

# Industrial Metrology - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 120 pages | Mordor Intelligence

## **AVAILABLE LICENSES:**

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

## **Report description:**

The Industrial Metrology Market is expected to register a CAGR of 6% during the forecast period.

### Key Highlights

- Furthermore, BMW has developed an innovative, fully automated inline measurement cell for quality control. This new inline multiple measurement cell streamlines this phase by integrating the measurement process into the production flow and can operate 24/7 if required. The inline measurement cell features four robots and a range of innovative measurement methods, including Laser Radar.

- The development of 3D measurement solutions, portable CMM, robot-mounted optical CMM scanners, cloud-based software application platforms, and dimensional metrology services led to high growth in the market. For instance, in October 2021, ZEISS confirmed the acquisition of Capture 3D, a prominent GOM 3D non-contact measuring solutions provider based in the USA. Capture 3D delivers 3D measurement solutions to help customers significantly improve product design, manufacturing, quality control, and production processes.

- The growing adoption of IoT-enabled sensors across the manufacturing value chain also brings advancements in the measuring process. In 2021, the Institute for Laser Technologies in Medicine and Metrology (ILM) at the University of Ulm developed a special sensor for short measurement times and environmental influences. It uses multi-wavelength digital holography, and allied implementation allows the collection of topographic data of an entire area for diffuse and specular reflective surfaces within one image.

Furthermore, the COVID-19 pandemic and the measures taken by governments and businesses around the world have accelerated the digital transformation of industries. These measures include increased budgets for digital transformation projects. However, the pace of infrastructure evolution, which forms metrology as one of its core elements, has not been balanced.
Due to the COVID-19 outbreak, the work environments were redesigned with fewer workers spending less time collaboratively

due to physical-distancing requirements. This created an acute need for industries to be more agile. Hence, the demand for industrial metrology is expected to increase globally over the coming years. The worldwide impact of this virus is pushing virtual and online tools, which may further boost the growth of the industrial metrology market.

Industrial Metrology Market Trends

Automotive Industry is Expected to Hold the Largest Share

- The automotive sector is expected to witness a major evolution during the forecast period, as automobile manufacturing is quickly moving to automated facilities. The need for highly reliable and quality processes and the rising demand for electric vehicles are expected to drive major growth.

- According to India Investment Grid, the USD 74 Billion Automobile industry is expected to reach USD 300 Billion by 2026. In addition, India is also planning to host four large auto manufacturing hubs in Delhi-Gurgaon-Faridabad in the North and Mumbai-Pune-Nashik-Aurangabad in the West, Chennai- Bengaluru-Hosur in the South, and Jamshedpur-Kolkata in the East.

- Moreover, the rising need for inspection, measurement, and quality checks of various components in the automotive sector is driving growth. The automotive industry has increasingly used optical measurement systems and coordinate measuring machines (CMM) instead of conventional strain gauges, accelerometers, transducers, and extensometers to improve vehicles' safety and comfort. In addition, according to Scotiabank, 66.7 million cars were sold worldwide in 2021. and it has expected to rise by 66.9 million units in 2022, which will drive studied market growth in the future.

- Technological advancements in automobiles are resulting in an increased level of precision of components. Every seat, door, panel, and component in an automobile must be precision aligned to promote passenger safety, comfort, and satisfaction. The necessity of tolerance measurement to inspect and assess equipment alignment on machinery is also driving the demand for metrology services. Furthermore, production of electric vehicles with a 500 km range will begin in India in 2024, according to Ola Electric. The project is the largest automobile undertaking ever in India.

- The shift in preference from off-line quality inspection to near-line or in-line measurement techniques, enabling higher sampling rates and shorter inspection times in the automotive sector, is driving the growth of the industrial metrology market for the automotive industry.

Asia Pacific to Register the Fastest Growth

- The Asia Pacific is expected to account for the largest share in the industrial metrology market during the forecast period. The growth in the Asia-Pacific is attributed to the region's growing automotive and manufacturing sectors. Also, continuous technological advancements by regional companies are propelling the market's growth.

- Moreover, large funding from governments of various Asia-Pacific countries in R&D and extensive industrial bases are the major contributors to the regional industrial metrology market. China, South Korea, and Japan are the major countries contributing to the market growth in the region.

- Further, in August 2021, Hexagon partnered with India's Central Manufacturing Technology Institute (CMTI) to establish a Smart Manufacturing Development and Demonstration Cell (SMDDC), an Industry 4.0 Centre of Excellence and Experience Centre, at the CMTI premises in Bengaluru, India.

- The industrial and power generation applications are expected to drive the metrology services market in Asia-Pacific. Metrology services are used in different power generations, including horizontal machine bearing, main shaft, casting, turbines, tops-off alignment, scroll case geometry and assembly, and other applications.

