

**WELDING PROCESS ANALYSIS ON REPLATING STEEL SHIP  
IN PT. ASIA ADHITAMA SHIPYARD**

By : Arya Ramang  
Student Identity Number : 09171017  
Supervisor : Taufik Hidayat. S.T., M.T., MRINA  
Co-Supervisor : Rodlian Jamal Ikhwani, S.T., M.T.

**ABSTRACT**

*In the manufacturing world related to steel construction, welding technology is generally used. Welding can be used as a means of joining and cutting. PT. Asia Adhitama Shipyard is a shipyard engaged in the business of new building and ship repair. This shipyard works on steel ships. In the repair of steel ships sometimes welding defects occur in the hull plate replating work. Whereas welding should have been done in accordance with the welding procedure specification (WPS). This case raises the real question of what causes dangerous weld defects to occur in welds and how to prevent them. The conclusions obtained in this study are: The welding process carried out is not in accordance with WPS. Dangerous welding defects have been found in the field, namely Undercut and Pinhole/Porosity welding defects. Where the welding defect has a great influence on the strength and durability of the ship's construction. And as for the advice that can be given to the company to prevent these dangerous welding defects is to do welding according to WPS recommended, pay attention to the cleanliness of the material to be welded and use Arc Voltage as recommended by WPS.*

**Keyword :** 1, Replating 2, Arc Voltage 3, Pengelasan 4 Prosedure.