

# ***DESIGN OF DISC BRAKE SYSTEM ON GOKART WITH 6.5 HP FUEL MOTOR DRIVE***

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## ***Abstract***

*Go-karts are currently developing in science and technology, along with the development and progress in the industrial field, especially in the automotive field. The braking system is included in the chassis category and is one of the important parts of the vehicle because braking is one of the vehicle's safety systems. The purpose of this design is to determine the braking time and deceleration distance with speed variations. The method used in the data collection process uses the road test method. Where the gokart moves straight with the specified speed variation. In this design using speed variations of 20 km / hour, 25 km / hour and 40 km / hour. From the tests that have been carried out, the results show that at a speed of 20 km / h a stopping distance of 1.78 seconds with a distance of 1.22 meters, at a speed of 25 km / h a stopping distance of 1.90 seconds with a distance of 1.43 meters, and at a speed of 40 km / h a stopping distance of 4.85 seconds with a distance of 2.44 meters is produced. The higher the speed of the go-kart, the longer the braking time will be and the longer the deceleration distance will be. This is influenced by the braking system on the kart.*

*Keywords: go-kart, braking, CBS (combi brake)*