

Failure Analysis Market by Equipment (Optical Microscope, SEM, TEM, FIB, Scanning Probe Microscope, Dual Beam), Technology (SIMS, EDX, CMP, FIB, BIM, RIE), Application, & Geography - Forecast to 2025

<https://marketpublishers.com/r/F64C59B81DAEN.html>

Date: May 2020

Pages: 165

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

ID: F64C59B81DAEN

Abstracts

“The failure analysis market is projected to grow at a CAGR of 8.3% from 2020 to 2025”

The failure analysis market is estimated to be valued at USD 3.9 billion in 2020 and is projected to reach USD 5.9 billion by 2025; it is expected to grow at a CAGR of 8.3% from 2020 to 2025. A few key factors driving the growth of this market include imposition of safety rules & regulations by governments and international bodies, rise in demand for failure analysis from the electronics & semiconductor industry, technological advancements in microscopes, and rising focus on nanotechnology and regenerative medicine.

“Energy Dispersive X-Ray Spectroscopy (EDX) technology expected to hold the largest share of failure analysis market during the forecast period”

Energy Dispersive X-Ray Spectroscopy (EDX) technology is expected to hold the largest share of failure analysis market during the forecast period. This growth is anticipated due to the integration of EDX with failure analysis equipment such as Scanning Electron Microscope (SEM), Transmission Electron Microscope (TEM), and Scanning Transmission Electron Microscopy (STEM). EDX is widely used as an attachment for elemental analysis.

“Focused Ion Beam System of the failure analysis market projected to grow at the

highest CAGR of during the forecast period”

Focused Ion Beam System (FIB) of the failure analysis market projected to grow at the highest CAGR of during the forecast period. FIBs are primarily used for semiconductor manufacturing. The development of commercially focused FIBs has led to their increased applications in the field of material sciences. In addition to circuit editing and Transmission Electron Microscopy (TEM) sample preparation, FIBs can now be used for microstructural analysis and prototyping nanomachining. The fastest growth of this segment can be attributed to the growing adoption of FIB systems in material science and bioscience applications.

“Failure analysis market in APAC is expected to grow at the highest CAGR during the forecast period”

Failure analysis market in APAC is expected to grow at the highest CAGR during the forecast period. This growth is attributed to opportunities in emerging economies such as India and China, establishment of collaboration centers for microscopy research, and increasing applications of correlative microscopy in life sciences and nanotechnology research in this region.

Breakdown of the profile of primary participants:

By Company Type: Tier 1 - 55 %, Tier 2 - 20%, and Tier 3 - 25%

By Designation: C-Level Executives - 35%, Directors - 25%, Others - 40%

By Region: North America - 10%, Europe – 20%, APAC - 40%, and RoW - 30%

Thermo Fisher Scientific, Inc. (US), Hitachi High-Technologies Corporation (Japan), Carl Zeiss (Germany), JOEL, Ltd. (Japan), TESCAN OSRAY HOLDING (Czech Republic), Bruker (US), Semilab (Hungary), A&D Company, Ltd. (Japan), HORIBA, Ltd. (Japan), Leica Microsystems GmbH (Germany), Veeco Instruments (US), Oxford Instruments (UK), and Eurofins Scientific (Luxembourg) are among a few major players in the failure analysis market.

Research Coverage

The failure analysis market has been segmented, based on equipment, into Optical

Failure Analysis Market by Equipment (Optical Microscope, SEM, TEM, FIB, Scanning Probe Microscope, Dual Beam)...

Microscope, Scanning Electron Microscope (SEM), Transmission Electron Microscope (TEM), Scanning Probe Microscope, Focused Ion Beam System (FIB), Dual Beam System (FIB-SEM) and others (X-ray microscopes, Raman microscopes, and scanning acoustic microscopes). Based on technology, the failure analysis market is segmented into Energy Dispersive X-Ray Spectroscopy (EDX), Secondary Ion Mass Spectrometry (SIMS), Focused Ion Beam (FIB), Broad Ion Milling (BIM), Relative Ion Etching (RIE), Scanning Probe Microscopy (SPM) and Others (Chemical Mechanical Planarization (CMP) and X-ray Photoelectron Spectroscopy (XPS)). Based on application failure analysis market has been segmented into electronics & semiconductor, industrial science, material science, and bioscience. On the basis of geographic regions, the failure analysis market has been classified into North America, Europe, Asia Pacific (APAC), and Rest of the World (RoW).

