

Industrial Metrology Market by Offering (Hardware, Software, Services), Equipment (CMM, ODS, X-ray, CT), Application, End-User Industry (Aerospace & Defense, Automotive, Manufacturing, Semiconductor) and Region - Global Forecast to 2029

<https://marketpublishers.com/r/I510383AEEBEN.html>

Date: February 2024

Pages: 306

Price: US\$ 4,950.00 (Single User License)

ID: I510383AEEBEN

Abstracts

The Industrial Metrology Market is projected to reach from USD 14.9 billion in 2024 to USD 20.6 billion by 2029; it is expected to grow at a CAGR of 6.7% from 2024 to 2029. The widespread application of industrial metrology extends to the continuous maintenance and repair of aerospace and defense equipment, assisting in the detection of wear and damage that may affect performance or safety. These industries depend greatly on accurate measurement and inspection to guarantee that components adhere to precise specifications and tolerances, as even slight deviations can lead to notable implications for safety and performance.

“The service offering is projected to grow at the highest CAGR during the forecast period.”

The uptake of service offerings in industrial metrology is driven by the pursuit of cost-effectiveness, flexibility, efficiency, scalability, and access to specialized expertise, all of which enable companies to fulfill their metrology requirements more efficiently. Additionally, service offerings in industrial metrology offer scalability to adjust to changing demand and project needs.

“ODS equipment is projected to have the highest growth during the forecast period.”

ODS equipment is increasingly utilized in industrial metrology due to its ability to perform non-contact measurements, its speed, accuracy, advanced software

functionalities, and compatibility with other metrology technologies. These ODS systems also include advanced software features for analyzing and visualizing data, facilitating thorough examination of measurement results and smooth integration into existing metrology workflows, thereby improving overall productivity and effectiveness in industrial metrology.

“Asia Pacific region is likely to grow at the highest CAGR.”

The industrial metrology market in the Asia-Pacific region has experienced significant growth, driven by the influential presence of key market players that have fueled the regional market's expansion. The rising adoption of advanced manufacturing technologies like additive manufacturing, robotics, and automation is driving increased demand for industrial metrology in the Asia Pacific region. Concurrently, increasing consumer expectations for top-quality products, along with strict regulatory standards, are motivating manufacturers in Asia Pacific to invest in metrology solutions for quality control and assurance.

Breakdown of primaries

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type - Tier 1 – 35%, Tier 2 – 45%, Tier 3 – 20%

By Designation— C-level Executives - 35%, Directors - 25%, Others – 40%

By Region—North America - 45%, Europe - 20%, Asia Pacific - 30%, RoW - 5%

The industrial metrology market is dominated by a few globally established players such as Hexagon AB (Sweden), Nikon Corporation (Japan), FARO (US), Carl Zeiss AG (Germany), JENOPTIK (Germany), KLA Corporation (US), Renishaw plc (UK), Mitutoyo Corporation (Japan), KEYENCE CORPORATION (Japan), CREAFORM (Canada). The study includes an in-depth competitive analysis of these key players in the industrial metrology market, with their company profiles, recent developments, and key market strategies.

Research Coverage:

The report segments the industrial metrology market and forecasts its size by offering, application, equipment, end-user industry, and region. The report also discusses the drivers, restraints, opportunities, and challenges pertaining to the market. It gives a detailed view of the market across four main regions— North America, Europe, Asia Pacific, and RoW. Supply chain analysis has been included in the report, along with the key players and their competitive analysis in the industrial metrology ecosystem.

Key Benefits to Buy the Report:

Analysis of Key Drivers (Increasing R&D investments in 3D metrology, Integration of IoT sensors with industrial metrology for promoting evolution in smart manufacturing, High focus on quality control and inspection equipment in precision manufacturing, Increasing demand for automobiles in emerging economies). Restraints (Limited technical knowledge regarding the integration of industrial metrology with robots and 3D models, Integration of industrial metrology processes with existing manufacturing units). Opportunities (Rising adoption of industrial metrology products in the food industry, Adoption of cloud, IIoT, and AI services to integrate metrological data, Rise in demand for industry 5.0) and Challenges (Ensuring data integrity and protection against cyber security, Lack of simplified software solutions).

Product Development/Innovation: Detailed insights on upcoming technologies, research and development activities, and new product launches in the industrial metrology market.

Market Development: Comprehensive information about lucrative markets – the report analyses the industrial metrology market across varied regions

Market Diversification: Exhaustive information about new products and services, untapped geographies, recent developments, and investments in the industrial metrology market.

Competitive Assessment: In-depth assessment of market shares, growth strategies, and product offerings of leading players like Hexagon AB (Sweden), Nikon Corporation (Japan), FARO (US), Carl Zeiss AG (Germany), JENOPTIK (Germany), KLA Corporation (US) among others in the industrial metrology market.

