

# **REENGINEERING CORRUGATED METAL GASKET TO INCREASE CONTACT WIDTH USING COATING PROCESSES TO REDUCE LEAKAGE RATE**

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## **ABSTRACT**

In previous study many researcher investigated on 25A-size corrugated metal gasket using material SUS304 and it modified. The elastic model design of corrugated metal gasket still leakage and need high axial force for tightening process. The purpose of this study is to analyze coated corrugated metal gasket by FEM simulation and experimental. The characteristic of coating material should softer than base material. The coating material will stick and fill in the surface roughness of flange. The simulation result shows that contact width increase and contact stress decrease after the gasket coated by copper. It mean that the gasket performance will increase to stop the leakage. The experimental result shows that coating gasket has a better performance than standard gasket.

*Kata Kunci: Corrugated metal gasket, coating, copper, nickel*