Reasons to Buy the Report

The report would help market leaders/new entrants in the following ways:

1. This report segments the failure analysis market comprehensively and provides the closest approximations of the overall market's size, as well as that of the subsegments across different equipment, technologies, applications, and regions.
2. The report helps stakeholders understand the pulse of the market and provides information on key market drivers, restraints, challenges, and opportunities.
3. This report would help stakeholders understand their competitors better and gain more insights to enhance their position in the business. The competitive landscape section includes competitive leadership mapping, product launches, product developments, agreements, acquisitions, collaborations, and partnerships in the failure analysis market.

Contents

1 INTRODUCTION

- 1.1 STUDY OBJECTIVES
- 1.2 MARKET DEFINITION AND SCOPE
 - 1.2.1 INCLUSIONS AND EXCLUSIONS
- 1.3 STUDY SCOPE
 - 1.3.1 MARKETS COVERED
 - 1.3.2 GEOGRAPHIC SCOPE
- 1.4 YEARS CONSIDERED
- 1.5 CURRENCY
- 1.6 LIMITATIONS
- 1.7 STAKEHOLDERS
- 1.8 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
 - 2.1.1 SECONDARY DATA
 - 2.1.1.1 Secondary sources
 - 2.1.2 PRIMARY DATA
 - 2.1.2.1 Primary sources
 - 2.1.2.2 Breakdown of primary interviews
 - 2.1.3 SECONDARY AND PRIMARY RESEARCH
- 2.2 MARKET SIZE ESTIMATION
 - 2.2.1 BOTTOM-UP APPROACH
 - 2.2.1.1 Approach for capturing market size using bottom-up analysis (demand side)
 - 2.2.2 TOP-DOWN APPROACH
 - 2.2.2.1 Approach for capturing market share using top-down analysis (supply side)
- 2.3 DATA TRIANGULATION
- 2.4 ASSUMPTIONS

3 EXECUTIVE SUMMARY

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES IN THE FAILURE ANALYSIS MARKET

Failure Analysis Market by Equipment (Optical Microscope, SEM, TEM, FIB, Scanning Probe Microscope, Dual Beam)...

4.2 FAILURE ANALYSIS MARKET IN ASIA PACIFIC, BY EQUIPMENT AND APPLICATION

4.3 FAILURE ANALYSIS MARKET, BY TECHNOLOGY

4.4 FAILURE ANALYSIS MARKET, BY GEOGRAPHY

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

5.2.1 DRIVERS

5.2.1.1 Imposition of safety rules and regulations by governments and international bodies

5.2.1.2 Rise in demand for failure analysis from the electronics & semiconductor industry

5.2.1.3 Technological advancements in microscopes

5.2.1.4 Rising focus on nanotechnology and regenerative medicine

5.2.2 RESTRAINTS

5.2.2.1 High ownership and maintenance cost

5.2.3 OPPORTUNITIES

5.2.3.1 Increasing demand for failure analysis in developing countries

5.2.3.2 Integration of microscopy with spectroscopy

5.2.3.3 Use of focused ion beam systems to study biological samples and biomaterials

5.2.4 CHALLENGES

5.2.4.1 Dearth of skilled professionals

5.3 VALUE CHAIN ANALYSIS

5.4 COVID-19 IMPACT ON FAILURE ANALYSIS MARKET

6 FAILURE ANALYSIS MARKET, BY EQUIPMENT

6.1 INTRODUCTION

6.2 OPTICAL MICROSCOPE

6.2.1 HIGH ADOPTION OF OPTICAL MICROSCOPES FOR LOCATING AND IDENTIFYING EXTERNAL DEFECTS TO DRIVE THE FAILURE ANALYSIS MARKET

6.3 SCANNING ELECTRON MICROSCOPE (SEM)

6.3.1 INCREASING ADOPTION OF SCANNING ELECTRON MICROSCOPES IN VARIOUS INDUSTRIES SUCH AS MATERIAL SCIENCE AND SEMICONDUCTORS TO DRIVE THE FAILURE ANALYSIS MARKET

6.4 TRANSMISSION ELECTRON MICROSCOPE (TEM)

6.4.1 HIGH ADOPTION OF TRANSMISSION ELECTRON MICROSCOPES FOR LIFE SCIENCE, MATERIAL SCIENCE, AND METALLURGY TO DRIVE THE FAILURE ANALYSIS MARKET