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES

1.2 MARKET DEFINITION

1.3 STUDY SCOPE

1.3.1 MARKETS COVERED

FIGURE 1 INDUSTRIAL METROLOGY MARKET: SEGMENTATION

1.3.2 REGIONAL SCOPE

1.3.3 INCLUSIONS AND EXCLUSIONS

1.3.4 YEARS CONSIDERED

1.4 CURRENCY CONSIDERED

1.5 VOLUME UNITS CONSIDERED

1.6 LIMITATIONS

1.7 STAKEHOLDERS

1.8 SUMMARY OF CHANGES

1.9 RECESSION IMPACT

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 2 INDUSTRIAL METROLOGY MARKET: RESEARCH DESIGN

2.1.1 SECONDARY AND PRIMARY RESEARCH

2.1.2 SECONDARY DATA

2.1.2.1 Key data from secondary sources

2.1.2.2 List of key secondary sources

2.1.3 PRIMARY DATA

2.1.3.1 Primary interviews with experts

2.1.3.2 List of key primary interview participants

2.1.3.3 Key data from primary sources

2.1.3.4 Key industry insights

2.1.3.5 Breakdown of primaries

2.2 MARKET SIZE ESTIMATION

2.2.1 BOTTOM-UP APPROACH

2.2.1.1 Approach to estimate market size using bottom-up analysis (demand side)

FIGURE 3 INDUSTRIAL METROLOGY MARKET: BOTTOM-UP APPROACH

2.2.2 TOP-DOWN APPROACH

2.2.2.1 Approach to estimate market size using top-down analysis
(supply side)

FIGURE 4 INDUSTRIAL METROLOGY MARKET: TOP-DOWN APPROACH

2.3 DATA TRIANGULATION

FIGURE 6 DATA TRIANGULATION

2.4 RESEARCH ASSUMPTIONS

2.4.1 GROWTH PROJECTION AND FORECAST-RELATED ASSUMPTIONS

TABLE 1 INDUSTRIAL METROLOGY MARKET: MARKET GROWTH ASSUMPTIONS

2.5 RESEARCH LIMITATIONS

2.6 RISK ASSESSMENTS

2.7 IMPACT OF RECESSION ON INDUSTRIAL METROLOGY MARKET

3 EXECUTIVE SUMMARY

FIGURE 7 INDUSTRIAL METROLOGY MARKET, 2020–2029

FIGURE 8 SERVICES SEGMENT TO REGISTER HIGHEST CAGR FROM 2024 TO 2029

FIGURE 9 QUALITY CONTROL & INSPECTION TO BE FASTEST-GROWING SEGMENT IN INDUSTRIAL METROLOGY MARKET DURING FORECAST PERIOD

FIGURE 10 CMM SEGMENT TO HOLD LARGEST SHARE OF INDUSTRIAL METROLOGY MARKET IN 2029

FIGURE 11 AUTOMOTIVE SEGMENT TO DOMINATE INDUSTRIAL METROLOGY MARKET DURING FORECAST PERIOD

FIGURE 12 NORTH AMERICA HELD LARGEST SHARE OF INDUSTRIAL METROLOGY MARKET IN 2023

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN INDUSTRIAL METROLOGY MARKET

FIGURE 13 INCREASING ADOPTION OF INDUSTRIAL METROLOGY PRODUCTS IN ASIA PACIFIC TO DRIVE MARKET

4.2 INDUSTRIAL METROLOGY MARKET, BY OFFERING

FIGURE 14 HARDWARE SEGMENT TO DOMINATE INDUSTRIAL METROLOGY MARKET IN 2029

4.3 INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT AND END-USER INDUSTRY

FIGURE 15 CMM AND AUTOMOTIVE SEGMENTS HELD LARGER SHARES OF INDUSTRIAL METROLOGY MARKET IN 2023

4.4 INDUSTRIAL METROLOGY MARKET, BY APPLICATION

FIGURE 16 QUALITY CONTROL & INSPECTION SEGMENT TO HOLD LARGEST SHARE OF INDUSTRIAL METROLOGY MARKET FROM 2024 TO 2029

4.5 INDUSTRIAL METROLOGY MARKET, BY REGION

FIGURE 17 ASIA PACIFIC TO RECORD HIGHEST CAGR DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 18 INDUSTRIAL METROLOGY MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES

5.2.1 DRIVERS

5.2.1.1 Increasing R&D investments in 3D metrology

5.2.1.2 Growing emphasis on promoting smart manufacturing with integration of IoT sensors into industrial metrology solutions

5.2.1.3 Rising focus on quality control and adoption of inspection equipment in precision manufacturing

5.2.1.4 Increasing demand for automobiles in emerging economies

FIGURE 19 GLOBAL ELECTRIC CAR SALES, 2020–2022

FIGURE 20 IMPACT ANALYSIS OF DRIVERS ON INDUSTRIAL METROLOGY MARKET

5.2.2 RESTRAINTS

5.2.2.1 Limited technical knowledge regarding integration of industrial metrology with robots and 3D models

5.2.2.2 Complexities associated with integration of industrial metrology products into existing manufacturing units

FIGURE 21 IMPACT ANALYSIS OF RESTRAINTS ON INDUSTRIAL METROLOGY MARKET

5.2.3 OPPORTUNITIES

5.2.3.1 Increasing use of industrial metrology products in food industry

5.2.3.2 Growing use of cloud-based, IIoT, and AI technologies to store and manage metrological data

5.2.3.3 Rising demand for Industry 5.0

FIGURE 22 IMPACT ANALYSIS OF OPPORTUNITIES ON INDUSTRIAL METROLOGY MARKET

5.2.4 CHALLENGES

5.2.4.1 Ensuring data integrity and protection against cyber security

5.2.4.2 Shortage of easy-to-use metrology software solutions

FIGURE 23 IMPACT ANALYSIS OF CHALLENGES ON INDUSTRIAL METROLOGY MARKET

5.3 SUPPLY CHAIN ANALYSIS

FIGURE 24 INDUSTRIAL METROLOGY MARKET: SUPPLY CHAIN ANALYSIS

5.4 PORTER'S FIVE FORCES ANALYSIS

TABLE 2 INDUSTRIAL METROLOGY MARKET: PORTER'S FIVE FORCES ANALYSIS

FIGURE 25 INDUSTRIAL METROLOGY MARKET: PORTER'S FIVE FORCES ANALYSIS

FIGURE 26 IMPACT OF PORTER'S FIVE FORCES ANALYSIS ON INDUSTRIAL METROLOGY MARKET

5.4.1 INTENSITY OF COMPETITIVE RIVALRY

5.4.2 BARGAINING POWER OF SUPPLIERS

5.4.3 BARGAINING POWER OF BUYERS

5.4.4 THREAT OF NEW ENTRANTS

5.4.5 THREAT OF SUBSTITUTES

5.5 INVESTMENT AND FUNDING SCENARIO

FIGURE 27 INVESTMENT AND FUNDING SCENARIO

5.6 PRICING ANALYSIS

5.6.1 AVERAGE SELLING PRICE OF INDUSTRIAL METROLOGY EQUIPMENT

FIGURE 28 INDUSTRIAL METROLOGY MARKET: AVERAGE SELLING PRICE, BY EQUIPMENT

5.6.2 INDICATIVE PRICING ANALYSIS OF PRODUCTS OFFERED BY KEY PLAYERS, BY EQUIPMENT

TABLE 3 INDUSTRIAL METROLOGY MARKET: INDICATIVE PRICING ANALYSIS OF PRODUCTS OFFERED BY KEY PLAYERS, BY EQUIPMENT, 2023 (USD)

