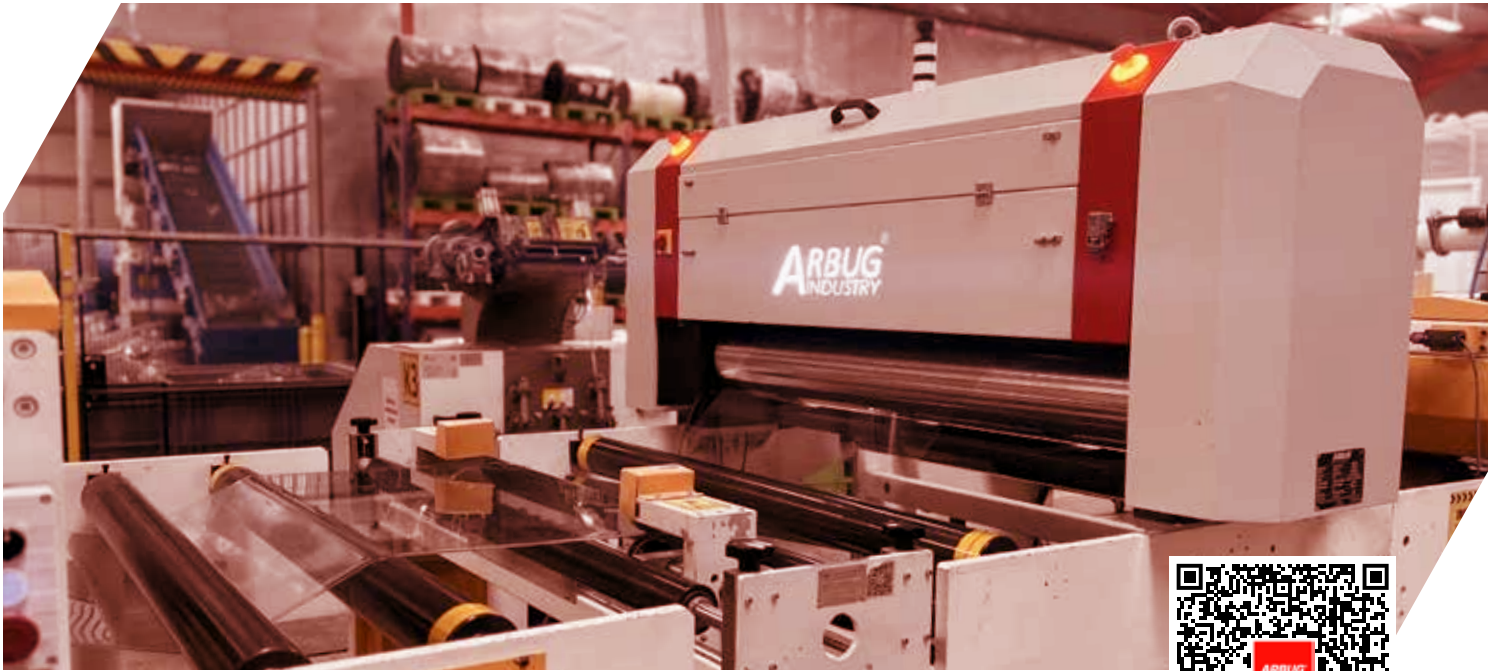


The logo for Arbug Industry, featuring the word "ARBUG" in a large, bold, red sans-serif font with a registered trademark symbol (®) to its upper right. Below "ARBUG", the word "INDUSTRY" is written in a smaller, black, all-caps sans-serif font.

ARBUG[®]
INDUSTRY

Arbug TMS Thickness Measurement System





Arbug Thickness Measurement System

What is the TMS System?

TMS (Thickness Measurement System) employs radiation-free and contactless measurement technology on the surface of plastic sheets produced through extrusion. This technology performs measurements with minimal precision and at 1 mm intervals. This allows the central portions of the sheet to be included in the measurement, ensuring control over the entire surface. Our system contains no elements of radioactive or x-ray technology.

Our products are designed and manufactured in compliance with IEC and CE standards.

Applications: Single and Multilayer Plastic Film and Sheet Extrusion, Nonwoven, Sheets Produced for Thermoforming, Membrane, Geomembrane, Rubber Sheet, Paper (PP, PE, PET, PS, ABS, PVC, etc.)

