

## EMC Shielding and Test Equipment Market by Material (Conductive Coatings & Paints, Conductive Polymers, EMC Filters), Test Equipment (Spectrum Analyzers, EMI Receivers, Amplifiers, Test Chambers) Method (Radiation, Conduction) - Global Forecast to 2029

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## Report description:

The global EMC shielding and test equipment market is expected to be valued at USD 8.4 billion in 2024 and is projected to reach USD 11.3 billion by 2029; it is expected to grow at a CAGR of 6.2% from 2024 to 2029. The global EMC shielding and test equipment market is driven by rapid industrialization, coupled with heightened concerns regarding electromagnetic pollution. As industries undergo rapid expansion and technological advancements, the proliferation of electronic devices leads to increased electromagnetic interference. To mitigate the impact of this interference and ensure the reliability of electronic systems, there is a growing need for robust EMC shielding and test equipment. This demand is further accentuated by the escalating awareness and concerns regarding electromagnetic pollution, urging industries worldwide to invest in comprehensive solutions for electromagnetic compatibility, making the EMC shielding and test equipment market a critical player in maintaining the integrity of electronic components on a global scale.

"Based on EMC shielding materials EMC shielding tapes & laminates accounts highest CAGR in the EMC shielding and test equipment market"

EMC Shielding Tapes & Laminates showcase the highest growth rate in the EMC shielding market, primarily due to their exceptional versatility and effectiveness in combating electromagnetic interference (EMI). These materials offer a flexible and adaptable solution for shielding electronic components and systems, making them ideal for various applications. As industries witness a surge in demand for compact and interconnected electronic devices, EMC Shielding Tapes & Laminates provide an efficient and easy-to-implement solution. Their effectiveness in preventing EMI, combined with advancements in tape technologies to ensure superior shielding performance, positions them as key contributors to the rapidly evolving landscape of electromagnetic

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compatibility solutions. These materials' continuous innovation and adoption across various industries, especially in consumer electronics and telecommunications, drive their remarkable CAGR in the EMC shielding market.

"Radiation method to exhibit highest CAGR in EMC shielding market."

Radiation emerges as the dominant method in the EMC shielding market due to its widespread effectiveness in mitigating electromagnetic interference (EMI). Radiation-based shielding methods involve absorbing or reflecting electromagnetic waves, offering a versatile and reliable solution across a broad spectrum of frequencies. This method is particularly advantageous in applications where electromagnetic signals need redirection or absorption to safeguard sensitive electronic components. Industries such as consumer electronics, telecommunications, automotive, healthcare, and aerospace rely heavily on radiation-based EMC shielding solutions to ensure the seamless operation of electronic devices. The adaptability of radiation-based methods to diverse materials, coupled with their ability to address a wide frequency range, makes them the preferred choice for shielding against electromagnetic interference in various industrial applications, driving their dominance and largest share in the market.

"Automotive end-user industry to exhibit highest growth rate in EMC shielding and test equipment market."

The automotive sector showcases the highest CAGR in the EMC shielding and test equipment market due to the transformative changes in the automotive landscape. As vehicles increasingly rely on electronic components and systems, including advanced driver-assistance systems (ADAS), connectivity features, and electric powertrains, the susceptibility to electromagnetic interference (EMI) rises substantially. Automotive manufacturers are investing significantly in EMC shielding and testing to ensure the reliability and performance of these intricate electronic systems, meeting stringent industry standards and regulations. The growing emphasis on electric vehicles and autonomous driving further amplifies the complexity of electronic systems, reinforcing the demand for robust EMC solutions. With the automotive industry at the forefront of technological innovation, the need for advanced EMC shielding and testing equipment experiences unparalleled growth, contributing to the sector's highest CAGR in the market.

"Asia Pacific region holds for largest share in EMC shielding and test equipment market."

Asia Pacific commands the largest EMC shielding and test equipment market share due to the region's burgeoning electronics manufacturing ecosystem. Countries such as China, Japan, South Korea, and Taiwan are pivotal hubs for consumer electronics, automotive manufacturing, and technological advancements. The rapid expansion of these industries, coupled with the increasing demand for sophisticated electronic devices, propels the need for effective electromagnetic compatibility (EMC) solutions. The region's robust manufacturing infrastructure and the relentless adoption of cutting-edge technologies fuel the demand for EMC shielding and test equipment. Additionally, stringent regulatory requirements drive the integration of EMC solutions across diverse industries. As Asia Pacific remains a global leader in electronics production and innovation, it secures the largest market share in the EMC shielding and test equipment market.

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 26%, Tier 2 32%, and Tier 3 42%
- By Designation: C-level Executives 40%, Directors 30%, and Others 30%
- By Region: North America 35%, Europe 30%, Asia Pacific 25%, and RoW 10%

The key players operating in the smart glass market are PARKER HANNIFIN CORP (US), PPG Industries, Inc. (US), 3M (US), Henkel AG & Co. KGaA (Germany), and AMETEK.Inc. (US) among others.

Research Coverage:

The research reports the EMC Shielding and Test Equipment Market, By Type (EMC Shielding, EMC Test Equipment), By End-user Industry (Consumer Electronics, Telecommunications, Automotive, Healthcare, Aerospace, and Others), and Region (North America, Europe, Asia Pacific, and Rest of the world (RoW)). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the smart glass market. A detailed analysis of the key industry players has been done to provide insights into their business overviews, products, key strategies, Contracts, partnerships, and agreements. New product & service launches, mergers and acquisitions, and recent developments associated with the smart glass market. Competitive analysis of upcoming startups in the EMC shielding and test

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equipment market ecosystem is covered in this report.

Key Benefits of Buying the Report

Analysis of key drivers (Stringent regulations for prevention of malfunctioning in electronic equipment, Increasing demand for compact electronic devices, Increasing adoption of reliable electrical systems with growing consumer electronics industry, Rapid industrialization along with growing concerns over electromagnetic pollution, Integration of smart grid technologies in the energy sector), restraints (High costs of EMI shielding metals coupled with susceptibility to environmental degradation, High cost of EMC test equipment, Low effectiveness of traditional materials used in EMC shielding), opportunities (Rising adoption of electric vehicles to fuel market growth in automotive EMC applications, Increasing adoption of digital healthcare solutions, Need of effective interoperability of connected devices, Increasing technological developments through research and development in EMC test equipment), and challenges (Concerns about signal interference within compact devices, Challenges in meeting complex EMC testing requirements) influencing the growth of the EMC shielding and test equipment market.

- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the smart glass market
- Market Development: Comprehensive information about lucrative markets the report analyses the smart glass market across varied regions.
- Market Diversification: Exhaustive information about new products/services, untapped geographies, recent developments, and investments in the smart glass market
- Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like PARKER HANNIFIN CORP (US), PPG Industries, Inc. (US), 3M (US), Henkel AG & Co. KGaA (Germany), and AMETEK.Inc. (US), among others in the EMC shielding and test equipment market.

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