5.6.3 INDICATIVE PRICING ANALYSIS OF CMM, BY REGION

TABLE 4 INDUSTRIAL METROLOGY MARKET: INDICATIVE PRICING ANALYSIS OF CMM, BY REGION, 2020–2023 (USD)

5.7 TRADE ANALYSIS

FIGURE 29 IMPORT DATA FOR HS CODE 903180-COMPLIANT PRODUCTS FOR MAJOR COUNTRIES, 2018–2022

TABLE 5 IMPORT VALUES FOR HS CODE 903180-COMPLIANT PRODUCTS, BY COUNTRY, 2018–2022 (USD MILLION)

FIGURE 30 EXPORT DATA FOR HS CODE 903180-COMPLIANT PRODUCTS FOR MAJOR COUNTRIES, 2018–2022

TABLE 6 EXPORT VALUES FOR HS CODE 903180-COMPLIANT PRODUCTS, BY COUNTRY, 2018–2022 (USD MILLION)

5.8 ECOSYSTEM ANALYSIS

FIGURE 31 INDUSTRIAL METROLOGY MARKET: ECOSYSTEM ANALYSIS

TABLE 7 ROLE OF PLAYERS IN INDUSTRIAL METROLOGY ECOSYSTEM

5.9 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES

FIGURE 32 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES

5.10 CASE STUDY ANALYSIS

5.10.1 RENISHAW CALIBRATOR REDUCED TIME TO MEASURE VOLUMETRIC PRECISION ERRORS

5.10.2 HEXAGON'S INDUSTRIAL METROLOGY PRODUCTS USED TO CREATE 3D PRINTED REPLICA OF MICHELANGELO'S DAVID SCULPTURE

5.10.3 ALLOY SPECIALTIES IMPROVED PRODUCTION CAPACITY BY DEPLOYING HEXAGON PRODUCTS

5.10.4 KAWASAKI REDUCED DAILY INSPECTION TIME OF AUTO PARTS USING RENISHAW'S REVO 5-AXIS SYSTEMS

5.10.5 DAWN MACHINERY INCREASED CUSTOM MACHINE TOOL PRODUCTION EFFICIENCY BY DEPLOYING RENISHAW'S ALIGNMENT LASER SYSTEM

5.10.6 FORD MOTOR COMPANY ESTABLISHED DEPENDABLE SYSTEM TO MONITOR GEAR SURFACE PROCESSING

5.11 PATENT ANALYSIS

TABLE 8 LIST OF MAJOR PATENTS IN INDUSTRIAL METROLOGY MARKET

FIGURE 33 NUMBER OF PATENTS GRANTED PERTAINING TO INDUSTRIAL METROLOGY, 2014–2023

5.12 TECHNOLOGY TRENDS

5.12.1 HIGH PREFERENCE FOR CMOS TECHNOLOGY IN INDUSTRIAL MACHINES

5.12.2 EMERGENCE OF MOBILE/PORTABLE VISION SYSTEMS

5.12.3 COMBINATION OF CMM WITH INDUSTRIAL INTERNET OF THINGS (IIOT)

5.12.4 DEPLOYMENT OF SMART IN-LINE CT INSPECTION SYSTEMS IN MANUFACTURING LINES

5.12.5 USE OF ARTIFICIAL INTELLIGENCE IN INDUSTRIAL METROLOGY

5.12.6 IMPLEMENTATION OF 3D MEASUREMENT SENSORS FOR IN-LINE MEASUREMENTS

5.12.7 UTILIZATION OF VIDEO MEASUREMENT SYSTEMS FOR PRECISION MEASUREMENT APPLICATIONS

5.12.8 INTEGRATION OF ROBOTICS INTO INDUSTRIAL METROLOGY SOLUTIONS

5.13 TARIFF AND REGULATORY LANDSCAPE

5.13.1 TARIFFS

TABLE 9 MFN TARIFFS FOR HS CODE 903180-COMPLIANT PRODUCTS

EXPORTED BY CHINA

5.13.2 STANDARDS

5.13.3 REGULATIONS

5.13.3.1 Regulatory bodies, government agencies, and other organizations

TABLE 10 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 11 EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 12 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.13.3.2 Paris Agreement

5.13.3.3 General Data Protection Regulation (GDPR)

5.13.3.4 Import–export laws

5.14 KEY CONFERENCES AND EVENTS

TABLE 13 INDUSTRIAL METROLOGY MARKET: LIST OF CONFERENCES AND EVENTS, 2024

5.15 KEY STAKEHOLDERS AND BUYING CRITERIA

5.15.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 34 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS, BY END-USER INDUSTRY

TABLE 14 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE END-USER INDUSTRIES (%)

5.15.2 BUYING CRITERIA

FIGURE 35 KEY BUYING CRITERIA FOR TOP THREE END-USER INDUSTRIES

TABLE 15 KEY BUYING CRITERIA FOR TOP THREE END-USER INDUSTRIES

6 INDUSTRIAL METROLOGY MARKET, BY OFFERING

6.1 INTRODUCTION

FIGURE 36 INDUSTRIAL METROLOGY MARKET, BY OFFERING

FIGURE 37 HARDWARE SEGMENT TO ACCOUNT FOR LARGEST SHARE OF INDUSTRIAL METROLOGY MARKET IN 2029

TABLE 16 INDUSTRIAL METROLOGY MARKET, BY OFFERING, 2020–2023 (USD BILLION)

TABLE 17 INDUSTRIAL METROLOGY MARKET, BY OFFERING, 2024–2029 (USD BILLION)

