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Abstract

Based on the results of the preliminary survey, the authors concluded that the services at the RORO crossing piers need to be considered and evaluated, especially for the performance of the piers in the port. Therefore, a study was carried out with the aim of determining the feasibility of the existing wharf structure in terms of structural elements. Each structural facility and elements in Port Facility Maintenance Management must be evaluated and given an assessment in the form of condition values and condition categories after inspection is completed by means of Non Destructive Test (NDT) structural testing and also Visual Test based on guidelines (Bridge Management System 1992). For the results of the Condition Value of the slab structure according to the Bridge Management System 1992 (BMS 1992) Elements / structures are damaged which requires periodic monitoring or maintenance. And from the results of the NDT test in the field, it resulted in a deflection that occurred in the pier slab structure of 1.26 mm, with the load of trucks passing above it weighing 3400 kg or the equivalent of 3.4 tons. On the structural elements of the slab, immediately repair those that are damaged, then also on the parts that have cracks. carry out routine maintenance such as painting structural components and carry out structural inspections every 5 years.

Kata kunci : *Wharf Assessment, NonDestructive Test, Visual Test, Abaqus CAE*