

Kenaikan Koefisien perpindahan Kalor Kondensasi Film pada Kondenser Silinder Vertikal dengan Nanofluida Al₂O₃-Air sebagai Fluida Dingin

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20304417&lokasi=lokal>

Abstrak

Research to nanofluida have a lot of conducted to indicate that nanofluida has a great potency for better heat transfer. Nanofluida is mixture between solid particle of nanosize with the based-fluid. Nano particle suspended in based-fluid permanently which is because of eristence of Brownian eject. Before nanofluida can be applied in commercial purpose, the furthermore experiment is needed. In this research conducted the measurement of heat transfer coefficient jilm condensation which used vertical condenser and nanofluids Al₂O₃-water as cooling fluids With variation of flow rote of cooling fluid and volume concentration of nanofluid as well, the experimental result shows the enhancement of condensation heat transfer coefficient with nanofluid compared to base fluids : 12- 19% for 1% particles concentration and 23-33 % for 4% particles concentration.