

Gasifier Batubara Unggun Bergerak (Moving-bed) dilengkapi Pipa Hisap (Draft Tube)

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20305634&lokasi=lokal>

Abstrak

Cool gasification experiments have been successfully carried out using the moving-bed gasifier at the temperature of reaction around 870°C which is comparatively low for coal gasifiers. The endothermic reaction of coal gasification is separated from the heat providing process with a certain amount of red-hot ceramic particles, which are heated in the draft tube by burning part of the product gas with air then circulated within the draft tube, the cyclone and the moving bed gasifier, so that can be obtained rich hydrogen product gas with high calorific value. Product gas containing hydrogen as high as 60 % vol and the calorific value of the product gas can reach 10 MJ/Nm³ when air is used as oxidant. Maximum cool gasification efficiency may reach 92%.