



# Karnataka Law Society's GOGTE INSTITUTE OF TECHNOLOGY Belagavi



## PROJECT EXPO-2023

Department of \_MECHANICAL ENGINEERING

### Project Title :- **360° TURNING ELECTRIC FORKLIFT FOR INDUSTRY WAREHOUSES & DOMESTIC PURPOSE**

#### Motivation and Objectives

Now a days due to heavy work load environment in the mechanical industrial lines workers are been depressed for carrying a heavy load, where the workers are prone to unhealthy conditions (FATIGUE). Due to these factors some load carrying machines were developed in the recent past years.

#### **Objective is to**

- Design & Develop a 360 turning E-forklift with Enhanced Manueverability.
- To Create a versatile mechanical Device To Cater both Industries & Domestic Application's.
- Taking safety as prime consideration: This device is safer in all respects.
- Taking Cost as Factor To make Device which is economically suitable for small Scale industries
- To Enhance productivity By minimizing Operation time & job cycle



#### Methodology

Study of various machine used now a days and survey

Study of different Type of mechanism / material

Designing the equipment with comforts and feasibility

Sketching /drawings approximates measurements

Purchasing the material as per the requirements

Fabrication with standers components and equipment

Testing for all the positive output

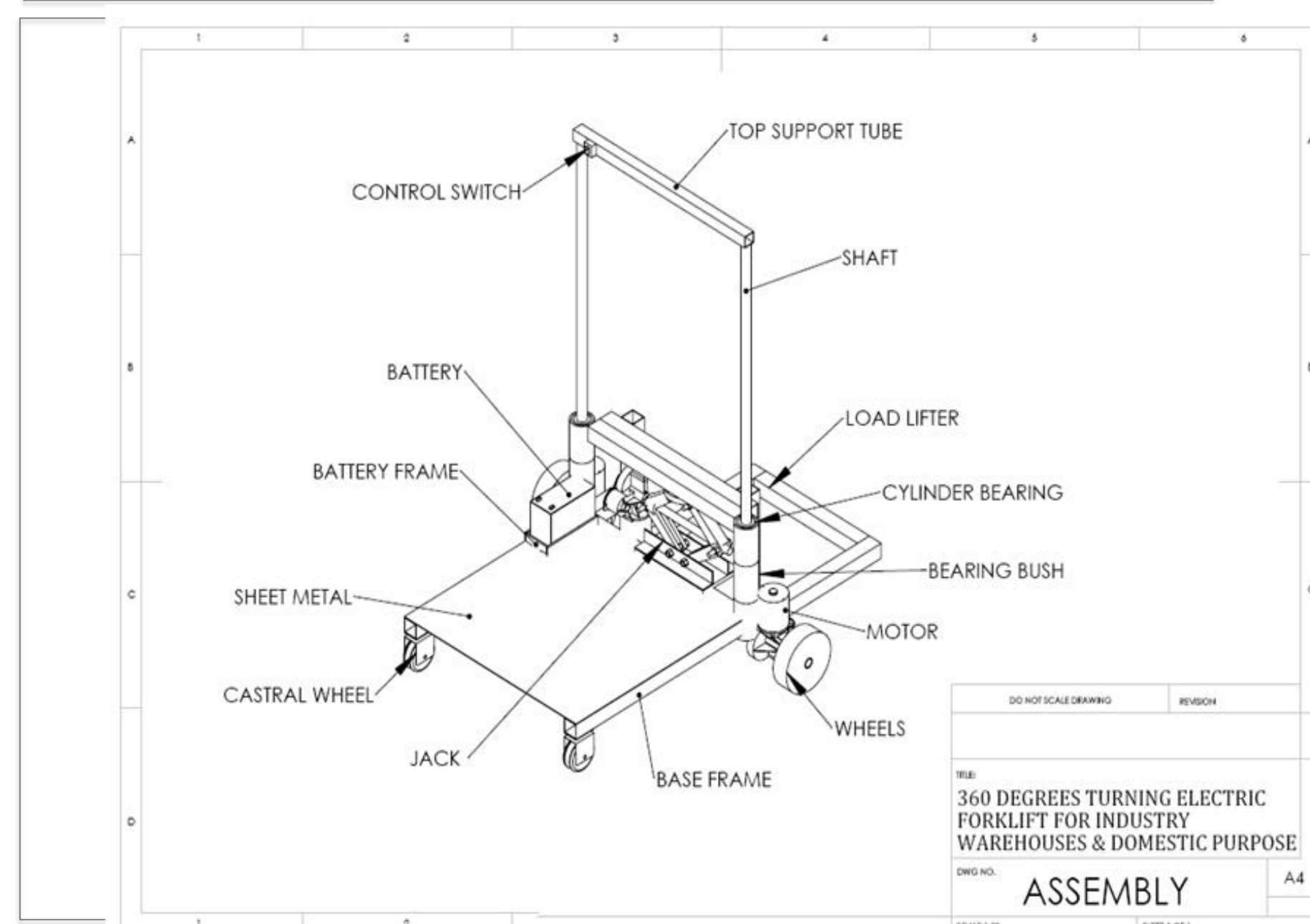
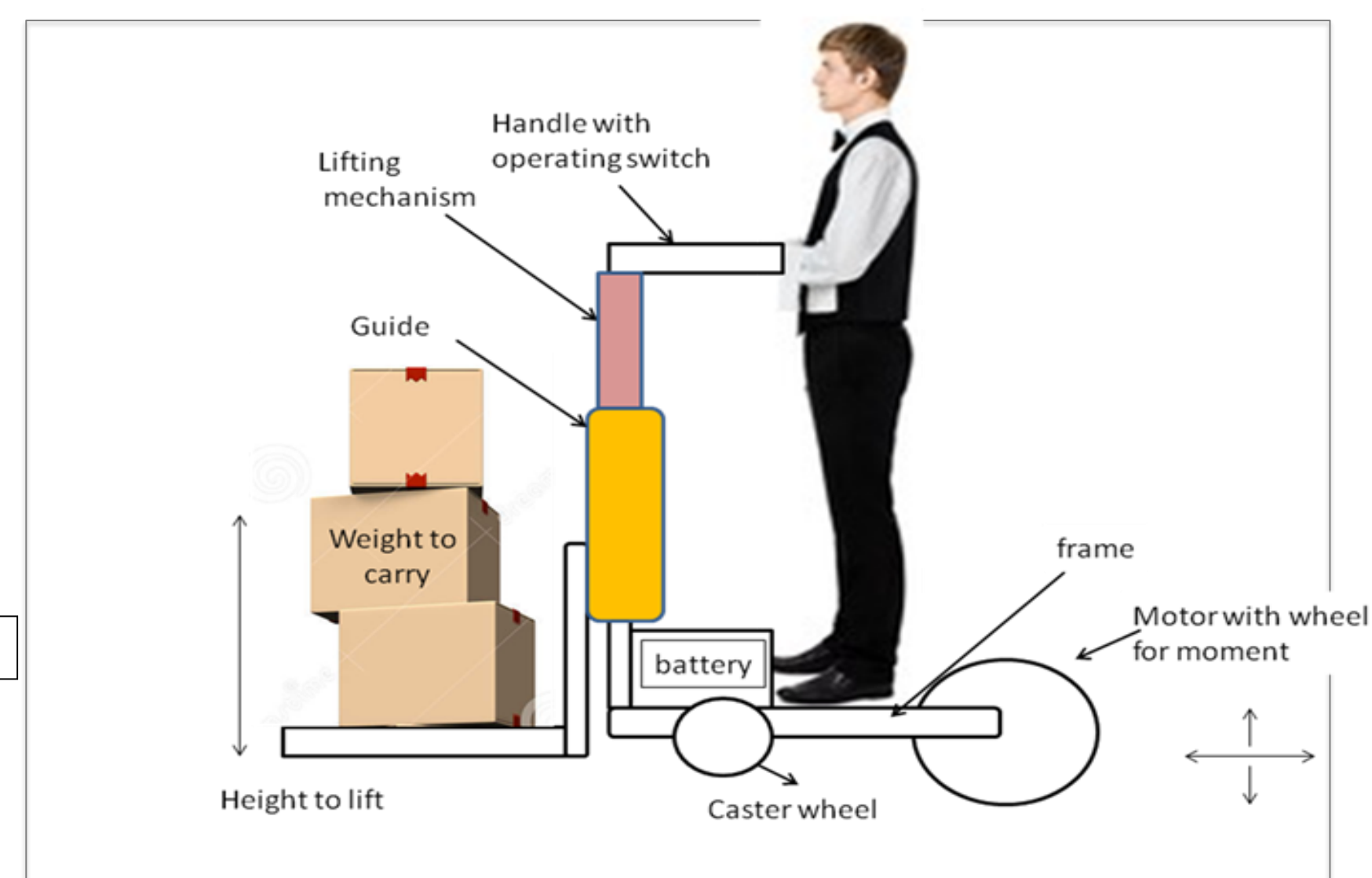
Painting and demo of the machine

