

A Project Report On

“Design and Fabrication of Power Handle Wheel Chair for the Disabled”

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By

**ANKIT KUMAR
SHOEB ASLAM
SANTOSH BHOSLE
YASHWANTH KUMAR JUTTER**

**1DS11ME019
1DS11ME101
1DS11ME129
1DS10ME128**

Under the guidance of

Mr. HASEEBUDDIN M.R.

Assistant Professor

Department of Mechanical Engineering

Dayananda Sagar College of Engineering, Bengaluru



Department of Mechanical Engineering

DAYANANDA SAGAR COLLEGE OF ENGINEERING

Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru -560078

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ABSTRACT

Wheel Chair is a mobility device designed for shifting patients, moving physically challenged people from one place to another with the help of attendee or by means of self propelling. Electrical powered wheel chairs runs with electric power, however manual operation is required to rotate rim for the movement of the chair. The objective of project work is to design of power handle for manual wheel chair. The design of power handle for wheel chair started by means of literature review to know its evaluation from earlier to the present generation. The power handle wheel chair which gives multiple options to the user by providing ease of mobility, which can be easily attached to the manual wheelchair and give mobility with minimum effort. It is fabricated with locking mechanism which acts a joining link between wheelchair and power handle and easily detachable. Foldable joints are provided to make it compact. Lithium battery is used which is light weight & easily chargeable. It is provided with compact hub motor capable of driving a person. The detachable power handle gives the user option of using it as a conventional wheel chair indoor and it can be used as electric powered tricycle outdoor. Folding joints are provided to fold power handle & carrying in bag. Finally it provides great opportunity for social interaction. Validation of the prototype is done and is working satisfactory.