6.2 HARDWARE

6.2.1 RISING DEMAND FOR QUALITY ASSURANCE AND INSPECTION SERVICES ACROSS VARIOUS INDUSTRIES TO FOSTER MARKET GROWTH

6.3 SOFTWARE

6.3.1 INCREASING ADOPTION OF CLOUD-BASED METROLOGY SOFTWARE TO FUEL MARKET GROWTH

6.4 SERVICES

6.4.1 AFTER-SALES SERVICES

6.4.1.1 Need for regular system upgrades to boost demand

6.4.2 MEASUREMENT SERVICES

6.4.2.1 Growing demand for Measurement Consultation and Cost and Time Reduction Evaluation Services to accelerate market growth

6.4.3 STORAGE-AS-A-SERVICE

6.4.3.1 Increasing focus of companies on achieving cost efficiency to boost adoption

6.4.4 SOFTWARE-AS-A-SERVICE

6.4.4.1 Surging use of cloud-based metrology services to contribute to segmental growth

7 INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT

7.1 INTRODUCTION

FIGURE 38 ODS SEGMENT TO REGISTER HIGHEST CAGR IN INDUSTRIAL METROLOGY MARKET DURING FORECAST PERIOD

TABLE 18 INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2020–2023 (USD MILLION)

TABLE 19 INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2024–2029 (USD MILLION)

TABLE 20 INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2020–2023 (THOUSAND UNITS)

TABLE 21 INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2024–2029 (THOUSAND UNITS)

7.2 COORDINATE MEASURING MACHINE (CMM)

TABLE 22 COORDINATE MEASURING MACHINE: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT TYPE, 2020–2023 (USD MILLION)

TABLE 23 COORDINATE MEASURING MACHINE: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT TYPE, 2024–2029 (USD MILLION)

TABLE 24 COORDINATE MEASURING MACHINE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 25 COORDINATE MEASURING MACHINE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

7.2.1 FIXED CMM

7.2.1.1 Bridge CMM

7.2.1.1.1 Excellent rigidity and higher accuracy than horizontal arm CMMs to drive market

7.2.1.2 Gantry CMM

7.2.1.2.1 Significant use in measuring large objects to contribute to market growth

7.2.1.3 Horizontal arm CMM

7.2.1.3.1 Ability to measure large workpieces and inaccessible parts to fuel market growth

7.2.1.4 Cantilever CMM

7.2.1.4.1 Proficiency in measuring small parts with greater accuracy to propel market

7.2.2 PORTABLE CMM

7.2.2.1 Articulated arm CMM

7.2.2.1.1 Advantages such as quick and accurate inspection of any object to boost segmental growth

7.3 OPTICAL DIGITIZER AND SCANNER (ODS)

TABLE 26 OPTICAL DIGITIZER & SCANNER: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT TYPE, 2020–2023 (USD MILLION)

TABLE 27 OPTICAL DIGITIZER & SCANNER: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT TYPE, 2024–2029 (USD MILLION)

TABLE 28 OPTICAL DIGITIZER & SCANNER: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 29 OPTICAL DIGITIZER & SCANNER: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

7.3.1 LASER SCANNER AND STRUCTURED LIGHT SCANNER

7.3.1.1 Properties such as fast and non-contact scanning to provide exact coordinates of the scanned object to drive market

7.3.2 LASER TRACKER

7.3.2.1 Competency in measuring large objects to support market growth

7.4 MEASURING INSTRUMENT

TABLE 30 MEASURING INSTRUMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 31 MEASURING INSTRUMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

7.4.1 MEASURING MICROSCOPE

7.4.1.1 Growing demand for precision measurement by industrial manufacturing firms to drive market

7.4.2 PROFILE PROJECTOR

7.4.2.1 Increasing use in two-dimensional measurements to contribute to market growth

7.4.3 AUTOCOLLIMATOR

7.4.3.1 Rising deployment in measuring small angular differences to propel segmental growth

7.4.4 VISION SYSTEM

7.4.4.1 Rapid transition toward digital cameras and advanced image processing techniques to boost market growth

7.4.5 MULTISENSOR MEASURING SYSTEM

7.4.5.1 Suitability for use in hard-to-reach areas to drive market

7.5 X-RAY AND COMPUTED TOMOGRAPHY (CT) EQUIPMENT

7.5.1 INCREASING USE TO DETECT VOIDS AND CRACKS AND ANALYZE PARTICLES IN MATERIALS TO PROPEL MARKET

TABLE 32 X-RAY & COMPUTED TOMOGRAPHY EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 33 X-RAY & COMPUTED TOMOGRAPHY EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

7.6 AUTOMATED OPTICAL INSPECTION (AOI) EQUIPMENT

7.6.1 EXTENSIVE USE IN SCANNING PCBS FOR CATASTROPHIC FAILURE AND QUALITY DEFECTS TO CONTRIBUTE TO MARKET GROWTH

TABLE 34 AUTOMATED OPTICAL INSPECTION EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 35 AUTOMATED OPTICAL INSPECTION EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

7.7 FORM MEASUREMENT EQUIPMENT

7.7.1 GROWING ADOPTION IN SURFACE ANALYSIS AND CONTOUR MEASUREMENT TO FUEL MARKET GROWTH

TABLE 36 FORM MEASUREMENT EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 37 FORM MEASUREMENT EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

7.8 2D EQUIPMENT

7.8.1 RISING FOCUS OF MECHANICAL ENGINEERS ON PRECISE MEASUREMENT TO DRIVE MARKET

TABLE 38 2D EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT TYPE, 2020–2023 (USD MILLION)

TABLE 39 2D EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT TYPE, 2024–2029 (USD MILLION)

TABLE 40 2D EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 41 2D EQUIPMENT: INDUSTRIAL METROLOGY MARKET, BY END-USER

INDUSTRY, 2024–2029 (USD MILLION)

8 INDUSTRIAL METROLOGY MARKET, BY APPLICATION

8.1 INTRODUCTION

FIGURE 39 INDUSTRIAL METROLOGY MARKET, BY APPLICATION

FIGURE 40 QUALITY CONTROL & INSPECTION SEGMENT TO REGISTER
HIGHEST CAGR DURING FORECAST PERIOD

TABLE 42 INDUSTRIAL METROLOGY MARKET, BY APPLICATION, 2020–2023 (USD
MILLION)