6.5 SCANNING PROBE MICROSCOPE (SPM)

6.5.1 INCREASING DEMAND FOR ATOMIC FORCE MICROSCOPY FROM MINIATURE ELECTRONIC AND SEMICONDUCTOR DEVICES IS DRIVING THE FAILURE ANALYSIS MARKET

6.6 FOCUSED ION BEAM (FIB) SYSTEM

6.6.1 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM SYSTEMS IS EXPECTED TO GROW AT THE HIGHEST CAGR DURING THE FORECAST PERIOD

6.7 DUAL BEAM SYSTEM

6.7.1 FAILURE ANALYSIS MARKET FOR DUAL BEAM SYSTEMS IS EXPECTED TO GROW AT THE SECOND HIGHEST CAGR DURING FORECAST PERIOD

6.8 OTHERS

7 FAILURE ANALYSIS MARKET, BY TECHNOLOGY

7.1 INTRODUCTION

7.2 ENERGY DISPERSIVE X-RAY SPECTROSCOPY (EDX)

7.2.1 EDX CAN BE COUPLED WITH SEM, TEM, AND STEM TECHNOLOGIES, WHICH IS LIKELY TO DRIVE THE DEMAND FOR THIS TECHNOLOGY

7.3 SECONDARY ION MASS SPECTROSCOPY (SIMS)

7.3.1 WIDE ADOPTION OF SIMS IN MATERIAL SCIENCE APPLICATIONS IS LIKELY TO DRIVE THE SEGMENT

7.4 FOCUSED ION BEAM (FIB)

7.4.1 DEMAND FROM NANOFABRICATION AND MICROMACHINING-RELATED APPLICATIONS IS LIKELY TO DRIVE THE FIB SEGMENT

7.5 BROAD ION MILLING (BIM)

7.5.1 HIGH-QUALITY TEM SAMPLING ABILITIES ARE LIKELY TO DRIVE THE DEMAND FOR BIM TECHNOLOGY

7.6 REACTIVE ION ETCHING (RIE)

7.6.1 INCREASED PRODUCT DENSITY, IMPROVED YIELDS, AND TIGHTER TOLERANCES FROM THE ELECTRONICS INDUSTRY ARE LIKELY TO BOOST THE DEMAND FOR REACTIVE ION ETCHING

7.7 SCANNING PROBE MICROSCOPY (SPM)

7.7.1 INCREASED DEMAND FROM SEMICONDUCTORS, MATERIAL SCIENCE, ELECTRONICS, AND NANOTECHNOLOGY FOR TOPOGRAPHIC ANALYSIS TO BOOST THE SPM SEGMENT

7.8 OTHERS

7.9 OVERVIEW OF FAILURE ANALYSIS TECHNIQUES (QUALITATIVE)

7.9.1 DESTRUCTIVE PHYSICAL ANALYSIS (DPA)

7.9.2 FAULT TREE ANALYSIS (FTA)

7.9.3 COMMON-MODE FAILURE ANALYSIS

7.9.4 FAILURE MODES AND EFFECTS ANALYSIS (FMEA)

7.9.5 SNEAK CIRCUIT ANALYSIS

8 FAILURE ANALYSIS MARKET, BY APPLICATION

8.1 INTRODUCTION

8.2 ELECTRONICS & SEMICONDUCTOR

8.2.1 SEMICONDUCTOR MANUFACTURING

8.2.1.1 Increasingly complex circuitry leads to the requirement for failure analysis of different electronic components and devices

8.2.2 MEMS AND THIN FILM PRODUCTION

8.2.2.1 Focused ion beam systems are used for failure analysis of MEMS and identification of root causes of these failures

8.3 INDUSTRIAL SCIENCE

8.3.1 OIL & GAS

8.3.1.1 FIB-SEM systems provide new insights related to the reservoir flow control mechanism for the oil & gas vertical

8.3.2 AUTOMOTIVE AND AEROSPACE

8.3.2.1 Increased demand for electronic systems in autonomous and driverless cars is likely to drive the failure analysis market for the automotive sector

8.3.3 CHEMICALS

8.3.3.1 Dual beam microscopes carry out the high-fidelity 3D characterization of crystallography, morphology, and chemistry of micro- and submicro-sized features of different components