Why Should the Arbug TMS System Be Preferred?

Process operators often assume that measurements from both edges and occasionally the center of the sheet are sufficient for its production. However, manual measurements cannot guarantee the thickness of the entire surface of the sheet.

By eliminating operator errors and precision losses during measurements, it enhances production quality and efficiency. The Arbug TMS system eliminates human errors and precision losses caused by manual measurements. Implement the slogan of **"Radiation-Free and Contactless Quality Control"** with plastic sheet measurement technology and experience why this choice is the right one with us.

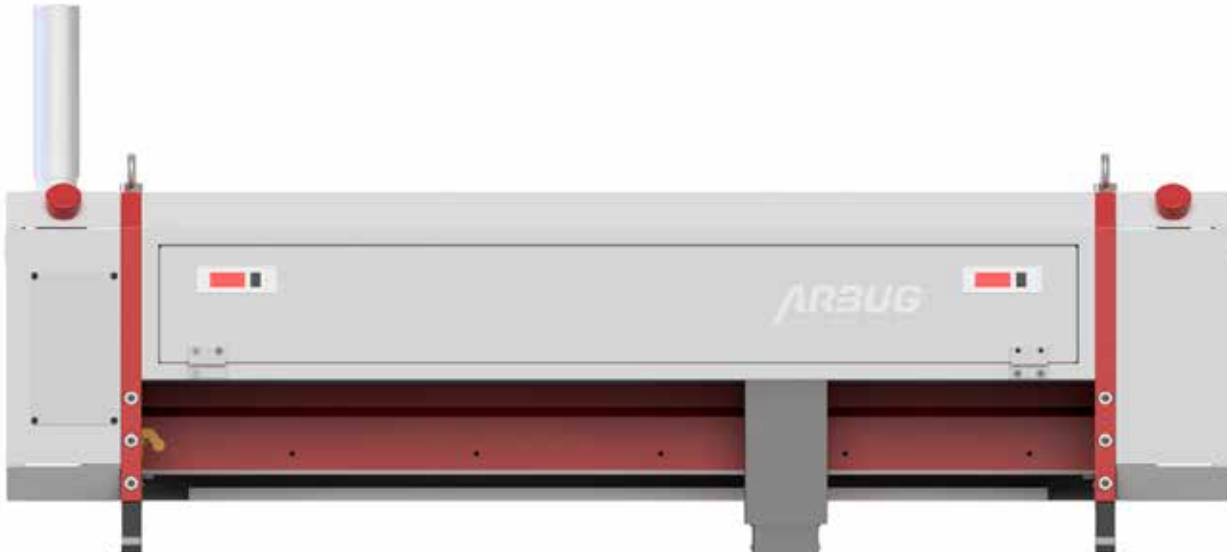
Arbug TMS System

Working Principle

The TMS system calculates the material's thickness by comparing the signals from a capacitive sensor and an eddy current sensor. Calibration is required for this calculation. For calibration, a reference object with a known thickness is used. The signal difference between the reference object and the target object made of the same material is equal to the difference in thickness.

The TMS system provides sub-micron accuracy and high signal stability, making it an ideal solution to optimize production processes and reduce costs





Arbug TMS System

Advantages

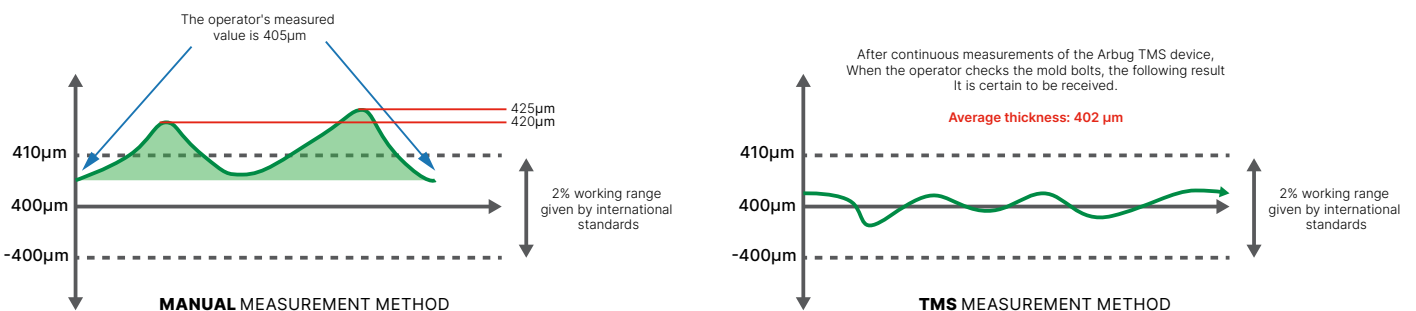
The Arbug TMS system provides a radiation-free and contactless technology for measuring the thickness profiles of plastic sheets.

This system can be easily integrated into machines of any brand. The Arbug TMS system offers several advantages, including improving production quality and efficiency, minimizing thickness transition times, enabling raw material savings, and reducing waste. This makes your production process more efficient and cost-effective.

- Raw Material Savings:** It allows for production with tighter tolerances, enabling raw material savings.
- Time Savings:** It can be easily adjusted when transitioning from one thickness to another, saving time and providing flexibility in the production process.
- Quality:** By minimizing thickness variations in the sheet production process, it ensures standard and high-quality products.
- Traceability:** With its reporting feature, it enhances production efficiency and quality control while allowing for process monitoring.
- Measurement Range (Width):** Our custom production width covers a measurement range of 800mm to 6000mm.

The Difference Between Arbug TMS System and Micrometer Measurement?

There are two methods used to measure the thickness of the sheet.



The Arbug TMS system is an intelligent solution for measuring the thickness profiles of plastic sheets. With this system, you can streamline your production process, reduce costs, and enhance customer satisfaction.





Arbug TMS Technical Specifications

The Arbug TMS system provides a radiation-free and contactless technology for measuring the thickness profiles of plastic sheets. This system can be easily integrated into machines of any brand.

The Arbug TMS system offers several advantages, including improving production quality and efficiency, minimizing thickness transition times, enabling raw material savings, and reducing waste. This makes your production process more efficient and cost-effective.

- /// **Set Thickness:** You can enter the desired sheet thickness.
- /// **Average Error Rate:** The average error rate of the measured sheet is shown as a percentage and in microns.
- /// **Screw Number:** The screw number to which the measured sheet belongs is displayed.
- /// **Thickness:** The thickness values at every point on the measured sheet are shown in millimeters in a graphical format.
- /// **Error Rates:** Error rates at every point on the measured sheet are graphically displayed as percentages and in microns. The graph clearly shows how well the sheet conforms to the set thickness.
- /// **Width Measurement:** It measures the width of the produced sheet with a precision of 0.5 mm.
- /// **Average Thickness:** It provides an interface displaying the average thickness of the sheet.
- /// **Reporting:** The system records reports of the products you produce for customers.
- /// **Printer Output:** Allows you to obtain measurement results as a printer output, enabling you to print and archive production reports.
- /// **User Management:** Prevents unauthorized usage with user management, thus ensuring the security and efficiency of the system.
- /// **Adding Tolerance and Alarm Lines:** Allows you to add tolerance and alarm lines for sheet thickness.
- /// **Recipe:** Enables you to add details such as description, product code, order code for the sheets you produce.
- /// **Safety Protection Sensor:** During the measurement process, it automatically activates and goes into protection mode in case of unwanted situations (such as the sheet folding, operator's unintentional contact with the sensor) to prevent sensor damage.
- /// **Remote Access Feature:** Provides fast and efficient technical support with remote access. The automatic update feature ensures that your system is always up to date and operating at maximum efficiency.
- /// **Calendar Cylinder Balance Indicator:** Displays the balance in the calendar roll graphically. If there is a balance issue, it helps determine whether it originates from the cylinder or the bearings, allowing for easy detection.
This ensures even distribution of the sheet and prevents quality issues.
- /// **Compatibility with Factory Infrastructure Data:** Records and shares measurement results in a format compatible with factory infrastructures like ERP, SAP, CRM.
- /// **Multilingual Support:** The TMS System, being 100% locally produced, is highly popular in our country. With multilingual support (German, English, Arabic, Polish, Russian, etc.), our system is exported to many countries worldwide, achieving global success.
- /// **Technical Support:** We offer services such as remote machine access, program updates, checking the proper functioning of the system, and adding desired features to our customers in case of any issues or technical requests.

ARBUG promises a sustainable future
with its contribution to global accessibility
and efficient resource use.



Reaching Arbug is just a click away



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