



ANALYSIS OF INCREASING ENGINE CAPACITY FOR DRAG BIKE COMPETITIONS

**Submitted as one of the requirements to
obtain Sarjana Teknik**

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ABSTRACT

This topic aims to increase the capacity of engines used in dragbike competitions. Motorcycle engines used in dragbike competitions require significant modifications to achieve maximum and optimal engine performance. One factor that greatly affects motorcycle speed is engine capacity. Engines with larger capacities tend to have faster acceleration, while engines with smaller capacities have higher maximum speeds and require more time to reach the desired target speed. Some of the main components for increasing engine capacity are modified: the camshaft, crankshaft, changing the cylinder head angle, piston, valve spring, valve, and other supporting components such as CDI, power up, drive pulley, rollers, CVT spring, double clutch springs, and double clutch bowls. The dyno results after several spare part replacements showed a torque of 35 Nm at 9500 RPM and 47 HP at 10.000 RPM.

Keywords : *Camshaft, Crankshaft, Cylinder Head, CDI, Power Up, Drive Pulley, Rollers, CVT Spring, Double Clutch Bowls, Engine Capacity, Dragbike Competition*

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