WELDING PROCESS QUALITY CONTROL ANALYSIS OF FIXED OFFSHORE PLATFORM WORTEL IN PT. PAL INDONESIA (PERSERO)

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Abstract

PT.PAL Indonesia (Persero) is one of the largest ship yards that can build a marine transportation and construction of offshore oil drilling. Construction of offshore platforms should be secured in terms of strength and safety. This study will discuss the process of quality control in welding construction fixed offshore platform part of jacket the Wortel. QA carry out the inspection planning, the project testing and quality assurance to control the entire production of the company. This study uses the standard weighted Montgomery (1998) where the weight for the class A (very serious), class B (serious), class C (rather serious) and class D (small) so that the control chart demerit can be used. Data taken from QA PT. PAL Indonesia (Persero) 1 July to 20 September 2011. Types of defects found in the welding is CR, IF, IP, SI, SL, P, and the RUC. Results welding process according to descriptive is 30% repair for welding process in the construction of fixed offshore platform part of jacket the Wortel. Based on analytical results obtained by the welding process is statistically controlled welding process but the ability to do PT. PAL Indonesia (Persero) in the construction of fixed offshore platform part of jacket the Wortel section shows unstable and have not been able to achieve in meeting the specifications of owner satisfaction. The cause of the frequent occurrence of slag defects inclusion are work system instruction less clear, the method is less appropriate type of welding should be replaced using FCAW, welding equipment facilities are less numerous, and the machine is not calibrated. The estimated maximum cost of the improvements in the construction of fixed offshore platform part of jacket the Wortel Rp 5.285 million.-

Keyword : Offshore quality control, Defect class weightings, Demerit control chart.