

**HAARLA**



# **BALEMAT<sup>3</sup>**

## **FOR RCF BALE GRADING**

Automated loose Bale Testing

"On-the-Truck" bale testing systems

**- FIBRES - PLASTICS - ASH - MOISTURE - BRIGHTNESS -**

# HAARLA

# BALEMAT

## THE TRUTH ABOUT FIBRES, PLASTIC, ASH, MOISTURE & BRIGHTNESS

The Haarla Balemat<sup>3</sup> combines the “best-of” measuring technology with industrial engineering to provide You with true numbers throughout the year

### Savings through “truth and reliability”

In addition to paying extra for the excessive moisture or foreign materials in RCF bales, traditional manual testing is also a labour intensive and slow process. Accompanied with sampling error related hazards, manual testing leads to high additional costs and far lower testing capacities. It is now possible to minimize most of these expenses by installing Balemat<sup>3</sup> as a part of your RCF handling process.

The Balemat drills a deep hole into the bale and measures the bale from inside along the full length of the hole. Up to 35-40% of the layers in the bale may be represented in the sample. We measure the bale, period.

### Scalable and flexible

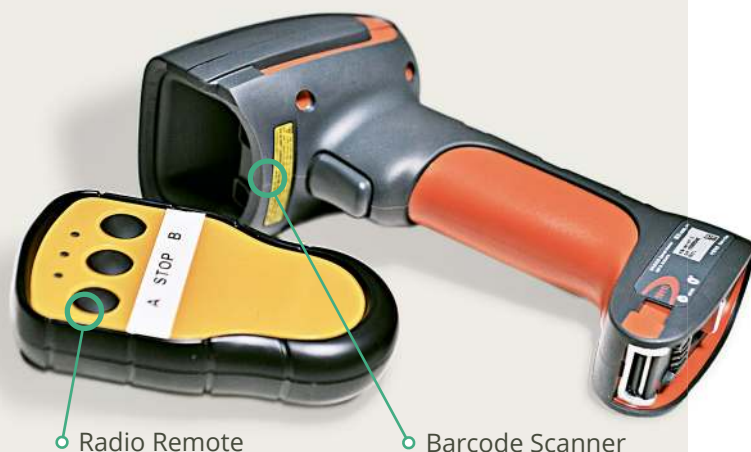
The Balemat<sup>3</sup> has been designed from the ground up to match the demands of the industry. From high speeds and industry standard measurement data, it has been designed with a focus on easy use, solid science and scalability.

With a various Balemat<sup>3</sup> setups it is possible to inspect bales directly from trucks or as loose items manipulated by bale clamps. A one-area system serves Your needs when no queuing is required and the a maximized capacity is not required. The Two-area system eliminates system waiting times thus making the full use of the system core performance. Over 700 bales per day is possible.

### PRACTICAL INNOVATIONS USER INTERFACE, SIMPLIFIED

Low-cost remote control & sample identification?

**Done and done.**



We designed the Balemat<sup>3</sup> features by rethinking the standards. The bale clamp driver can operate the system without the need of stepping outside his cabin.

Have Your system print a Barcode / QR-code and let our system manage the rest.

# THE FACTS

## PLUG 'N PLAY FOR EASY LIVING

- Designed with quick installation in mind
- Both types of systems are typically set up as "1+1 week projects"; First week for installation and the second week for the run-up & training together with the customer.

## START 'N FORGET FULLY AUTOMATED

- Calibration is automated and the system even notifies You about the cleanliness of the standard
- Spectral calibration is required only every 12 months - no specialized on-site know-how is required.
- Reliable results 24/7

## PRECISE TESTING OPTIMIZED PTS-TECHNOLOGY

- The system integrates the most reliable NIR-measuring system on the market with over 30 units sold.
- The measuring sensor is specially made for the Balemat with a proven performance and a maximized sampling rate
- Automatic calibration with an on-board calibration standard ensures true numbers in 24/7 operation
- No need to work with any additional samples from bales as the numbers are accepted by the industry

## MADE-TO-ORDER TAILORED FOR YOU

- Various installation options due to a modular system
- Data delivered to production management, quality control and procurement
- The Automatic-units can be extended to manage any number of bales depending on customer preference

## DURABLE DRILLS EASY-TO-SERVICE DRILL-BIT SOLUTION

- Easy to change, ultra-wear resistant drills with typically 1000 drillings per sharpening
- Easy-to-service drilling system for even the most difficult materials
- Smart drilling with fuzzy logic.

## COMMON TECH FOR AFFORDABLE ENGINEERING

- Supplier identification by barcode or QR-code.
- Low-cost radio control system
- Using standard components from mainstream suppliers like Siemens, ABB, SEW and Sick
- Can be built with some functions done with pneumatics or as an "electrics only" - system.

## WE INNOVATE SUPERIOR SOLUTIONS

- The only fully-automatic loose bale testing system
- The only fully rotating truck testing system
- Also brightness measurement is offered as an option.

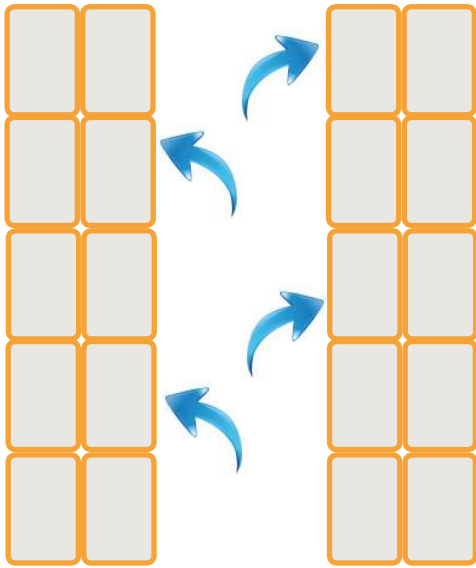
## INTELLIGENT REMOTE SUPPORT

- System health can be monitored remotely
- Most of the system components are accessible remotely due to our industrial internet based bus-system
- We use the Tosibox system for ultra safe remote access.

"We really do this stuff better than anybody else"

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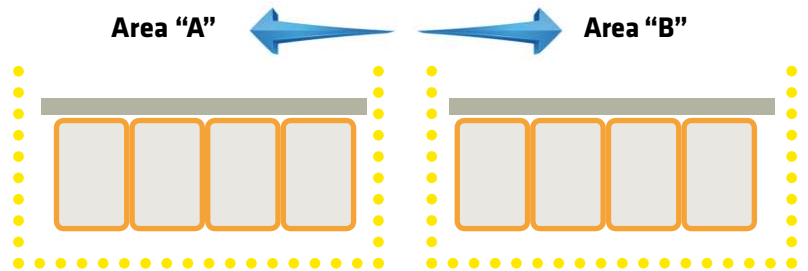


## BALEMAT TRUCK360

**The system travels alongside the trucks for best flexibility and speed.**

Rotation allows for randomized truck placement while maintaining parallel traffic. Our solution eliminates any foul play by the suppliers in loading the trucks.

Our unique way of entering the bale caters for excellent sampling on any kind of loads



## BALEMAT AUTOMATIC

**Loose bale testing for container & closed vehicle -deliveries**

The system traverses inside a safe working area. Bale clamps in the yard push the bales against stoppers on the floor and once the system is loaded, the driver just "Scans the supplier & Presses start".

In a two-area system, one area can be loaded / unloaded while the other area has the testing going, which increases speed and flexibility of the yard resource use.

The testing area size is typically determined by the planned number of bales to be tested from each truck.  
"One loading, one truck"

**For additional information:**

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