Article Side

Non-Destructive Testing: Making Sure That Only the Best Products are Made Available for You by NTS Limited

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If you are wondering how companies make sure that only the best quality materials will reach you, then you should read up on non-destructive testing (NDT).

It is part of any companyâ€™s standard operating procedure to make sure that every material that goes into their product is durable and of top quality. From the smallest to the largest component, every detail is given attention in order to make up a strong and high-quality whole. And one of the ways by which they follow this procedure is through NDT techniques.

Basically, NDT is a group of analysis techniques that are used mostly in the fields of engineering to evaluate the properties and quality of a certain material, component or system but without causing any form of damageâ€”hence the name. Specifically, NDT is most commonly used in forensic engineering, electrical engineering, aeronautical engineering, mechanical engineering, systems engineering, as well as medicine and art.

This procedure is also known by other names. Some of which are non-destructive examination, non-destructive inspection, and non-destructive evaluation.

Regular non-destructive testing is actually very crucial for any company to maintain their operations. As a matter of fact, the reason behind this is pretty simple. Essentially, you should be aware of the fact that all parts and materials that go into every product are made in such a way that they can tolerate certain situations and environmental conditionsâ€”no matter how small or large that material is.

By environment, this can refer to the external surroundings of the material which may affect its components. Examples of which are temperature or corrosion. In the same manner, time-bound elements may also be another environmental factor. An example here would be fatigue wherein a certain element, substance or material really gets worn out after a specific duration of time.

Given all these factors, it is important to continually test the material within its life cycle to ensure that it is fit, strong and durable enough to give the quality expected from it before the time for its replacement finally comes. More importantly, this testing has to be done in such a way as not to damage the material so that it can still be used continuously as the industry would need it to. Hence, the great value given to NDT.

There are actually a lot of techniques used in NDT. The most popular ones are magnetic testing and ultrasonic inspection or ultrasonic testing which includes welding inspection. X-ray inspection, radiographic, remote visual inspection, liquid penetrant and low-coherence interferometry are also used in NDT.

Magnetic testing techniques are used to examine the likes of welds and turbine blades. Pipelines, structures and some engine components are also tested using this method. On the other hand, ultrasonic testing is primarily used for assessing thickness and corrosion of a certain material.

Actually, NDT is very beneficial for companies as they save time, effort and money that would otherwise go into more research, evaluation and troubleshooting of products. And this is basically because non-destructive testing allows the companies to examine the materials and components while still making sure that the latter can still be used without interfering with the continuous cycle of the industry.

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NTS Ltd provides professional Non Destructive Testing service at competitive prices. Our services includes Ultrasonic Inspection, Eddy Current Inspection, Magnetic Particle Inspection and more.

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