waste. Tailored precision.

➤➤ Ideal checkweighers for simple, accurate, and repeatable weight control

Nemesis weighing systems enable dynamic in-line weight control using advanced technologies and dedicated software. From process verification to the control of products intended for sale, the platform has been developed in accordance with MID 2014/32/EU and, where applicable, the requirements for pre-packaged goods set out in Law 690/1978 (Dir. 76/211/EEC).

They monitor process quality and efficiency, reducing overfilling and the resulting waste. The return on investment can therefore be rapid and measurable. Accurate control of declared label weight helps reduce the risk of non-compliance and protects the brand's reputation.

**For an even more comprehensive level of inspection, the systems can be integrated with metal detectors and X-ray inspection systems to meet application requirements and industry standards.**



### BENEFITS OF IN-LINE CHECKWEIGHING

- **Automatic inspection of every product:** eliminates manual spot checks, delivering significant savings in labour and time.
- **Process trends under control:** even the smallest deviations are detected immediately, reducing waste and rework.
- **Documented quality:** inspection records for audits and complaints are always available, without additional manual effort.



### DATA ANALYSIS SOFTWARE

The Nimax software platform allows you to easily analyse process data and extract key indicators and statistical data useful for production and quality. The system collects production data, scrap, and inspection results in a structured way, providing clear performance monitoring.

Thanks to customised views, you can choose which information to view; data can be exported in the most common formats (e.g. PDF and CSV) for reporting, traceability, and auditing.

## Essentia C

**The most versatile in the range.**  
**From 15 g to 8 kg.**

A compact and flexible solution for adding end-of-line quality control in small spaces (even < 1 m), without disrupting the layout. It offers reliable performance with low operating costs (energy and maintenance) and is ideal for multi-product lines.

**Ideal sectors:** Food & Beverage, Cosmetics, Pharmaceuticals, Chemical Industry, Non-food.

**Ideal formats:** cans, bottles, cartons/boxes, flowpacks.



## Essentia S

**The lightweight specialist.**  
**From 5 g to 1.2 kg.**

Characterised by weighing accuracy of up to  $\pm 0.2$  g (MID) while maintaining high speeds, this series is ideal for light and small products. It handles both packaged items (small boxes, bags, flow packs, bottles) and multi-component kits, where weight control highlights any missing parts.

**Ideal sectors:** Light food products, Cosmetics, Pharmaceuticals, Chemical Industry, Non-food.

**Ideal formats:** bags, flowpacks, bottles, multi-component kits.



### Opposing side belts – EasySet

Designed for containers with critical stability (tall, slender, or with a small base)—such as bottles, jars, and shaped formats—the belts pick up the product from the line and feed it to the checkweigher while maintaining the correct position. After inspection, they convey the product back to the production line, preventing product tipping and ensuring more efficient and repeatable weighing. On request, the belts can be mounted diagonally, allowing the machine to be installed parallel to the line and avoiding cuts or modifications to the existing production line.

### Single or double air-jet ejector

Non-contact ejection for light or sensitive products: precise rejection with a single or double jet even on high-speed lines.



### Side push ejector (pneumatic pusher)

A pneumatic piston ensures decisive and repeatable rejection, ideal for medium to heavy products even at high speeds.

# Essentia H

**The heavy-duty specialist.**  
**Up to 60 kg.**

Designed for heavy and bulky packages, the H Series combines a stainless steel frame and high-performance brushless motors for stable and reliable transport. Ideal for demanding environments (logistics and the chemical industry), where robustness and operational continuity make all the difference.

**Ideal sectors:** Logistics, Chemical Industry, Packaged Food, Non-food.

**Ideal formats:** bags, cartons, cans, heavy or bulky packages.



# Essentia Mx

**The product safety specialist.**  
**From 5 g to 60 kg.**

A combined system that integrates weight control and foreign body detection with a metal detector or X-ray system in a compact footprint. The Mx configuration can be implemented on the main Essentia platforms (C, S, H), allowing you to choose the most suitable base for weight range, throughput, and line layout. Data collection is integrated, with the recording of non-conformities and reports useful for quality management and audits.

