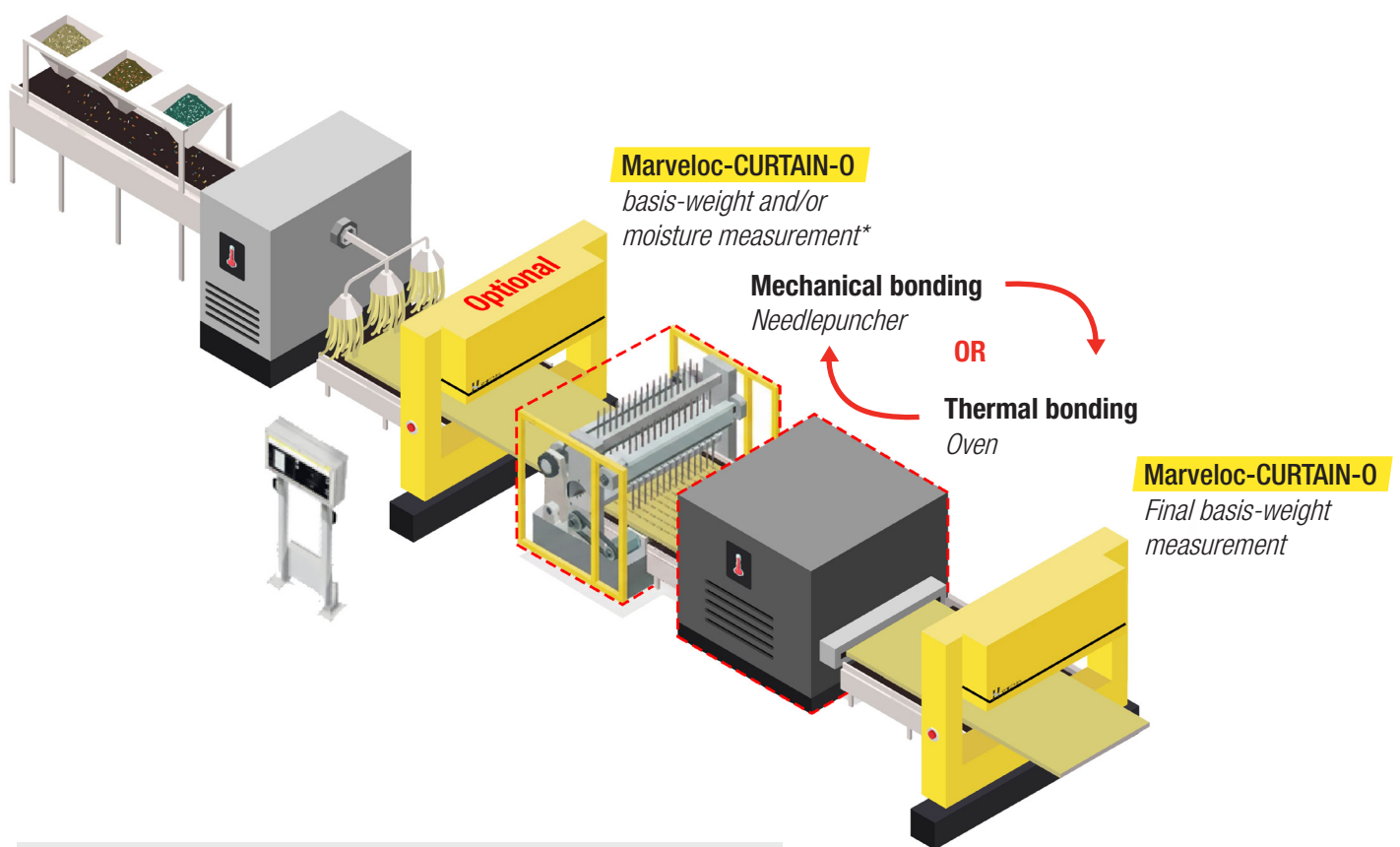




HAMMER-IMS

Inline basis-weight, moisture and thickness measurements of mineral, stone and glass wool insulation:



General benefits

- ✓ Using materials and energy more efficiently
- ✓ Less manual work needed
- ✓ Keeping production under control
- ✓ Making precise measurements for better product quality
- ✓ Improving and maintaining product quality consistently
- ✓ Decreasing customer complaints

* Applicability of basis-weight and/or moisture measurement before oven/entanglement section is considered in a case-depending manner. Consult Hammer-IMS for your specific case.

