

ABSTRACT

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Fork Unit Testing Process on a Forklift Using the Dye Penetrant Test Method at PT. Mutu Bina Inspeksi

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(xi + 28 + Appendices)

Non-Destructive Testing (NDT), commonly known as testing that does not damage the equipment being tested, is an activity that involves testing or inspecting a material test object, such as the fork testing on a forklift using the Dye Penetrant Test method. The Dye Penetrant Test is an inspection method used to detect surface defects on non-porous materials. The testing process for the fork on the forklift involves several steps. The first step is the cleaning process using Liquid Cleaner. The second step involves applying Liquid Red Penetrant to identify any defects in the test object. The next step is applying Liquid Developer to provide a visual effect of the trapped Liquid Red Penetrant, which reveals any defects in the material. Several tools are used in the Dye Penetrant Test method. Cloths and wire brushes assist the Liquid Cleaner in the material cleaning process. The next step, after the cleaning process, is to spray Liquid Red Penetrant. During this step, it's important to pay attention to wind direction to avoid any residual liquid from splashing into the eyes. The results from the fork testing on the forklift indicate the visual condition of the fork and whether or not there are defects present in the component. Bibliography (2010-2023)