- In additional Metrology Conclave, Narendra Modi emphasized the country's operation toward improving the quality of products

supplied under the Make In India campaign, government participation has been extended concerning improving quality control standards within regional industries. In January 2021, at the Nationgn. Establishing a national standardization and metrology system is a key supporter and essential part of the goal to become a regional and global hub for future industries and a global market for various industries.

Industrial Metrology Industry Overview

The industrial metrology market is competitive, owing to the presence of many players. The market is moderately concentrated, with the major players applying strategies like product innovations and mergers and acquisitions. Also, companies are involved in several growth and expansion strategies to gain a competitive advantage in the market.

- August 2022 - LMI Technologies (LMI), a major developer of 3D scanning and inspection solutions, has announced the official release of its latest Gocator 2600 Series of 4K+ resolution smart 3D laser line profile sensors. These factory pre-calibrated sensors come modified with custom optics and a powerful 9-megapixel imager to deliver 4200 data points per profile for high-resolution 3D scanning and inspection across broad fields of view in applications such as battery inspection, building materials, automotive, rubber and tire production, and general factory automation.

- March 2022 - Hexagon AB has announced the acquisition of ETQ, a SaaS-based quality management system (QMS), environment, health and safety software, and compliance management software. The company will operate as part of Hexagon's Manufacturing Intelligence division. ETQ's multitenant QMS software, ETQ Reliance, provides the data backbone for automating the collection and delivery of manufacturing quality control data, nonconformance reports, and customer feedback.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

## Table of Contents:

1 INTRODUCTION 1.1 Study Assumptions and Market Definition 1.2 Scope of the Study

- 2 RESEARCH METHODOLOGY
- **3 EXECUTIVE SUMMARY**
- **4 MARKET INSIGHTS**
- 4.1 Market Overview
- 4.2 Industry Attractiveness Porters Five Forces Analysis
- 4.2.1 Bargaining Power of Suppliers
- 4.2.2 Bargaining Power of Buyers
- 4.2.3 Threat of New Entrants
- 4.2.4 Threat of Substitutes
- 4.2.5 Intensity of Competitive Rivalry
- 4.3 Industry Value Chain Analysis

4.4 Assessment of Impact of COVID-19 on the Industrial Metrology Market

**5 MARKET DYNAMICS** 

5.1 Market Drivers

5.1.1 Rise in Big Data Analytics

5.1.2 Adoption of Cloud Services to Integrate the Metrological Data

5.1.3 Rising Demand for Automobiles in Developing Countries

5.2 Market Challenges

- 5.2.1 High Cost of Setting Up Metrology Facility
- 5.2.2 Lack of Expertise for Efficient Handling of Metrological Systems

## 6 MARKET SEGMENTATION

- 6.1 By Type
- 6.1.1 Hardware
- 6.1.2 Software
- 6.1.3 Services
- 6.2 By Equipment
- 6.2.1 Coordinate Measuring Machine
- 6.2.2 Optical Digitizer and Scanner
- 6.2.3 Measuring Instrument
- 6.2.4 X-Ray and Computed Tomography
- 6.2.5 Automated Optical Inspection
- 6.2.6 2D Equipment
- 6.3 By Application
- 6.3.1 Reverse Engineering
- 6.3.2 Quality Control & Inspection
- 6.3.3 Mapping and Modelling
- 6.3.4 Other Applications
- 6.4 By End User Industry
- 6.4.1 Aerospace and Defense
- 6.4.2 Automotive
- 6.4.3 Manufacturing
- 6.4.4 Semiconductor
- 6.4.5 Other End User Industries
- 6.5 By Geography
- 6.5.1 North America
- 6.5.2 Europe
- 6.5.3 Asia Pacific
- 6.5.4 Rest of the World

### 7 COMPETITIVE LANDSCAPE

- 7.1 Company Profiles
- 7.1.1 Hexagon AB
- 7.1.2 Renishaw PLC
- 7.1.3 FARO Technologies
- 7.1.4 Nikon Metrology
- 7.1.5 Carl Zeiss AG

7.1.6 Jenoptik AG7.1.7 Perceptron7.1.8 Automated Precision Inc.7.1.9 KLA Corporation7.1.10 Applied Materials Inc.

8 INVESTMENT ANALYSIS

9 FUTURE OF THE MARKET



# Industrial Metrology - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

## **ORDER FORM:**

Select license	License		Price
	Single User License		\$4750.00
	Team License (1-7 Users)		\$5250.00
	Site License		\$6500.00
	Corporate License		\$8750.00
		VAT	
		Total	

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346. []\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	Phone*	
First Name*	Last Name*	
Job title*		
Company Name*	EU Vat / Tax ID / NIF	P number*
Address*	City*	
Zip Code*	Country*	
	Date	2025-05-07
	Signature	