ANALYSIS OF THE EFFECTIVENESS OF DIFFERENTIAL GEARS ON THREE WHEELED ELECTRIC VEHICLES FOR DISABILITIES

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ABSTRACK

This study aims to determine the effectiveness of a three wheeled electric bicycle brushless DC with the addition of a gear differential because there are still deficiencies in the motion mechanism to facilitate the mobility of persons with disabilities. The researcher used a quantitative research method, in which the researcher distributed questionnaires to 45 respondents to find out the feasibility of a three wheeled electric bicycle brushless DC after development. Researchers used random sampling to determine the number of respondents and obtained the number of respondents 45 people, from the distribution of questionnaires it can be seen that the average value of 45 respondents showed a value of 73%. Of the 45 respondents, 31 stated that the three wheeled Electric bicycle brushless DC was suitable for use.

Keywords: Brushless DC electric bicycle, Electric vehicle feasibility, Gear differential, Disability.