

## Global Non-Destructive Testing (NDT) Equipment Market - By Technology (Ultrasonic, Eddy Current, Electromagnetic, Radiography, Thermography), Verticals (Manufacturing, Petrochemical, Aerospace, Automotive, Power Generation) & Geography (2013 – 2018)

**Description:** Non-destructive testing relates to the examination of materials for flaws without harming the object being tested. Non-destructive testing provides a cost effective means of testing while protecting the object's usability for its designed purpose. The technique can be applied on a sampling basis for individual investigation or may be used for 100% checking of material in a production quality control system.

There are some existing non-destructive testing technologies such as ultrasonic testing, radiography testing and eddy current testing which capture most of the market. Ultrasonic testing has been the first choice of the end users for flaw determination. On the other side the emergence of next generation technologies like phased array ultrasonic, X-Ray computed tomography and computed radiography will affect the traditional technologies in the days to come.

This report describes the traditional technologies as well as emerging technologies for contact and non-contact methods for testing the flaws of objects. Non-destructive testing market is in its maturity period however some technologies of it are still in their growth stage. Technologies are integrating with asset management, integrity solution and decision making tools with the advancement in sensors, semiconductor and automation.

The major drivers for non-contact equipment market are strong government regulations, user friendly software, continuous advancement in electronics, automation and robotics and assured return on investment. There is a lot of opportunity for existing players as well as for new entrants to innovate and differentiate the products in price and design. The infrastructure sector is rapidly growing all over the globe; especially in BRIC (Brazil, India, Russia and China). This creates an opportunity for the automation provider companies in the NDT market.

Non-destructive testing market is highly diversified and matured; however there is lack of skilled manpower, which will be a burning issue for the market in the days to come. The major players in NDT equipment market include GE Inspection technologies (U.S.), Olympus Corporation (Japan), YXLON international (Germany), Mistras (U.S.), Zetec (U.S.) and Nikon metrology (U.S.).

### Scope of the report

This research report categorizes the “Non-Destructive Testing Equipment” on the basis of different technologies, verticals, applications and geographical analysis; forecasting revenue and analyzing trends in the market.

### On the basis of technology

The basic types under this include contact and non-contact methods. Contact methods covered in this report are ultrasonic testing, eddy current testing, magnetic and electromagnetic testing and penetrant testing. Non-contact methods covered in this report are radiography testing, thermography, Shearography and visual inspection. Data management softwares for equipments are also included in this report.

### On the basis of verticals

The basic applications include manufacturing, petrochemical & gas, aerospace, government infrastructure and public safety, automotive and power generation. Manufacturing application covers mining industry, iron foundry, pipe and tube manufacturing, shipbuilding industry and metal industry. Petrochemical and gas covers subsea pipelines, LNG liquefaction, transmission pipelines, refining and storage tanks. Aerospace covers aircraft engine part production, composite airframe manufacturing and aircraft maintenance. Government infrastructure includes military and defense sector, airports, railways, bridges and tunnels, border crossing security and nuclear plants. Power generation covers nuclear power, solar power, wind

power and fossil fuel power.

On the basis of geography

- North America
- U.S.
- Canada
- Europe
- APAC
- ROW

Each section will provide market data, market drivers, trends and opportunities, key players, and competitive outlook. This report also makes ways for market tables to cover the sub-segments and micro-markets. In addition, it profiles around 25 companies covering all the sub-segments such as "overview", "products & services", "financials", "strategy", and "developments".

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