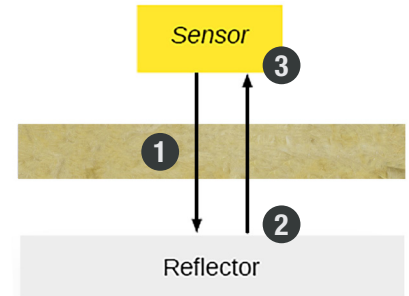
Maximizing Efficiency, Minimizing Waste: Hammer-IMS advances in insulation control

Mineral wool, stone wool, and glass wool are known for their excellent thermal properties and non-flammability, providing a solid foundation for various insulation products. Hammer-IMS offers cutting-edge sustainable measurement systems that provide real-time data, facilitating seamless integration. Allowing manufacturers to adjust parameters promptly, maintain consistent product quality, and reduce waste.

Marveloc Sensor Technologies

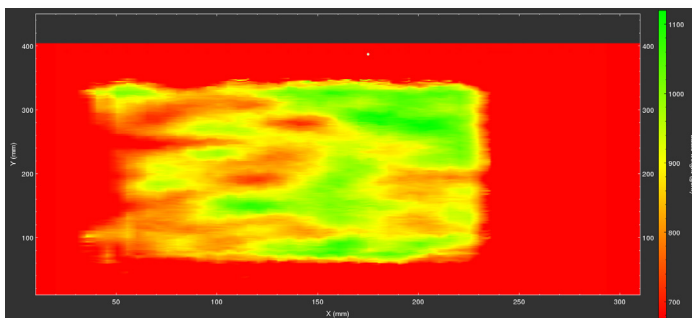
M-Ray: millimeter wave sensor technology

The concept of our M-Ray technology for basis-weight (grammage) measurements is straightforward: a sensor at the top sends out a millimeter wave. This wave goes through the material we want to measure. **1** When it reaches the bottom, it bounces off a reflector **2** and comes back up through the material once again. Finally, it reaches the sensor again, where we can capture it and analyze it. **3**



M-Ray: moisture measurement

The M-Ray sensor can also measure moisture throughout the entire product, not just the surface. Unlike other sensors that mainly detect surface moisture, the Marveloc M-Ray Moisture Sensor also measures water inside the material.



M-Ray: real-time detection of product variations

Our sensors spot product variations in your production process at the lowest latency. 2D colormaps graphically reveal the areas with highest and lowest grammage of the produced products. Using a frequency analysis tool, any systematic and periodic variations in the machine direction can be retrieved in order to better control these variations.

L-Ray: laser-based sensor technology

For thickness control, L-Ray laser-based sensors are integrated. By employing two opposing laser sensors, our system accurately measures insulation thickness with precision alignment. This integration allows for a complete analysis of the material's thickness profile.



Marveloc-CURTAIN O-Frame

Redefining quality control with sustainable measuring systems

Compared to older radioactive technologies, M-Ray sensors from Hammer-IMS are not harmful for the environment nor the operators handling the system. Moreover, when taking into consideration the licenses required to use traditional radioactive measuring technologies, Hammer-IMS systems do not require such licenses, making it a better total-cost-of-ownership solution.



Experience the benefits of radiation-free technology:

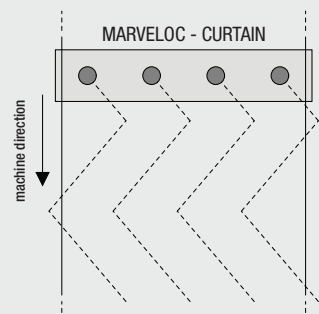
- ✓ **No Radiation, No Training, No Costs:** Our solutions require no specialized training or costly safety measures, ensuring seamless integration into your production process.
- ✓ **Elimination of Cooling Requirements:** Operate efficiently without the need for additional cooling, reducing energy consumption and maintenance overheads.
- ✓ **No Bulb Replacement Hassles:** Bid farewell to the hassle of bulb replacements, ensuring uninterrupted operation and cost savings.
- ✓ **Minimal Service Requirements:** Enjoy enhanced reliability and longevity, minimizing downtime and maximizing productivity.



