

Calibration Services Market by Proofreading (In-house, OEM, Third-party Vendor), Application (Mechanical, Electrical, Dimensional, Thermodynamics), Application (Industrial & Automation, Electronics, Aerospace & Defence) and Region - Forecast to 2030

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Report description:

The global calibration services market is projected to grow from USD 5.7 billion in 2023 to USD 8.1 billion by 2030, registering a CAGR of 5.3% during the forecast period. The market's growth is primarily propelled by the escalating demand for dimensional, electrical, mechanical, among other calibration services. Calibration services encompass a range of types, including dimensional calibration for measurements like length and width, electrical calibration for voltage and current instruments, temperature calibration for thermometers, pressure calibration for gauges, flow calibration for flow meters, mass calibration for scales, force calibration for load cells, time and frequency calibration for clocks and counters, torque calibration for wrenches, humidity calibration for hygrometers, optical calibration for spectrometers, acoustic calibration for microphones, ensuring accurate measurements and instrument reliability across diverse industries and applications. Furthermore, the expanding adoption of calibration services in various applications, such as electronics, industrial and automation, aerospace and defense and communication, further fuels the market's growth trajectory.

The third-party vendor proofreading segment is expected to hold a significant market share in the overall calibration services market

During the forecast period, third-party vendor proofreading segment in the calibration market is likely to experience notable growth driven by various factors. Companies across industries increasingly recognize the critical role of accurate calibration in maintaining compliance, quality, and operational efficiency. As the complexity of instruments and equipment rises, the need for specialized expertise in proofreading calibration procedures becomes evident. Third-party vendors offer impartial and specialized

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services, addressing potential errors or inconsistencies that might otherwise be overlooked. This outsourcing trend allows businesses to focus on their core operations while ensuring precision in calibration processes. As regulatory demands and technological advancements persist, the third-party vendor proofreading segment is poised for continued growth, contributing to the overall expansion of the calibration services market.

The electronics application is expected to grow at a significant growth rate during the forecast period

The calibration services within the electronic manufacturing industry include the calibration of final products, periodic calibration of infrastructural machinery, and calibration on completion of specified operational usage time. Considering its vast nature of operations, calibration services are likely to have a considerable demand in the electronic manufacturing industry. Calibration services are frequently used in all electronic manufacturing plants to monitor the regular activities and regulate the equipment according to standard values. With the growing trend of using inspection services such as industrial radiography, phased array ultrasonic, and X-ray computed tomography in electronic manufacturing plants, the calibration of such test and measurement devices has also become a vital aspect of preventive maintenance within the industry. Calibration services are essential in consumer electronics to ensure accurate and reliable functionality of devices, maintain product quality and compliance with industry standards, and verify production processes. They play a critical role in enhancing user experiences and building consumer trust in electronic products.

North America is projected to have the significant growth rate during the forecast period

The North American region has grown substantially in the calibration services market due to its robust industrial landscape and stringent quality standards. Industries spanning aerospace, healthcare, automotive, and manufacturing demand precise measurements to comply with regulations. Technological advancements have led to increasingly complex instruments, necessitating accurate calibration. Moreover, North America's emphasis on innovation and adoption of precision manufacturing practices has propelled the calibration services sector. As businesses strive for accuracy and compliance, the region's advanced infrastructure and commitment to quality control contribute to its significant role in driving the calibration services market's expansion.

Breakdown of profiles of primary participants:

- By Company Type: Tier 1 = 30%, Tier 2 = 50%, and Tier 3 = 20%

- By Designation: C-level Executives = 25%, Directors = 35%, and Others = 40%

- By Region: North America = 35%, Europe = 30%, APAC = 25%, and Rest of the World = 10%

The major companies in the calibration services market are Keysight Technologies (US), Hexagon AB (Sweden), Rohde & Schwarz (Germany), Tektronix, Inc. (US), and VIAVI Solutions Inc. (US).

Research Coverage

The report segments the calibration services market and forecasts its size, by value, based on region (North America, Europe, Asia Pacific, and Rest of the World), proofreading (in-house, OEM, third-party vendor), application (mechanical, electrical, dimensional, thermodynamics), and end user (industrial & automation, electronics, communication, aerospace & defence, others). The report also comprehensively reviews market drivers, restraints, opportunities, and challenges in the calibration services market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Reasons to Buy the Report:

- Analysis of key drivers (growing demand for quality and inspection equipment in precision manufacturing, increased need for interoperability testing owing to growing deployment of IoT and connected devices, strict regulatory standards imposed by governments to ensure product safety and environmental protection), restraints (lack of highly skilled calibration and maintenance technicians, high competition due to increased price sensitivity), opportunities (the advent of 5G technology and deployment of LTE and LTE-Advanced (4G) networks), and challenges (built-in self-calibration feature of electrical & electronic instrument) influencing the growth of the calibration services market.

- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the calibration services market

- Market Development: Comprehensive information about lucrative markets - the report analyses the calibration services market across varied regions.

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-□ Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the calibration services market.

-□ Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Keysight Technologies (US), Hexagon AB (Sweden), Rohde & Schwarz (Germany), Tektronix, Inc. (US), VIAVI Solutions Inc. (US), Omega Engineering, Inc. (US), Advantest Corporation (Japan), National Instruments Corporation (US), Anritsu (Japan), Trescal, Inc. (France), Pratt and Whitney Measurement Systems, Inc. (US), Kolb & Baumann GmbH & Co KG. (Germany), Renishaw plc. (UK), Feinmess Suhl GmbH (Germany), Octagon Precision India Pvt. Ltd. (India), TESA Brown & Sharpe (Part of Hexagon AB) (Switzerland), Mitutoyo (Japan), MSI Viking (US), Master Gage & Tool Co. (US), Tanson Instrument (India), and Micro Precision Calibration (US).

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4.5 □ CALIBRATION SERVICES MARKET, BY REGION □ 55

**Calibration Services Market by Proofreading (In-house, OEM, Third-party Vendor),
Application (Mechanical, Electrical, Dimensional, Thermodynamics), Application
(Industrial & Automation, Electronics, Aerospace & Defence) and Region - Forecast to
2030**

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