

## SUMMARY

**Muhammad Rugby**, *Department of Mechanical Engineering, Faculty of Engineering, Brawijaya University, in July 2016, Effect Against Spraying Sandblasting Abrasive Materials Paint Thickness and Corrosion rate results for Low Carbon Steel Painting.*

*Sandblasting is typically used by companies engaged in the oil & gas, industrial, and fabrication to clear layer covering the surface of an object which is normally made of metal / steel with a special sand grains in the high-pressure direct hit to the object.*

*Inside the steel construction, steel plate in use for many in the field of construction. The steel plate is a building material that is very strong and with a fine grain structure, it can do the work in hot conditions or cold working.*

*The downside of all steel is corrosion / rust. Corrosion itself arising from damage or waning of the alloy by the chemical or electrochemical reaction with the environment*

*The purpose of this study was to determine the effect of spraying the material effectively and efficiently on low carbon steel abrasive on the thickness of the paint and corrosion rate. In the methodology of this study using two materials are garnet and steel abrasive grit.*

*Spraying is done only once, twice, and three times spraying with a spray angle of 90° and a pressure of 6 bar. The results of the study note that the steel grit abrasive material on penyempotan twice produce the highest paint thickness of 198.5  $\mu\text{m}$  and produces the lowest corrosion rate of 0.000000086 mm / year as compared to spraying garnet.*

*Keywords: Process Sandblasting, Paint Thickness and Corrosion rate*