DESAIN OPTIMALISASI GROUNDING GEDUNG A KAMPUS 1 UNIVERSITAS TEKNOLOGI YOGYAKARTA MENGGUNAKAN PERANGKAT LUNAK ETAP

Dhimas Amrie Sujono

Program Studi Teknik Elektro, Fakultas Sains & Teknologi
Universitas Teknologi Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail: Dhimasuty@gmail.com

ABSTRACT

The grounding design in University of Technology Yogyakarta Building A uses a comparison of copper, aluminium and stainless steel with different total costs. Improving the grounding quality that is made significantly affects whether the building is safe or not in the event of lightning or overcurrent according to the PUILL 2000 guidelines. The grounding design was created using the ETAP (Electric Transient and Analysis Program) 12.6.0 software application with a ground grid menu option.

Among the considerations taken in planting the grounding wire and the distance between the wires makes the building safer so that a small percentage of unwanted things occur. Comparison of the design of the grounding design made affects the performance and durability of the materials used to overcome fault overloads. The results of grounding measurements must comply with PUILL 2000, which is less than 1 ohm.

Making this grounding design directly to the building's place to be designed according to the size of the building, the texture of the ground and the height of the building. Retrieval of previous grounding data for comparison is better and can help the campus so that there is further research on the building's grounding.

Keywords: PUILL 2000, Improvement, Quality.