8.3.4 POWER GENERATION

8.3.4.1 Scanning electron microscope high-resolution imaging is used for the analysis of microstructural changes in power plants

8.4 MATERIAL SCIENCE

8.4.1 METALS AND MINING

8.4.1.1 High adoption of scanning electron microscopes, transmission electron microscopes, and focused ion beam systems to gain an improved understanding of the physical properties of metals and alloys

8.4.2 PAPER AND FIBER MATERIALS

8.4.2.1 Focused ion beam systems provide failure analysis of paper

and fiber materials

8.4.3 CERAMIC AND GLASS

8.4.3.1 Focused ion beam systems provide nanofabrication, milling, and imaging of ceramics and glass

8.4.4 POLYMERS

8.4.4.1 High adoption of scanning electron microscopes in modern material science investigations into polymers and plastics is driving the segment

8.4.5 NANOFABRICATION

8.4.5.1 Focused ion beam offers patterning solutions for nanofabrication

8.5 BIOSCIENCE

8.5.1 CELLULAR BIOLOGY

8.5.1.1 Examination of 3D cell and tissue architecture using SEM and TEM is boosting the segment

8.5.2 STRUCTURAL BIOLOGY

8.5.2.1 FIB-SEM systems are being used extensively for studying structural biology

8.5.3 BIOMEDICAL ENGINEERING

8.5.3.1 FIB and TEM systems are aiding research activities for biotechnology and implantable biomedical devices

8.5.4 NEUROSCIENCE

8.5.4.1 3D biological samples imaging is done through FIB-SEM systems

9 FAILURE ANALYSIS MARKET, BY GEOGRAPHY

9.1 INTRODUCTION

9.2 NORTH AMERICA

9.2.1 US

9.2.1.1 Increasing R&D and growing commercialization of nanotechnology-based products are driving the demand for failure analysis in the US

9.2.2 CANADA

9.2.2.1 Initiatives by different institutions, research laboratories, and companies in Canada are driving the failure analysis market

9.2.3 MEXICO

9.2.3.1 Increasing adoption of advanced technologies in electronics & semiconductor and material science verticals is fueling the demand for failure analysis equipment in Mexico

9.3 EUROPE

9.3.1 GERMANY

9.3.1.1 Favorable funding scenario for R&D in microscopy, growth in the biotechnology industry, and rise in focus on nanotechnology are driving the failure analysis market in Germany

9.3.2 UK

9.3.2.1 Increase in R&D investments in biotechnology, nanotechnology, and life sciences is expected to surge the demand for failure analysis equipment in the UK

9.3.3 FRANCE

9.3.3.1 Growing biotechnology industry is likely to propel the failure analysis market growth in France

9.3.4 REST OF EUROPE

9.4 ASIA PACIFIC

9.4.1 JAPAN

9.4.1.1 Consistent and increased investments in R&D activities by key players are likely to drive the failure analysis market in Japan

9.4.2 CHINA

9.4.2.1 Growing demand for failure analysis equipment from electronics & semiconductor, automotive, and other consumer industries is likely to drive the failure analysis market

9.4.3 SOUTH KOREA

9.4.3.1 Increased adoption of FIB and FIB-SEM systems and solutions in laboratories, universities, and manufacturing companies is contributing to the growth of the failure analysis market in South Korea

9.4.4 INDIA

9.4.4.1 Increase in government initiatives to support the growth of the electronics & semiconductor industry is likely to drive the failure analysis market in India

9.4.5 REST OF ASIA PACIFIC

9.5 REST OF THE WORLD (ROW)

9.5.1 MIDDLE EAST & AFRICA

9.5.1.1 Increase in demand for failure analysis equipment from consumer electronics, automotive, and aerospace & defense industries is likely to drive the market in the Middle East & Africa

9.5.2 SOUTH AMERICA

9.5.2.1 Increase in investments in bioscience research is likely to drive the failure analysis market in South America

10 COMPETITIVE LANDSCAPE

10.1 OVERVIEW

10.2 MARKET PLAYER RANKING ANALYSIS

10.3 COMPETITIVE LEADERSHIP MAPPING

10.3.1 VISIONARY LEADERS

10.3.2 INNOVATORS

10.3.3 DYNAMIC DIFFERENTIATORS

10.3.4 EMERGING COMPANIES

10.4 COMPETITIVE SCENARIO

10.4.1 PRODUCT LAUNCHES AND DEVELOPMENTS

10.4.2 ACQUISITIONS, PARTNERSHIPS, AGREEMENTS, AND COLLABORATIONS

11 COMPANY PROFILES

11.1 KEY PLAYERS

(Business Overview, Products Offered, Recent Developments, SWOT Analysis, and MnM View)*

