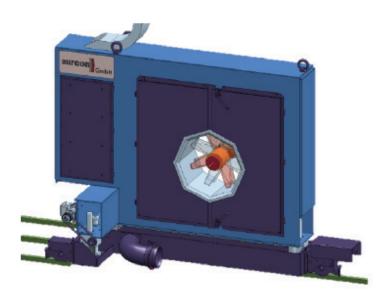


### **Maximize Precision of Long Product Measurements**



This 3D Surface Inspection System features a customized O-frame design and can measure round, hex and H-beam products.

Industry's Only 3D Gauge Takes Real-Time Depth & Surface Measurements in a Single Pass

For the most accurate reads of surface, contour, height and depth of your aluminum substrate, install IMS gauges throughout your production lines.

By taking measurements on three (3) axes instead of two (2), at up to 1,000 ft./min. (122m/min. to 305m/min.), this innovative gauge can immediately identify a wide range of defects, including:

- > Seams
- > Slivers
- > Bruises
- > Scratches
- > Holes
- > Longitudinal & Transverse Cracks
- > Overfill/Underfill

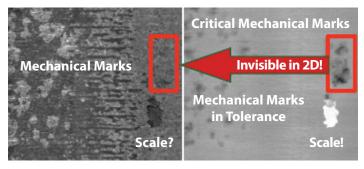
- > Scabs
- > Swirl Marks
- > Torn Flanges
- > Treebarking (from roll wear)
- > Wavy Flange
- > Web Off-Center
- > Other Surface Imperfections

When you add IMS gauges to your production line, you'll be able to correct imperfections before customers see them. The resulting benefits include:

- > Increased Productivity & Yield
- > Reduced Re-Work
- > Fewer Customer Complaints
- > Improved Process Optimization
- > Instant Verification of Adherence to Specifications
- > Improved Worker Safety by Eliminating Need for Manual or Visual Inspections
- > Product Weight Provided Automatically

IMS gauges meet the most demanding specifications and may be integrated seamlessly with new and retrofit lines.





**2D Image** 

**3D Image** 

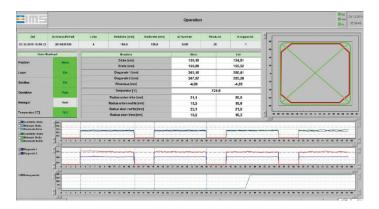
A 3D inspection of the material surface's height topology detects the depth of the defect, but the flaw remains hidden in a traditional 2D inspection.

### **WORLD MARKET LEADER IN MEASURING SYSTEMS**

## **User-Friendly, Actionable Data**

Our long product solutions offer visual and numeric representations of measurements that are easy to understand. They also allow you to decide immediately whether an order is ready for shipment or doesn't meet the end user's specifications.

When you invest in IMS technology, you're putting your trust in a company that has been setting the standard for excellence in non-contact precision measurement of ferrous and non-ferrous product for more than 35 years.



Operator screens provide real-time numeric and visual representations of long product features that are critical to deciding whether to ship or re-work a bar, beam, billet, bloom, ingot, rail or tube.

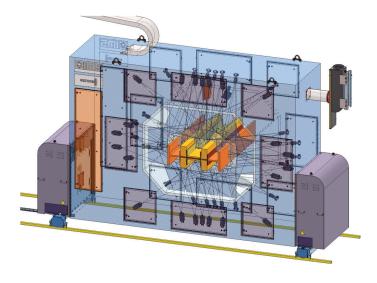


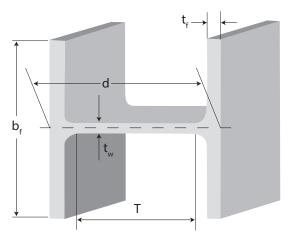
#### **Resolution:**

Height Direction: within ± 0.05 mm (0.002 inch)

Length Direction: within  $\pm$  0.25 mm (0.01 inch) at max. 1 m/s slab speed

Width Direction: within ± 0.25 mm (0.01 inch)



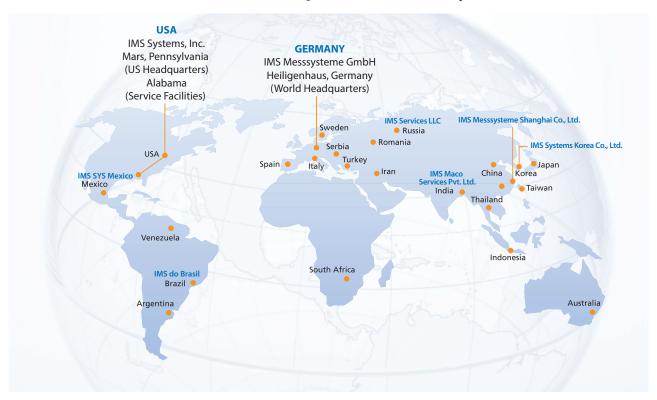


IMS gauges can measure numerous properties of long products, including flange depth (d), thickness ( $t_f$ ) and width (bf); web thickness ( $t_w$ ); and material temperature (T).

Defect (Samples)	Minimum Detectable Size	Minimum Detectable Size
	Width x Length x Depth [mm]	Width x Length x Depth [inch]
Grooves	0.6 x 5.0 x 0.5	0.0236 x 0.197 x 0.0197
Longitudinal Crack	0.6 x 5.0 x 0.5	0.0236 x 0.197 x 0.0197
Hole	0.6 x 0.6 x 0.5	0.0236 x 0.0236 x 0.0197
Scratch	0.6 x 5.0 x 0.5	0.0236 x 0.197 x 0.0197
Mechanical Depression	2.0 x 2.0 x 0.5	0.0787 x 0.0787 x 0.0197

Highly detailed performance data is one of the many useful features of IMS 3D Inspection Systems.

# The Global Footprint of IMS Systems



### Measurements You Can Trust. Technology You Can Depend On.

IMS is a leading manufacturer of non-contact optical, x-ray and isotope measuring systems that gauge height, width, depth, profile, flatness, length, thickness, coating weight and other characteristics of hot and cold, ferrous and non-ferrous products. We operate a sales, service and production facility at our North American headquarters in Mars, PA, near Pittsburgh. We also offer gauge training and repair courses at that location. Our Southeastern Service Center, near Mobile, AL, helps customers operate and maintain their gauges in ways that optimize accuracy and productivity.

The company was founded in 1980 in Heiligenhaus, Germany, near Düsseldorf. IMS established a U.S. presence in 2000 to take advantage of market opportunities throughout the United States and Canada.



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