

Global EDS, WDS, EBSD, Micro-XRF Instruments
Market Size study, By Product (Energy Dispersive
Spectroscopy (EDS), Wavelength Dispersive
Spectroscopy (WDS), Electron Backscatter Diffraction
(EBSD), Micro X-Ray Fluorescence (Micro-XRF)), By
Application (Semiconductors, Oil and Gas,
Pharmaceuticals and Biotechnology, Manufacturing,
Others), and Regional Forecasts 2022-2028

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## **Abstracts**

Global EDS, WDS, EBSD, Micro-XRF Instruments Market is valued approximately USD 567.63 Million in 2021 and is anticipated to grow with a healthy growth rate of more than 5.47% over the forecast period 2022-2028.

The Energy Dispersive Spectroscopy (EDS), Wavelength-dispersive X-ray spectroscopy (WDS or WDXS), Electron Backscatter Diffraction (EBSD), and Micro X-ray fluorescence instruments are the components of the spectrometer. The spectrometers are analytical instruments that are used to identify the features of materials by measuring the emissions and absorption of electromagnetic spectra. EDS is a standard method to detect and quantify the elemental composition of sample areas of a less or micron. The WDS is a non-destructive analysis procedure that is performed to get elemental data regarding the range of materials by measuring individual x-rays in a small wavelength range. EBSD is a scanning electron microscope that is based on technique, which offers crystallographic data about the microstructure of a sample. Micro X-ray fluorescence is an elemental analysis method that facilitates the examination of very small sample areas. The thriving growth of the semiconductors, aerospace, and automobile industry, increasing technological developments, and



growing popularity of nanotechnology are the primary factors that are augmenting the global market growth. For instance, according to the Semiconductor Industry Association, the global semiconductor industry sales recorded nearly USD 555.9 billion in 2021. The industry generates the highest annual revenue and with the rise of 26.2% in comparison of 2020 total of \$440.4 billion. Consequentially, the growth of the semiconductor industry is stimulating the demand for the EDS, WDS, EBSD, Micro-XRF Instruments, which, in turn, impels the market growth. However, a dearth of skilled professionals and high initial investment impede the growth of the market over the forecast period of 2022-2028. Also, the growth of the healthcare sector and the development of the emerging economies is anticipated to act as a catalyzing factor for the market demand during the forecast period.

The key regions considered for the Global EDS, WDS, EBSD, Micro-XRF Instruments Market study include Asia Pacific, North America, Europe, Latin America, and the Rest of the World. North America is the leading region across the world in terms of market share owing to the rising applications across various industries and the presence of the leading market players. Whereas, Asia-Pacific is anticipated to exhibit the highest CAGR over the forecast period 2022-2028. Factors such as the increasing industrialization, as well as rising technological developments, would create lucrative growth prospects for the EDS, WDS, EBSD, Micro-XRF Instruments market across the Asia-Pacific region.

Major market players included in this report are:
Oxford Instruments plc
AMETEK, Inc.
Bruker Corporation
Thermo Fisher Scientific, Inc.
JEOL Ltd.
FEI Company
Shimadzu Corporation
Rigaku Corporation
IXRF Systems, Inc.
Horiba Ltd.

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming eight years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within each of the regions and countries involved in the study. Furthermore, the report also caters the detailed information about the crucial aspects such as driving factors &



challenges which will define the future growth of the market. Additionally, the report shall also incorporate available opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below: By Product

Energy Dispersive Spectroscopy (EDS)

Wavelength Dispersive Spectroscopy (WDS)

Electron Backscatter Diffraction (EBSD)

Micro X-Ray Fluorescence (Micro-XRF)

By Application

Semiconductors

Oil and Gas

Pharmaceuticals and Biotechnology

Manufacturing

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

**RoAPAC** 

Latin America

Brazil

Mexico

Rest of the World



Furthermore, years considered for the study are as follows:

Historical year – 2018, 2019, 2020 Base year – 2021 Forecast period – 2022 to 2028

Target Audience of the Global EDS, WDS, EBSD, Micro-XRF Instruments Market in Market Study:

Key Consulting Companies & Advisors
Large, medium-sized, and small enterprises
Venture capitalists
Value-Added Resellers (VARs)
Third-party knowledge providers
Investment bankers
Investors



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