11.1.1 HITACHI HIGH-TECHNOLOGIES CORPORATION

11.1.2 THERMO FISHER SCIENTIFIC, INC.

11.1.3 CARL ZEISS

11.1.4 JEOL LTD.

11.1.5 TESCAN OSRAY HOLDING

11.1.6 BRUKER

11.1.7 HORIBA, LTD.

11.1.8 SEMILAB

11.1.9 A&D COMPANY LTD.

11.1.10 MOTION X CORPORATION

* Business Overview, Products Offered, Recent Developments, SWOT Analysis, and MnM View might not be captured in case of unlisted companies.

11.2 RIGHT TO WIN

11.3 OTHER KEY PLAYERS

11.3.1 EUROFINS SCIENTIFIC

11.3.2 INTERTEK GROUP PLC

11.3.3 OXFORD INSTRUMENTS

11.3.4 RAITH GMBH

11.3.5 LEICA MICROSYSTEMS

11.3.6 VEECO INSTRUMENTS

11.3.7 ACCU-SCOPE

11.3.8 MEIJI TECHNO CO.

11.3.9 FIBICS

11.3.10 APPLIED BEAMS

12 APPENDIX

12.1 DISCUSSION GUIDE

12.2 KNOWLEDGE STORE: MARKETSSANDMARKETS' SUBSCRIPTION PORTAL

12.3 AVAILABLE CUSTOMIZATIONS

12.4 RELATED REPORTS

12.5 AUTHOR DETAILS

List Of Tables

LIST OF TABLES

TABLE 1 FAILURE ANALYSIS MARKET, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 2 FAILURE ANALYSIS MARKET FOR OPTICAL MICROSCOPE, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 3 FAILURE ANALYSIS MARKET FOR OPTICAL MICROSCOPE, BY REGION, 2017–2025 (USD MILLION)

TABLE 4 FAILURE ANALYSIS MARKET FOR OPTICAL MICROSCOPE IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 5 FAILURE ANALYSIS MARKET FOR OPTICAL MICROSCOPE IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 6 FAILURE ANALYSIS MARKET FOR OPTICAL MICROSCOPE IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 7 FAILURE ANALYSIS MARKET FOR OPTICAL MICROSCOPE IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 8 FAILURE ANALYSIS MARKET FOR SCANNING ELECTRON MICROSCOPE, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 9 FAILURE ANALYSIS MARKET FOR SCANNING ELECTRON MICROSCOPE, BY REGION, 2017–2025 (USD MILLION)

TABLE 10 FAILURE ANALYSIS MARKET FOR SCANNING ELECTRON MICROSCOPE IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 11 FAILURE ANALYSIS MARKET FOR SCANNING ELECTRON MICROSCOPE IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 12 FAILURE ANALYSIS MARKET FOR SCANNING ELECTRON MICROSCOPE IN

ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 13 FAILURE ANALYSIS MARKET FOR SCANNING ELECTRON MICROSCOPE IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 14 FAILURE ANALYSIS MARKET FOR TRANSMISSION ELECTRON MICROSCOPE, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 15 FAILURE ANALYSIS MARKET FOR TRANSMISSION ELECTRON MICROSCOPE, BY REGION, 2017–2025 (USD MILLION)

TABLE 16 FAILURE ANALYSIS MARKET FOR TRANSMISSION ELECTRON MICROSCOPE IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 17 FAILURE ANALYSIS MARKET FOR TRANSMISSION ELECTRON MICROSCOPE IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 18 FAILURE ANALYSIS MARKET FOR TRANSMISSION ELECTRON MICROSCOPE IN

ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 19 FAILURE ANALYSIS MARKET FOR TRANSMISSION ELECTRON MICROSCOPE IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 20 TYPES OF SCANNING PROBE MICROSCOPE (SPM)

