ANALYSIS OF THE PERFORMANCE OF HEAVY EQUIPMENT ON GROUND PAVEMENT (*Class B*) IN RIGID PAVEMENT ROAD PROJECTS

Case Study (Gajah Mada Road to Pinggir District)

ABSTRACT

Student Name : Kurnia Sari
Nim : 4204191272
Lecturer's Guide : Efan Tifani M.Eng

pavement is a pavement layer that is located between layers of subgrade and vehicle wheels that function to provide services to transportion facilities, expected during the service period no significant damage occurred. Coasting materials and materials road pavement is aggregate as the main influential material on the carrying capacity of the road surface layer ad asphalt as a material aggregate binder so that the hardness layer is airtight. Aggregate is the main component of the road pavement layer viz ranging from 90-95% by weight percentage. Support and The stability of the road surface layer is determaned from the properties, grain shape, and aggregate gradition. Completion of a work project certainly requires selection and determanation of the composition of heavy equipment depending on the characteristics of each tool and terrain conditions. The data analysis method used is an analytical description consisting of data collection techniques and final project plans. Based on the analysis results obtained, Productivity of heavy equipment *Wheel loader* perhour is 7,793 m^3/hours and for day is 62,344 m^3/day, Productivity for *Dump truck* is 7,335 m^3/hours and for day is 58,68 m^3/day, Productivity from *Motor grader* is 5,455 m^3/hours and for day is 43,648 m^3/day, Productivity*Vibratory roller* is 5,832 m^3/hours and for day is 46,656 m^3/day, Productivity for the *Water tank* of 4,780 m^3/hours and 38,240 m^3/day.

Keywords : heavy equipment, granulated pavement, productivity