TABLE 43 INDUSTRIAL METROLOGY MARKET, BY APPLICATION, 2024–2029 (USD
MILLION)

8.2 QUALITY CONTROL & INSPECTION

8.2.1 NEED TO IDENTIFY DEFECTIVE PARTS AND MAINTAIN STRICT QUALITY
STANDARDS TO DRIVE MARKET

TABLE 44 QUALITY CONTROL & INSPECTION: INDUSTRIAL METROLOGY
MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 45 QUALITY CONTROL & INSPECTION: INDUSTRIAL METROLOGY
MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

8.3 REVERSE ENGINEERING

8.3.1 HIGH ADOPTION IN AUTOMOTIVE AND AEROSPACE & DEFENSE
INDUSTRIES TO PROPEL MARKET

TABLE 46 REVERSE ENGINEERING: INDUSTRIAL METROLOGY MARKET, BY END-
USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 47 REVERSE ENGINEERING: INDUSTRIAL METROLOGY MARKET, BY END-
USER INDUSTRY, 2024–2029 (USD MILLION)

8.4 MAPPING & MODELING

8.4.1 REQUIREMENT FOR VISUALIZATION AND CONSTRUCTION OF
PROTOTYPE PRODUCTS TO DRIVE MARKET

TABLE 48 MAPPING & MODELING: INDUSTRIAL METROLOGY MARKET, BY END-
USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 49 MAPPING & MODELING: INDUSTRIAL METROLOGY MARKET, BY END-
USER INDUSTRY, 2024–2029 (USD MILLION)

8.5 OTHER APPLICATIONS

TABLE 50 OTHER APPLICATIONS: INDUSTRIAL METROLOGY MARKET, BY END-
USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 51 OTHER APPLICATIONS: INDUSTRIAL METROLOGY MARKET, BY END-
USER INDUSTRY, 2024–2029 (USD MILLION)

9 INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY

9.1 INTRODUCTION

FIGURE 41 INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY

FIGURE 42 AUTOMOTIVE SEGMENT TO HOLD LARGEST SIZE OF INDUSTRIAL METROLOGY MARKET IN 2029

TABLE 52 INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 53 INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

9.2 AEROSPACE & DEFENSE

9.2.1 INCREASING USE OF METROLOGY IN AIRCRAFT MANUFACTURING AND ASSEMBLY TO DRIVE MARKET

TABLE 54 AEROSPACE & DEFENSE: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2020–2023 (USD MILLION)

TABLE 55 AEROSPACE & DEFENSE: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2024–2029 (USD MILLION)

TABLE 56 AEROSPACE & DEFENSE: INDUSTRIAL METROLOGY MARKET, BY APPLICATION, 2020–2023 (USD MILLION)

TABLE 57 AEROSPACE & DEFENSE: INDUSTRIAL METROLOGY MARKET, BY APPLICATION, 2024–2029 (USD MILLION)

TABLE 58 AEROSPACE & DEFENSE: INDUSTRIAL METROLOGY MARKET, BY REGION, 2020–2023 (USD MILLION)

TABLE 59 AEROSPACE & DEFENSE: INDUSTRIAL METROLOGY MARKET, BY REGION, 2024–2029 (USD MILLION)

9.3 AUTOMOTIVE

9.3.1 GROWING ADOPTION OF METROLOGY PRODUCTS TO ENSURE PRECISION AND QUALITY IN AUTOMOBILE MANUFACTURING TO PROPEL MARKET

TABLE 60 AUTOMOTIVE: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2020–2023 (USD MILLION)

TABLE 61 AUTOMOTIVE: INDUSTRIAL METROLOGY MARKET, BY EQUIPMENT, 2024–2029 (USD MILLION)

TABLE 62 AUTOMOTIVE: INDUSTRIAL METROLOGY MARKET, BY APPLICATION, 2020–2023 (USD MILLION)

TABLE 63 AUTOMOTIVE: INDUSTRIAL METROLOGY MARKET, BY APPLICATION, 2024–2029 (USD MILLION)

TABLE 64 AUTOMOTIVE: INDUSTRIAL METROLOGY MARKET, BY REGION, 2020–2023 (USD MILLION)

TABLE 65 AUTOMOTIVE: INDUSTRIAL METROLOGY MARKET, BY REGION,
2024–2029 (USD MILLION)

9.4 SEMICONDUCTORS

9.4.1 SURGING DEMAND FOR MINIATURIZED PRODUCTS WITH HIGH
ACCURACY, PRECISION, AND THROUGHPUT TO CREATE OPPORTUNITIES

TABLE 66 SEMICONDUCTORS: INDUSTRIAL METROLOGY MARKET, BY
EQUIPMENT, 2020–2023 (USD MILLION)

TABLE 67 SEMICONDUCTORS: INDUSTRIAL METROLOGY MARKET, BY
EQUIPMENT, 2024–2029 (USD MILLION)

TABLE 68 SEMICONDUCTORS: INDUSTRIAL METROLOGY MARKET, BY
APPLICATION, 2020–2023 (USD MILLION)

TABLE 69 SEMICONDUCTORS: INDUSTRIAL METROLOGY MARKET, BY
APPLICATION, 2024–2029 (USD MILLION)

TABLE 70 SEMICONDUCTORS: INDUSTRIAL METROLOGY MARKET, BY REGION,
2020–2023 (USD MILLION)

TABLE 71 SEMICONDUCTORS: INDUSTRIAL METROLOGY MARKET, BY REGION,
2024–2029 (USD MILLION)

9.5 MANUFACTURING

9.5.1 RISING FOCUS OF MANUFACTURING FIRMS ON REDUCING TIME-
CONSUMING MANUAL MEASUREMENT TASKS TO BOOST DEMAND

TABLE 72 MANUFACTURING: INDUSTRIAL METROLOGY MARKET, BY
EQUIPMENT, 2020–2023 (USD MILLION)

TABLE 73 MANUFACTURING: INDUSTRIAL METROLOGY MARKET, BY
EQUIPMENT, 2024–2029 (USD MILLION)