TABLE 21 FAILURE ANALYSIS MARKET FOR SCANNING PROBE MICROSCOPE, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 22 FAILURE ANALYSIS MARKET FOR SCANNING PROBE MICROSCOPE, BY REGION, 2017–2025 (USD MILLION)

TABLE 23 FAILURE ANALYSIS MARKET FOR SCANNING PROBE MICROSCOPE IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 24 FAILURE ANALYSIS MARKET FOR SCANNING PROBE MICROSCOPE IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 25 FAILURE ANALYSIS MARKET FOR SCANNING PROBE MICROSCOPE IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 26 FAILURE ANALYSIS MARKET FOR SCANNING PROBE MICROSCOPE IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 27 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM SYSTEM, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 28 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM SYSTEM, BY REGION, 2017–2025 (USD MILLION)

TABLE 29 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM SYSTEM IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 30 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM SYSTEM IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 31 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM SYSTEM IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 32 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM SYSTEM IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 33 FAILURE ANALYSIS MARKET FOR DUAL BEAM SYSTEM, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 34 FAILURE ANALYSIS MARKET FOR DUAL BEAM SYSTEM, BY REGION, 2017–2025 (USD MILLION)

TABLE 35 FAILURE ANALYSIS MARKET FOR DUAL BEAM SYSTEM IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 36 FAILURE ANALYSIS MARKET FOR DUAL BEAM SYSTEM IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 37 FAILURE ANALYSIS MARKET FOR DUAL BEAM SYSTEM IN ASIA

PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 38 FAILURE ANALYSIS MARKET FOR DUAL BEAM SYSTEM IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 39 FAILURE ANALYSIS MARKET FOR OTHERS, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 40 FAILURE ANALYSIS MARKET FOR OTHERS, BY REGION, 2017–2025 (USD MILLION)

TABLE 41 FAILURE ANALYSIS MARKET FOR OTHERS IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 42 FAILURE ANALYSIS MARKET FOR OTHERS IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 43 FAILURE ANALYSIS MARKET FOR OTHERS IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 44 FAILURE ANALYSIS MARKET FOR OTHERS IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 45 FAILURE ANALYSIS MARKET, BY TECHNOLOGY, 2017–2025 (USD MILLION)

TABLE 46 FAILURE ANALYSIS MARKET, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 47 ELECTRONICS & SEMICONDUCTOR FAILURE ANALYSIS TECHNIQUES

TABLE 48 FAILURE ANALYSIS MARKET FOR ELECTRONICS & SEMICONDUCTOR, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 49 FAILURE ANALYSIS MARKET FOR ELECTRONICS & SEMICONDUCTOR, BY REGION, 2017–2025 (USD MILLION)

TABLE 50 FAILURE ANALYSIS MARKET FOR INDUSTRIAL SCIENCE, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 51 FAILURE ANALYSIS MARKET FOR INDUSTRIAL SCIENCE, BY REGION, 2017–2025 (USD MILLION)

TABLE 52 FAILURE ANALYSIS MARKET FOR MATERIAL SCIENCE, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 53 FAILURE ANALYSIS MARKET FOR MATERIAL SCIENCE, BY REGION, 2017–2025 (USD MILLION)

TABLE 54 FAILURE ANALYSIS MARKET FOR BIOSCIENCE, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 55 FAILURE ANALYSIS MARKET FOR BIOSCIENCE, BY REGION, 2017–2025 (USD MILLION)

TABLE 56 FAILURE ANALYSIS MARKET, BY REGION, 2017–2025 (USD MILLION)

TABLE 57 FAILURE ANALYSIS MARKET IN NORTH AMERICA, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 58 FAILURE ANALYSIS MARKET IN NORTH AMERICA, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 59 FAILURE ANALYSIS MARKET IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 60 FAILURE ANALYSIS MARKET IN US, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 61 FAILURE ANALYSIS MARKET IN CANADA, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 62 FAILURE ANALYSIS MARKET IN MEXICO, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 63 FAILURE ANALYSIS MARKET FOR ELECTRONICS & SEMICONDUCTOR IN

NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 64 FAILURE ANALYSIS MARKET FOR INDUSTRIAL SCIENCE IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 65 FAILURE ANALYSIS MARKET FOR MATERIAL SCIENCE IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 66 FAILURE ANALYSIS MARKET FOR BIOSCIENCE IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 67 FAILURE ANALYSIS MARKET IN EUROPE, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 68 FAILURE ANALYSIS MARKET IN EUROPE, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 69 FAILURE ANALYSIS MARKET IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 70 FAILURE ANALYSIS MARKET IN GERMANY, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 71 FAILURE ANALYSIS MARKET IN UK, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 72 FAILURE ANALYSIS MARKET IN FRANCE, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 73 FAILURE ANALYSIS MARKET IN REST OF EUROPE, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 74 FAILURE ANALYSIS MARKET FOR ELECTRONICS & SEMICONDUCTOR IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 75 FAILURE ANALYSIS MARKET FOR INDUSTRIAL SCIENCE IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 76 FAILURE ANALYSIS MARKET FOR MATERIAL SCIENCE IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 77 FAILURE ANALYSIS MARKET FOR BIOSCIENCE IN EUROPE, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 78 FAILURE ANALYSIS MARKET IN ASIA PACIFIC, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 79 FAILURE ANALYSIS MARKET IN ASIA PACIFIC, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 80 FAILURE ANALYSIS MARKET IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 81 FAILURE ANALYSIS MARKET IN JAPAN, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 82 FAILURE ANALYSIS MARKET IN CHINA, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 83 FAILURE ANALYSIS MARKET IN SOUTH KOREA, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 84 FAILURE ANALYSIS MARKET IN INDIA, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 85 FAILURE ANALYSIS MARKET IN REST OF ASIA PACIFIC, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 86 FAILURE ANALYSIS MARKET FOR ELECTRONICS & SEMICONDUCTOR IN

ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 87 FAILURE ANALYSIS MARKET FOR INDUSTRIAL SCIENCE IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 88 FAILURE ANALYSIS MARKET FOR MATERIAL SCIENCE IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 89 FAILURE ANALYSIS MARKET FOR BIOSCIENCE IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD MILLION)

TABLE 90 FAILURE ANALYSIS MARKET IN ROW, BY EQUIPMENT, 2017–2025 (USD MILLION)

TABLE 91 FAILURE ANALYSIS MARKET IN ROW, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 92 FAILURE ANALYSIS MARKET IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 93 FAILURE ANALYSIS MARKET IN MIDDLE EAST & AFRICA, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 94 FAILURE ANALYSIS MARKET IN SOUTH AMERICA, BY APPLICATION, 2017–2025 (USD MILLION)

TABLE 95 FAILURE ANALYSIS MARKET FOR ELECTRONICS & SEMICONDUCTOR IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 96 FAILURE ANALYSIS MARKET FOR INDUSTRIAL SCIENCE IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 97 FAILURE ANALYSIS MARKET FOR MATERIAL SCIENCE IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 98 FAILURE ANALYSIS MARKET FOR BIOSCIENCE IN ROW, BY REGION, 2017–2025 (USD MILLION)

TABLE 99 TOP FIVE PRODUCT LAUNCHES AND DEVELOPMENTS, JANUARY 2018–MARCH 2020

TABLE 100 TOP FIVE ACQUISITIONS, PARTNERSHIPS, AGREEMENTS, AND COLLABORATIONS, JANUARY 2018–MARCH 2020

List Of Figures

LIST OF FIGURES

FIGURE 1 FAILURE ANALYSIS MARKET SEGMENTATION

FIGURE 2 RESEARCH FLOW

FIGURE 3 FAILURE ANALYSIS MARKET: RESEARCH DESIGN

FIGURE 4 BOTTOM-UP APPROACH

FIGURE 5 TOP-DOWN APPROACH

FIGURE 6 DATA TRIANGULATION

FIGURE 7 MATERIAL SCIENCE SEGMENT OF THE FAILURE ANALYSIS MARKET IS

PROJECTED TO GROW AT THE HIGHEST CAGR FROM 2020 TO 2025

FIGURE 8 OPTICAL MICROSCOPE TO HOLD THE LARGEST SHARE OF THE FAILURE ANALYSIS MARKET FROM 2020 TO 2025

FIGURE 9 FOCUSED ION BEAM TECHNOLOGY TO GROW AT THE HIGHEST CAGR IN THE FAILURE ANALYSIS MARKET FROM 2020 TO 2025

FIGURE 10 ASIA PACIFIC IS ESTIMATED TO ACCOUNT FOR THE LARGEST SHARE OF THE FAILURE ANALYSIS MARKET IN 2020

FIGURE 11 RISE IN DEMAND FOR FAILURE ANALYSIS FROM THE ELECTRONICS & SEMICONDUCTOR INDUSTRY AND TECHNOLOGICAL ADVANCEMENTS IN MICROSCOPES ARE DRIVING THE GROWTH OF THE FAILURE ANALYSIS MARKET FROM 2020 TO 2025

