

# **THE ANALYSE OF INFLUENCE SUBSTITUE OF PALM ASH FLY ASH AND BOTTOM ASH ON FLEXIBLE PAVEMENT CHARACTERISTIC**

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## **ABSTRACK**

Riau is one of the largest oil palm producing provinces in Indonesia. Palm oil production produces a lot of palm waste too, 35-40% of the processing of fresh fruit bunches (FFB) is the resulting waste. This palm waste also used as a substitute for coal which produces fly ash and bottom ash waste. Therefore, to reduce the amount of palm waste, it is used as a substitute for filler in the asphalt concrete mixture. The fillers used are fly ash and bottom ash produced from oil palm fruit processing companies. Although the percentage of filler is relatively small for the mixture, it has a big effect on reducing palm oil waste.

The specifications in the implementation of the test refer to the general specifications of *Bina Margaon* 2018. Before testing the characteristics of the asphalt concrete mixture, first carry out testing the characteristics of the basic material and determine the optimum asphalt content. The object test compaction is carried out  $2 \times 75$  collisions assuming that the test is intended for heavy traffic.

The test results show that the basic material characteristics test has completed material specifications. The use of variations of fly ash has a higher stability value than bottom ash with a value of 2316 Kg, while bottom ash of 2205 Kg. The overall average percentage value generated in the characteristic test shows that the use of fly ash filler 1.23% is better than the use of bottom ash filler.

**Keywords :** Flexible Pavement, Palm Ash, Filler, Fly Ash, Bottom Ash.