World Academy of Science, Engineering and Technology International Journal of Materials and Metallurgical Engineering Vol:18, No:07, 2024

Remanufacturing and Integrity Assessment of a 27-Year-Old 25kV Gas Insulated Switchgear: A Comprehensive Study on Dismantling, Inspection, and Testing

Authors: Yechan Kim, Bonhyuk Ku, Minkyung Jung, Hyoungku Kang

Abstract : This study presents the remanufacturing of a 25kV gas insulated switchgear (GIS) that operated indoors for 27 years before being decommissioned due to aging. The research involved a detailed process of dismantling, visual inspection, component-wise examination, and various testing methodologies to assess the equipment's condition. The focus was on evaluating the GIS's integrity and feasibility for remanufacturing. The results highlight the potential of remanufacturing in extending the life of electrical power equipment, offering insights into the best practices, challenges, and technical considerations of such an undertaking. This contributes to a sustainable approach in the power industry, emphasizing the reuse and restoration of aging equipment.

Keywords: remanufacturing, dismantling, gas insulated switchgear, sustainability, life extension

Conference Title: ICR 2024: International Conference on Remanufacturing

Conference Location : Prague, Czechia **Conference Dates :** July 04-05, 2024