FIGURE 12 OPTICAL MICROSCOPE AND ELECTRONICS & SEMICONDUCTOR SEGMENTS

TO HOLD LARGEST SHARES OF THE FAILURE ANALYSIS MARKET IN ASIA PACIFIC IN 2020

FIGURE 13 FAILURE ANALYSIS MARKET FOR FOCUSED ION BEAM TECHNOLOGY IS

PROJECTED TO GROW AT THE HIGHEST CAGR FROM 2020 TO 2025

FIGURE 14 US IS ESTIMATED TO ACCOUNT FOR THE LARGEST SHARE OF THE FAILURE ANALYSIS MARKET IN 2020

FIGURE 15 FAILURE ANALYSIS MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES

FIGURE 16 FAILURE ANALYSIS MARKET DRIVERS AND THEIR IMPACT

FIGURE 17 FAILURE ANALYSIS MARKET RESTRAINT AND ITS IMPACT

FIGURE 18 FAILURE ANALYSIS MARKET OPPORTUNITIES AND THEIR IMPACT

FIGURE 19 FAILURE ANALYSIS MARKET CHALLENGES AND THEIR IMPACT

FIGURE 20 FAILURE ANALYSIS MARKET: VALUE CHAIN ANALYSIS

FIGURE 21 OPTICAL MICROSCOPE SEGMENT IS EXPECTED TO ACCOUNT FOR THE LARGEST SHARE OF THE FAILURE ANALYSIS MARKET DURING THE FORECAST PERIOD

FIGURE 22 ENERGY DISPERSIVE X-RAY SPECTROSCOPY (EDX) SEGMENT IS EXPECTED TO ACCOUNT FOR THE LARGEST SHARE OF THE FAILURE ANALYSIS MARKET DURING THE FORECAST PERIOD

FIGURE 23 MATERIAL SCIENCE SEGMENT IS EXPECTED TO GROW AT THE HIGHEST CAGR DURING THE FORECAST PERIOD

FIGURE 24 GEOGRAPHIC SNAPSHOT OF THE FAILURE ANALYSIS MARKET

FIGURE 25 NORTH AMERICA: GEOGRAPHIC SNAPSHOT

FIGURE 26 EUROPE: GEOGRAPHIC SNAPSHOT

FIGURE 27 ASIA PACIFIC: GEOGRAPHIC SNAPSHOT

FIGURE 28 COMPANIES ADOPTED PARTNERSHIPS, AGREEMENTS, AND COLLABORATIONS AS KEY GROWTH STRATEGIES FROM JANUARY 2018 TO MARCH 2020

FIGURE 29 TOP 5 PLAYERS IN THE FAILURE ANALYSIS MARKET, 2019

FIGURE 30 FAILURE ANALYSIS MARKET (GLOBAL) COMPETITIVE LEADERSHIP MAPPING, 2019

FIGURE 31 MARKET EVALUATION FRAMEWORK: PRODUCT LAUNCHES FUELED GROWTH AND INNOVATION DURING 2018–2019

FIGURE 32 HITACHI HIGH-TECHNOLOGIES CORPORATION: COMPANY SNAPSHOT

FIGURE 33 THERMO FISHER SCIENTIFIC, INC.: COMPANY SNAPSHOT

FIGURE 34 CARL ZEISS: COMPANY SNAPSHOT

FIGURE 35 JEOL LTD.: COMPANY SNAPSHOT

FIGURE 36 BRUKER: COMPANY SNAPSHOT

FIGURE 37 HORIBA, LTD.: COMPANY SNAPSHOT

I would like to order

Product name: Failure Analysis Market by Equipment (Optical Microscope, SEM, TEM, FIB, Scanning Probe Microscope, Dual Beam), Technology (SIMS, EDX, CMP, FIB, BIM, RIE), Application, & Geography - Forecast to 2025

Product link: <https://marketpublishers.com/r/F64C59B81DAEN.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/F64C59B81DAEN.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