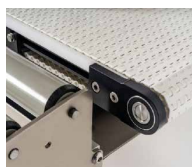
**Ideal sectors:** Food & Beverage, Cosmetics, Pharmaceuticals, Chemical Industry.

**Ideal formats:** weight control + foreign body detection (metal detector or X-ray).



## HeavyWeight - Reliable rejection for heavy products

For heavy or bulky packages ( $\geq 15$  kg): enhanced pneumatic ejection ensures reliable rejection even on large boxes and crates, maintaining high productivity.



## Modular mesh conveyor belt and reinforced rollers

Reinforced rollers and a modular plastic mesh conveyor belt ensure stable transport at high loads, making the system ideal for demanding production environments such as chemical processing, areas with process residues, and intensive production use.

## Multi-channel sorting – Automatic classification by weight range

Real-time physical separation of products into multiple weight classes with dedicated collection destinations. The system provides high classification accuracy and enables differentiation even for a few grams. Ideal when it is necessary to standardise product size or create homogeneous batches, ensuring orderly and targeted management of each weight range.



## >> EasyWeigh®: Weighing software with an intelligent algorithm

EasyWeigh® is the advanced software installed in Nemesis checkweighers to overcome the limitations of traditional weighing systems. It reduces setup complexity and dependence on learning procedures while maintaining accuracy and repeatability in in-line control.

### >> Key advantages

- **Instant recipes without learning:** weighing of new products regardless of shape, size, and orientation.
- **Greater compliance assurance:** reduces the risk of “apparently compliant” batches affected by sub-optimal learning.
- **Reduced training:** intuitive interface, few steps for main functions.
- **Quick changeovers:** product weight and belt speed are all you need to start weighing.
- **Guaranteed net weight:** ensures that the weight stated on the product label is respected, demonstrating production quality and process control while reducing waste and delivering economic savings.

### DISCOVER NIMAX DIGITAL INNOVATIONS



**Line Strategy is the application that gives you full control of your production line from a single workstation:**





- Connects machines of any brand on the line;
- Reduces human error and enables centralized production control;
- Provides real-time reports on production performance;
- Reduces costs and streamlines tooling, control, and maintenance processes;
- Interfaces with company MES and ERP systems.



**MyNimax Service Portal is your central platform for managing your Nimax machine fleet:**

- AI-powered support with ai.max, available 24/7 for fast issue resolution;
- Integrated e-shop for easy ordering of consumables and spare parts;
- Unlimited remote assistance from our technical support team;
- Complete service and maintenance history.

# Technical specifications

	Models	Capacity	Accuracy (3 $\sigma$ )	Cadence	Belt speed	Washability
	<b>ESSENTIA C</b> <i>The most versatile</i> 7" Touch Monitor (10" optional)	From 15 g to 8 kg	$\pm 0,36$ g (MID)	up to 300 ppm	up to 80 m/min (MID)	IP54 (IP65 optional)
	<b>ESSENTIA S</b> <i>The lightweight specialist</i> 7" Touch Monitor (10" optional)	From 5 g to 1,2 kg	$\pm 0,07$ g (MID)	up to 450 ppm	up to 100 m/min (MID)	IP54 (IP65 optional)
	<b>ESSENTIA H</b> <i>For heavy and bulky products</i> 7" touchscreen monitor (10" optional)	From 8 kg to 60 kg	$\pm 1,6$ g (MID)	up to 60 ppm	up to 40 m/min (MID)	IP54 (IP65 optional)
	<b>ESSENTIA Mx COMBINED</b> <i>With Metal Detector / X-Ray</i> 7" touchscreen monitor (10" optional)	As basic model (C/S/H)	As base model (C/S/H)	As base model (C/S/H)	As base model (C/S/H)	IP54 (IP65 optional)

## Certifications and quality standards

Designed for Food & Pharma lines, supporting the requirements of the main standards: HACCP - BRCGS - IFS - SQF - Marks & Spencer - GMP. Cadence and speed depend on product pitch (spacing), format, and transport/ejection configuration. Values refer to MID mode where indicated. Technical data subject to change without notice.

DISCOVER MORE