TABLE 74 MANUFACTURING: INDUSTRIAL METROLOGY MARKET, BY
APPLICATION, 2020–2023 (USD MILLION)

TABLE 75 MANUFACTURING: INDUSTRIAL METROLOGY MARKET, BY
APPLICATION, 2024–2029 (USD MILLION)

TABLE 76 MANUFACTURING: INDUSTRIAL METROLOGY MARKET, BY REGION,
2020–2023 (USD MILLION)

TABLE 77 MANUFACTURING: INDUSTRIAL METROLOGY MARKET, BY REGION,
2024–2029 (USD MILLION)

9.6 OTHER END-USER INDUSTRIES

TABLE 78 OTHER END-USER INDUSTRIES: INDUSTRIAL METROLOGY MARKET,
BY EQUIPMENT, 2020–2023 (USD MILLION)

TABLE 79 OTHER END-USER INDUSTRIES: INDUSTRIAL METROLOGY MARKET,
BY EQUIPMENT, 2024–2029 (USD MILLION)

TABLE 80 OTHER END-USER INDUSTRIES: INDUSTRIAL METROLOGY MARKET,
BY APPLICATION, 2020–2023 (USD MILLION)

TABLE 81 OTHER END-USER INDUSTRIES: INDUSTRIAL METROLOGY MARKET, BY APPLICATION, 2024–2029 (USD MILLION)

TABLE 82 OTHER END-USER INDUSTRIES: INDUSTRIAL METROLOGY MARKET, BY REGION, 2020–2023 (USD MILLION)

TABLE 83 OTHER END-USER INDUSTRIES: INDUSTRIAL METROLOGY MARKET, BY REGION, 2024–2029 (USD MILLION)

10 INDUSTRIAL METROLOGY MARKET, BY REGION

10.1 INTRODUCTION

FIGURE 43 INDUSTRIAL METROLOGY MARKET, BY REGION

FIGURE 44 ASIA PACIFIC TO EXHIBIT HIGHEST CAGR IN INDUSTRIAL METROLOGY MARKET DURING FORECAST PERIOD

TABLE 84 INDUSTRIAL METROLOGY MARKET, BY REGION, 2020–2023 (USD BILLION)

TABLE 85 INDUSTRIAL METROLOGY MARKET, BY REGION, 2024–2029 (USD BILLION)

10.2 NORTH AMERICA

FIGURE 45 NORTH AMERICA: INDUSTRIAL METROLOGY MARKET SNAPSHOT

TABLE 86 NORTH AMERICA: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2020–2023 (USD MILLION)

TABLE 87 NORTH AMERICA: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

TABLE 88 NORTH AMERICA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 89 NORTH AMERICA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.2.1 IMPACT OF RECESSION ON INDUSTRIAL METROLOGY MARKET IN NORTH AMERICA

10.2.2 US

10.2.2.1 Rapid adoption of electric vehicles to drive market

TABLE 90 US: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 91 US: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.2.3 CANADA

10.2.3.1 Presence of automotive assembly plants to support market growth

TABLE 92 CANADA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 93 CANADA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.2.4 MEXICO

10.2.4.1 Strong manufacturing base to fuel demand for metrology products

TABLE 94 MEXICO: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 95 MEXICO: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.3 EUROPE

FIGURE 46 EUROPE: INDUSTRIAL METROLOGY MARKET SNAPSHOT

TABLE 96 EUROPE: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2020–2023 (USD MILLION)

TABLE 97 EUROPE: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

TABLE 98 EUROPE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 99 EUROPE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.3.1 IMPACT OF RECESSION ON INDUSTRIAL METROLOGY MARKET IN EUROPE

10.3.2 GERMANY

10.3.2.1 Digitalization of manufacturing industry to increase resource efficiency and industrial output to contribute to market growth

TABLE 100 GERMANY: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 101 GERMANY: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.3.3 UK

10.3.3.1 Increasing demand from aerospace industry to augment market growth

TABLE 102 UK: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 103 UK: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.3.4 FRANCE

10.3.4.1 High demand from automotive industry to fuel market growth

TABLE 104 FRANCE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 105 FRANCE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.3.5 ITALY

10.3.5.1 Rising automobile production to generate demand for metrology solutions

TABLE 106 ITALY: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 107 ITALY: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.3.6 SPAIN

10.3.6.1 High demand for industrial vehicles to drive market

TABLE 108 SPAIN: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 109 SPAIN: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.3.7 REST OF EUROPE

TABLE 110 REST OF EUROPE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 111 REST OF EUROPE: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.4 ASIA PACIFIC

FIGURE 47 ASIA PACIFIC: INDUSTRIAL METROLOGY MARKET SNAPSHOT

TABLE 112 ASIA PACIFIC: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2020–2023 (USD MILLION)

TABLE 113 ASIA PACIFIC: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

TABLE 114 ASIA PACIFIC: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 115 ASIA PACIFIC: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.4.1 IMPACT OF RECESSION ON INDUSTRIAL METROLOGY MARKET IN ASIA PACIFIC

10.4.2 CHINA

10.4.2.1 Substantial investments by government in aviation sector to contribute to market growth

TABLE 116 CHINA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 117 CHINA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.4.3 JAPAN

10.4.3.1 High demand for quality control and inspection services to boost market growth

TABLE 118 JAPAN: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 119 JAPAN: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.4.4 SOUTH KOREA

10.4.4.1 Aerospace & defense and automotive sectors to be major contributors to market growth

TABLE 120 SOUTH KOREA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 121 SOUTH KOREA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.4.5 INDIA

10.4.5.1 Rising demand from manufacturing sector to offer immense market growth potential

TABLE 122 INDIA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 123 INDIA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.4.6 REST OF ASIA PACIFIC

TABLE 124 REST OF ASIA PACIFIC: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 125 REST OF ASIA PACIFIC: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.5 ROW

TABLE 126 ROW: INDUSTRIAL METROLOGY MARKET, BY REGION, 2020–2023 (USD MILLION)

TABLE 127 ROW: INDUSTRIAL METROLOGY MARKET, BY REGION, 2024–2029 (USD MILLION)

