

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,
BELAGAVI 590018**



**A project report on
“DESIGN AND FABRICATION OF LIFTING EQUIPMENT
FOR PHYSICALLY DISABLED PERSONS”**

**Submitted in partial fulfillment of the requirements for the degree of
BACHELOR OF ENGINEERING**

**in
MECHANICAL ENGINEERING**

By

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CERTIFICATE


Certified that the project work entitled "DESIGN AND FABRICATION OF LIFTING EQUIPMENT FOR PHYSICALLY DISABLED PERSONS" is a bonafide work carried out by

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ABSTRACT

This equipment plays a critical role in improving the quality of life and independence for individuals with paralysis. The numerous engineering breakthroughs, knowledge areas, and future opportunities in this sector. These considerations are critical for building lifting equipment that is safe, efficient, and user-friendly while meeting the unique demands of people with paralysis. Automation in disability lifting equipment has various benefits, including increased safety, independence, and a better user experience. Looking ahead, this field's future holds promising opportunities for advancements in mobility solutions, neuro technology integration, personalized designs, and smart, connected systems, all of which contribute to a more accessible, efficient, and sustainable approach to lifting and transferring people with paralysis. Continued research and collaboration are critical to driving future innovation and ensuring the global development of paraplegic lifting equipment. Its intended use is for paralysis patients at hospital and house. For the user's quality of work life is improved while for the factory, there will be reduction of the work-related pain of the patient. It is meant to reduce worker fatigue and work-related accidents while improving productivity. It can be customized to fit all sizes and outfits. For the hospital, space management is an important factor. Unnecessary chairs and resting places can be avoided by maximizing the use of this equipment. This device is used to shift the patient from one place to another with comfort and less effort.