Multi-sensor measurement for 100% material coverage

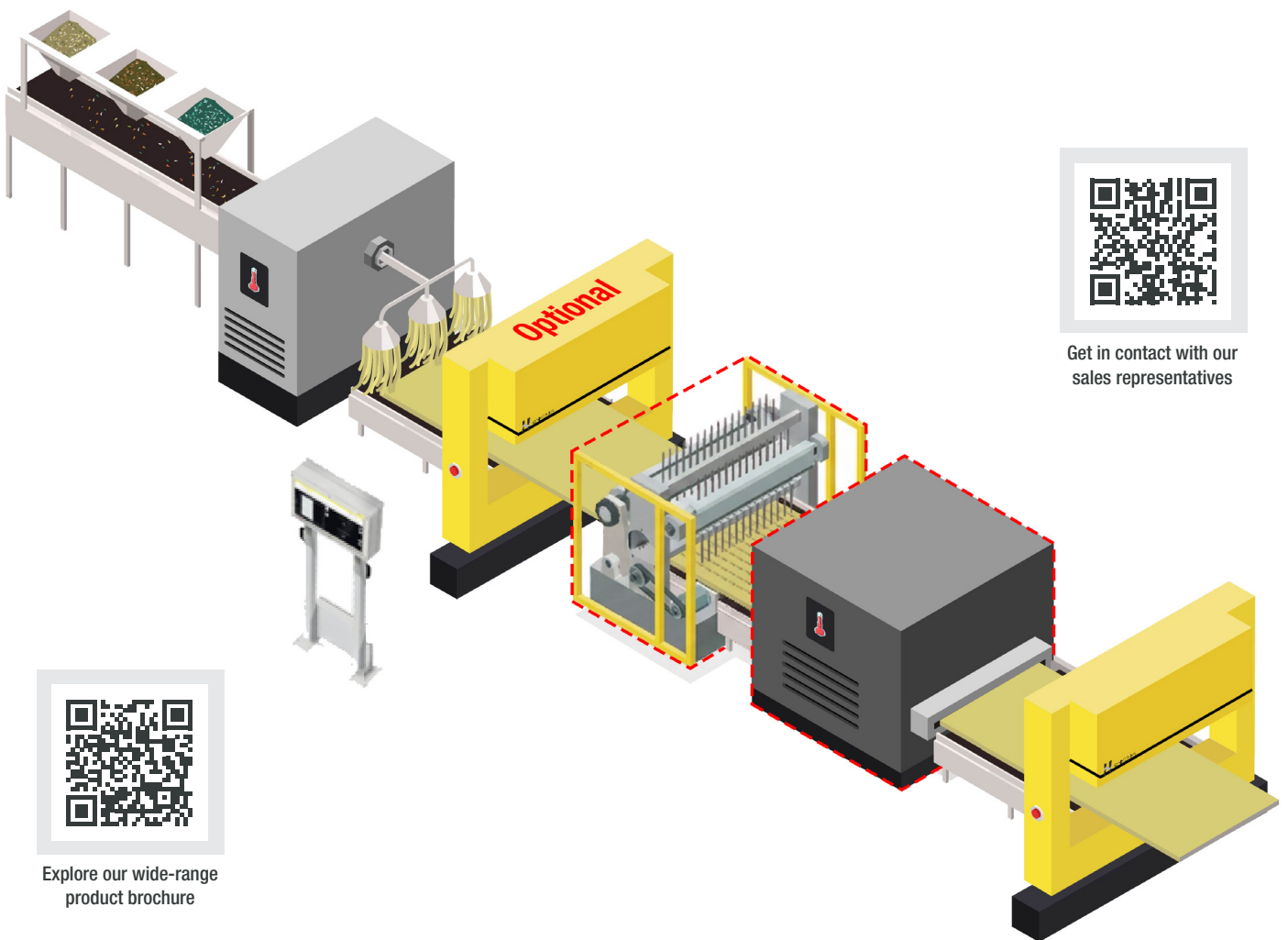
Our quality control system configurations containing multiple sensors, developed to simultaneously measure weight and thickness. The use of multiple sensors provides up to 100% material coverage.

By maximizing coverage, our systems optimize efficiency and minimize the risk of defects, ultimately enhancing the overall quality of the final product.



Different types of insulation

- ✓ Wood fiber wool
- ✓ Calcium wool
- ✓ Rockwool
- ✓ Glasswool
- ✓ Silicate wool
- ✓ Ceramic wool



Get in contact with our sales representatives



Explore our wide-range product brochure



Hammer-IMS nv

Industrieweg 1401
3540 Herk-de-Stad, Belgium
www.hammer-IMS.com
Info@hammer-IMS.com
Phone: +32 11 36 55 01
VAT (BE)0648.896.643
RPR Antwerpen, Department Hasselt

Hammer-IMS Inc

Tyger Ryver CEBED, 1875 E Main St
Duncan, SC 29334, United States
www.hammer-IMS.com
Info@hammer-IMS.com
Phone: +1 864 641 1223
VAT (BE)0648.896.643
RPR Antwerpen, Department Hasselt

The data as listed in this brochure is nonbinding. Contact us to obtain a dedicated technical datasheet, a feasibility analysis for your industrial case, or to get in touch with our preferred integrators and resellers. Our general terms and conditions apply.

© Hammer-IMS nv 2026
© Hammer-IMS inc 2026