

Global Micro Computed Tomography Market Size Study, by Product (In-vivo, Ex-vivo), by Application (Life Science, Bones, Dentistry, Plants & Food), by End-Use, and Regional Forecasts 2022-2032

<https://marketpublishers.com/r/G7F8DC5B572CEN.html>

Date: January 2025

Pages: 285

Price: US\$ 3,218.00 (Single User License)

ID: G7F8DC5B572CEN

Abstracts

The Global Micro Computed Tomography Market is valued at approximately USD 0.28 billion in 2023 and is anticipated to grow with a moderate yet steady CAGR of 6.70% during the forecast period 2024-2032. Micro computed tomography (Micro-CT) represents a pivotal innovation in the imaging domain, offering unparalleled non-destructive insights at a microscopic level. With the capability to visualize internal structures with exceptional precision, this technology has become indispensable across a variety of scientific and industrial applications, including life sciences, dentistry, and material analysis.

The burgeoning demand for advanced imaging solutions is propelling market growth, driven by research developments in life sciences and healthcare. Micro-CT has revolutionized preclinical research, enabling intricate evaluations of biological samples, including bone microarchitecture and dental structures. Simultaneously, its applications in food and plant sciences are opening new avenues for studying material properties and agricultural innovations. Additionally, ongoing improvements in imaging resolution and software integration are making these systems more efficient and accessible, further broadening their adoption across sectors.

However, market expansion is hampered by certain challenges, such as high equipment costs and the technical expertise required to operate these systems effectively. Despite these hurdles, increasing R&D investments and advancements in user-friendly software interfaces are addressing these concerns, paving the way for broader utilization of micro-CT technology.

Geographically, North America holds a commanding position in the global market due to a robust healthcare infrastructure, significant research funding, and the early adoption of advanced technologies. Europe follows closely, supported by strong academic research initiatives and a thriving healthcare industry. Meanwhile, the Asia Pacific region is witnessing the fastest growth, fueled by rising investments in biomedical research, expanding healthcare facilities, and increasing awareness about advanced diagnostic tools. Emerging economies in Latin America and the Middle East & Africa also present lucrative growth opportunities as governments prioritize healthcare development and scientific innovation.

Major market players included in this report are:

Bruker Corporation

Scanco Medical AG

Zeiss Group

Thermo Fisher Scientific Inc.

Nikon Metrology NV

North Star Imaging Inc.

TESCAN ORSAY HOLDING, a.s.

Rigaku Corporation

PerkinElmer Inc.

XRE NV

Eurotek Systems Ltd.

J. Morita Corporation

GE Healthcare

Hitachi High-Technologies Corporation

Philips Healthcare

The detailed segments and sub-segments of the market are explained below:

By Product

In-vivo

Ex-vivo

By Application

Life Science

Bones

Dentistry

Plants & Food

By End-Use

Academic and Research Institutes

Biotechnology and Pharmaceutical Companies

Clinical and Diagnostic Centers

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

Rest of Europe

Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

Latin America

Brazil

Mexico

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

Key Takeaways:

Comprehensive market estimates and forecasts from 2022 to 2032.

Detailed regional insights and country-level breakdowns.

Competitive landscape featuring key players and their strategies.

Strategic recommendations for leveraging emerging opportunities.

Demand and supply-side market dynamics with actionable insights.

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