TABLE 128 ROW: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 129 ROW: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

10.5.1 IMPACT OF RECESSION ON INDUSTRIAL METROLOGY MARKET IN ROW

10.5.2 MIDDLE EAST & AFRICA

10.5.2.1 Aerospace and manufacturing sectors to contribute most to market growth

10.5.2.2 GCC countries

10.5.2.3 Rest of Middle East & Africa

TABLE 130 MIDDLE EAST & AFRICA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 131 MIDDLE EAST & AFRICA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

TABLE 132 MIDDLE EAST & AFRICA: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2020–2023 (USD MILLION)

TABLE 133 MIDDLE EAST & AFRICA: INDUSTRIAL METROLOGY MARKET, BY COUNTRY, 2024–2029 (USD MILLION)

10.5.3 SOUTH AMERICA

10.5.3.1 High demand from Brazil, Chile, and Argentina to propel market

TABLE 134 SOUTH AMERICA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2020–2023 (USD MILLION)

TABLE 135 SOUTH AMERICA: INDUSTRIAL METROLOGY MARKET, BY END-USER INDUSTRY, 2024–2029 (USD MILLION)

11 COMPETITIVE LANDSCAPE

11.1 OVERVIEW

11.2 KEY PLAYER STRATEGIES/RIGHT TO WIN

TABLE 136 OVERVIEW OF STRATEGIES DEPLOYED BY KEY MARKET PLAYERS

11.2.1 PRODUCT PORTFOLIO

11.2.2 REGIONAL FOCUS

11.2.3 MANUFACTURING FOOTPRINT

11.2.4 ORGANIC/INORGANIC GROWTH STRATEGIES

11.3 MARKET SHARE ANALYSIS, 2023

FIGURE 48 INDUSTRIAL METROLOGY MARKET SHARE ANALYSIS, 2023

TABLE 137 INDUSTRIAL METROLOGY MARKET: DEGREE OF COMPETITION, 2023

11.4 COMPANY REVENUE ANALYSIS, 2019–2023

FIGURE 49 REVENUE ANALYSIS OF TOP FIVE PLAYERS IN INDUSTRIAL METROLOGY MARKET, 2019–2023

11.5 MARKET CAPITALIZATION AND FINANCIAL METRICS

11.5.1 INDUSTRIAL METROLOGY MARKET: MARKET CAPITALIZATION

FIGURE 50 MARKET CAPITALIZATION

11.5.2 INDUSTRIAL METROLOGY MARKET: FINANCIAL METRICS

FIGURE 51 FINANCIAL METRICS

11.6 BRAND/PRODUCT COMPARISON

FIGURE 52 BRAND COMPARISON

11.7 COMPANY EVALUATION MATRIX: KEY PLAYERS, 2023

11.7.1 STARS

11.7.2 EMERGING LEADERS

11.7.3 PERVASIVE PLAYERS

11.7.4 PARTICIPANTS

FIGURE 53 INDUSTRIAL METROLOGY MARKET: COMPANY EVALUATION MATRIX (KEY PLAYERS), 2023

11.7.5 COMPANY FOOTPRINT: KEY PLAYERS

11.7.5.1 Overall company footprint

11.7.5.2 Company end-user industry footprint

11.7.5.3 Company application footprint

11.7.5.4 Company region footprint

11.8 COMPANY EVALUATION MATRIX: STARTUPS/SMES, 2023

11.8.1 PROGRESSIVE COMPANIES

11.8.2 RESPONSIVE COMPANIES

11.8.3 DYNAMIC COMPANIES

11.8.4 STARTING BLOCKS

FIGURE 54 INDUSTRIAL METROLOGY MARKET: COMPANY EVALUATION MATRIX (STARTUPS/SMES), 2023

11.8.5 COMPETITIVE BENCHMARKING: STARTUPS/SMES, 2023

11.8.5.1 Industrial metrology market: List of key startups/SMEs

11.8.5.2 Industrial metrology market: Competitive benchmarking of key startups/SMEs

11.9 COMPETITIVE SCENARIOS AND TRENDS

11.9.1 PRODUCT LAUNCHES

TABLE 138 INDUSTRIAL METROLOGY MARKET: PRODUCT LAUNCHES, JANUARY 2020–DECEMBER 2023

11.9.2 DEALS

TABLE 139 INDUSTRIAL METROLOGY MARKET: DEALS, JANUARY 2020–DECEMBER 2023

12 COMPANY PROFILES

(Business Overview, Products/Solutions/Services Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made, and Weaknesses and Competitive Threats))*

12.1 KEY PLAYERS

12.1.1 HEXAGON AB

TABLE 140 HEXAGON AB: COMPANY OVERVIEW

FIGURE 55 HEXAGON AB: COMPANY SNAPSHOT

TABLE 141 HEXAGON AB: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 142 HEXAGON AB: PRODUCT LAUNCHES

TABLE 143 HEXAGON AB: DEALS

12.1.2 NIKON CORPORATION

TABLE 144 NIKON CORPORATION: COMPANY OVERVIEW

FIGURE 56 NIKON CORPORATION: COMPANY SNAPSHOT

TABLE 145 NIKON CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 146 NIKON CORPORATION: PRODUCT LAUNCHES

TABLE 147 NIKON CORPORATION: DEALS

12.1.3 FARO

TABLE 148 FARO: COMPANY OVERVIEW

FIGURE 57 FARO: COMPANY SNAPSHOT

TABLE 149 FARO: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 150 FARO: PRODUCT LAUNCHES