#### Results & Discussion

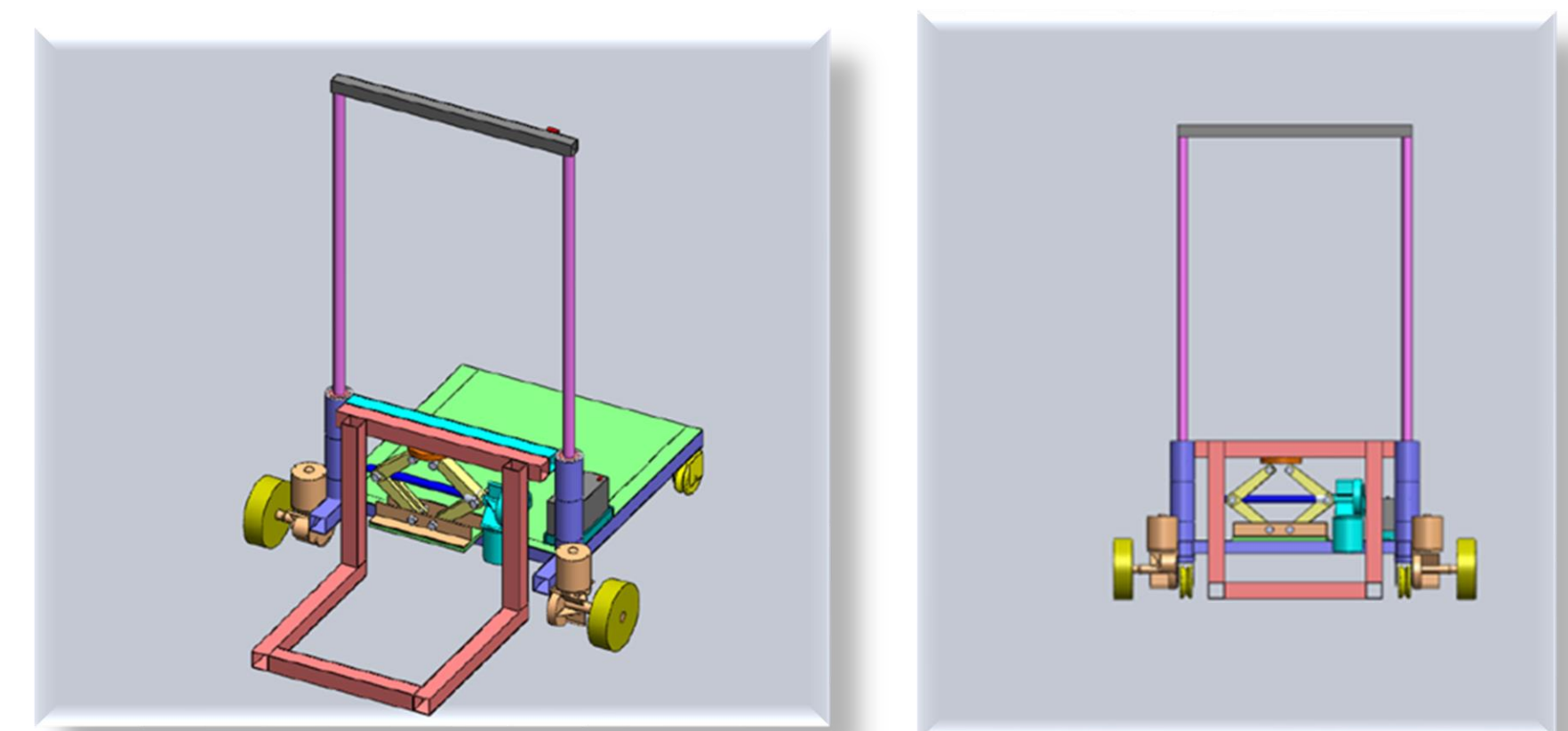
*After successful Design & Development Taking design considerations*

*We found The best Product which is Feasible in following aspects*

- ✓ Can move in less space
- ✓ Easy in operation
- ✓ The machine is easily affordable.
- ✓ The machine is easily portable
- ✓ Simple construction- is fabricated from locally available materials and common tool; easy to maintain and repair.
- ✓ Adaptable- can is stationary or portable and can be adapted for medium as well as small scale industry, store house
- ✓ Performance- specification is higher than the manually operated.
- ✓ Easy setup- it can assemble easily.
- ✓ Light weight- machine is simple in design and light in weight.
- ✓ No skill is required to operate the machine; little demonstration is more than enough.
- ✓ Safety in all respects.



#### ASSEMBLED 3D VIEW OF E-FORKLIFT



#### