

# Web Gauging Systems for Building Products

# **Asphalt Roofing**



A Quad Plus gauging system will ensure you are producing high quality building materials that improve your product quality and bottom line.

We help you determine the correct technology, configure the frame for optimal performance, install the system, train the operators, and provide support. Our gauging systems are a full turnkey solution with minimal downtime.

#### **Custom Scanning Frames**

A variety of frames allow for customized applications specific to your configuration. Scanning frames are available in I-Frame, O-Frame, and C-Frame.

# **Premium Installation and Support**

Qualified experts and technicians to support you throughout the entire process, from initial planning to after-installation support.

#### **Sensor Technology**

We offer a variety of sensor technologies such as BETA (Sr-90 and Kr-85), terahertz, x-ray, laser, color detection, microwave, and infrared. Our web gauging experts will help you to determine which sensor is best for your application.

# **Software and Reporting**

Make use of the data collected to reduce waste and cut costs.

# **Gauging for Asphalt Roofing**

Asphalt thickness and end product weight is a major component in asphalt roofing manufacturing. Quad Plus offers a few options to measuring these for manufactures.



BETA radiation is a industry proven technology for measuring product weight. We offer scanning systems that employ nuclear radiation to measure the product weight and then display this information for operations and process engineers.

A newer technology to asphalt industry is Terahertz. Terahertz is non-ionizing radiation that is safe for operations, request no licensing or special safety requirements. When deployed before sand or granules are applied, Terahertz can accurately measure true asphalt layer thickness and matt thickness, giving an asphalt balance on the top/bottom of the matt, as well as total product thickness. When deployed after sand or granules are applied, Terahertz can be used to measure product basis weight.

# **How Gauging Systems Improve Operations**

# **Maximize Raw Materials**

Our gauging systems allow you to monitor the thickness of your product with such precision that you can reduce the thickness by as little as 0.01mm and realize significant annual savings. For example, in tire production, a typical plant might allow as much as a 0.025 reduction in gauge, resulting in over \$1.2 million in annual savings.

#### **Reduce Waste**

Production defects cause waste and use resources such as raw material. labor. energy, and time. Defects provide no value to customers and have an impact on your bottom line. Our gauging systems give you the ability to identify defects in real-time, so you can correct issues sooner and minimize waste.

# **Improved Production**

As your production line and gauging system run in parallel, you'll be able to identify and correct product defects before they occur. Your output yield will be increased as your production line will run without serious interruptions and extended downtime.



# **Gauging System Software and Reporting**

Our software takes the data collected during the process and implements this into an HMI system that is easy to understand by operators and gives information at just a glance of the screen. We provide CD (cross direction) and MD (machine direction) trends that show pertinent information about the process. We also have 2D and 3D models of the data to make a better visualization of the process.

Long term reporting and storage of product data can be useful for tracking and verification of issues at a later date. Our software stores the data for each production batch in a database that can be accessed at a later date for evaluation.