TABLE 151 FARO: DEALS

12.1.4 CARL ZEISS AG

TABLE 152 CARL ZEISS AG: COMPANY OVERVIEW

FIGURE 58 CARL ZEISS AG: COMPANY SNAPSHOT

TABLE 153 CARL ZEISS AG: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 154 CARL ZEISS AG: PRODUCT LAUNCHES

TABLE 155 CARL ZEISS AG: DEALS

12.1.5 KEYENCE CORPORATION

TABLE 156 KEYENCE CORPORATION: COMPANY OVERVIEW

FIGURE 59 KEYENCE CORPORATION: COMPANY SNAPSHOT

TABLE 157 KEYENCE CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 158 KEYENCE CORPORATION: PRODUCT LAUNCHES

12.1.6 KLA CORPORATION

TABLE 159 KLA CORPORATION: COMPANY OVERVIEW

FIGURE 60 KLA CORPORATION: COMPANY SNAPSHOT

TABLE 160 KLA CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 161 KLA CORPORATION: PRODUCT LAUNCHES

12.1.7 MITUTOYO CORPORATION

TABLE 162 MITUTOYO CORPORATION: COMPANY OVERVIEW

TABLE 163 MITUTOYO CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 164 MITUTOYO CORPORATION: PRODUCT LAUNCHES

TABLE 165 MITUTOYO CORPORATION: DEALS

12.1.8 JENOPTIK

TABLE 166 JENOPTIK: COMPANY OVERVIEW

FIGURE 61 JENOPTIK: COMPANY SNAPSHOT

TABLE 167 JENOPTIK: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 168 JENOPTIK: PRODUCT LAUNCHES

TABLE 169 JENOPTIK: DEALS

12.1.9 RENISHAW PLC

TABLE 170 RENISHAW PLC: COMPANY OVERVIEW

FIGURE 62 RENISHAW PLC: COMPANY SNAPSHOT

TABLE 171 RENISHAW PLC: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 172 RENISHAW PLC: PRODUCT LAUNCHES

TABLE 173 RENISHAW PLC: DEALS

12.1.10 CREAFORM

TABLE 174 CREAFORM: COMPANY OVERVIEW

TABLE 175 CREAFORM: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 176 CREAFORM: PRODUCT LAUNCHES

TABLE 177 CREAFORM: DEALS

12.2 OTHER PLAYERS

12.2.1 ACCUSCAN

12.2.2 CARMAR ACCURACY CO., LTD.

12.2.3 BAKER HUGHES COMPANY

12.2.4 CYBEROPTICS

12.2.5 CAIRNHILL

12.2.6 ATT METROLOGY SOLUTIONS

12.2.7 SGS SOCIÉTÉ GÉNÉRALE DE SURVEILLANCE SA

12.2.8 TRIMET

12.2.9 AUTOMATED PRECISION INC (API)

12.2.10 APPLIED MATERIALS, INC.

12.2.11 PERCEPTRON, INC.

12.2.12 SHINING3D

12.2.13 INTERTEK GROUP PLC

12.2.14 BRUKER

12.2.15 METROLOGIC GROUP

*Details on Business Overview, Products/Solutions/Services Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made, and Weaknesses and Competitive Threats) might not be captured in case of unlisted companies.

13 APPENDIX

13.1 DISCUSSION GUIDE

13.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

13.3 CUSTOMIZATION OPTIONS

13.4 RELATED REPORTS

13.5 AUTHOR DETAILS

About

According to the new market research report on "Industrial Metrology Market by Offering, Product, Application (Reverse Engineering, Quality & Inspection, Mapping & Modelling), Industry (Aerospace & Defense, Automotive, Precision Manufacturing, Consumer), and Geography - Global Forecast to 2023", the industrial metrology market, the market is expected to grow from USD 9.62 Billion in 2018 to USD 12.97 Billion by 2023, at a CAGR of 6.2% during the forecast period. The growing big data analytics market and increasing demand for inspection services from precision manufacturing drive the growth of industrial metrology market. Moreover, increasing focus on quality control in various industries also contributes to the growth of this market.

The major players in the industrial metrology market include

Hexagon (Sweden)

FARO Technologies (US)

Nikon Metrology (Belgium)

Carl Zeiss Optotechnik (Germany)

Jenoptik (Germany)

GOM (Germany)

Creaform (Canada)

Renishaw (UK)

KLA-Tencor (US)

Applied Materials (US)

Perceptron (US)

GoM (Germany)

Automated Precision (US)

JLM Advanced Technical Services (US)

Precision Products (US)

CARMAR ACCURACY (Taiwan)

Pollen Metrology (France)

Cairnhill Metrology (Singapore).

Hardware to hold largest size of industrial metrology market between 2018 and 2023

The major driver for the growth of the industrial metrology market for hardware is the increasing adoption of industrial metrology products in the industries such as aerospace and defense, and automotive to maintain product quality. Moreover, the use of 2D metrology products for dimensioning and inspection applications also contributes to the growth of the market for hardware.

Industrial metrology market for coordinate measuring machine to grow at a high CAGR between 2018 and 2023

The rising need for precision dimensional analysis and validation of geometric accuracy in the manufacturing, automotive, aerospace, and military industries contribute to the largest share of coordinate measuring machines (CMMs) in the market based on equipment.

Quality control and inspection application to hold largest size of industrial metrology market between 2018 and 2023

Industries such as automotive and aerospace face increasing demand for intense quality control and inspection; not meeting quality standards can hamper their reputation and, ultimately, their brand and business. Thus, these industries are prominently adopting industrial metrology for the quality control and inspection application.

Industrial metrology market for automotive industry to grow at significant CAGR between 2018 and 2023

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 automotive sector, drives the growth of the industrial metrology market for the automotive industry. Moreover, the growing demand for automobiles in developing countries, such as India and China, is expected to fuel the growth of industrial metrology market in the near future.

APAC held largest share of industrial metrology market in 2017

Highest CAGR of the market in APAC is attributed to the high economic growth of the major countries, such as China and Japan, in this region. China has a huge potential in terms of the applications of industrial metrology offerings. Moreover, with the initiatives taken by the Government of India to encourage local and foreign players to have a manufacturing set-up in India is likely to boost the industrialization, thereby making it an attractive market for industrial metrology.

I would like to order

Product name: Industrial Metrology Market by Offering (Hardware, Software, Services), Equipment (CMM, ODS, X-ray, CT), Application, End-User Industry (Aerospace & Defense, Automotive, Manufacturing, Semiconductor) and Region - Global Forecast to 2029

Product link: <https://marketpublishers.com/r/I510383AEEBEN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/I510383AEEBEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970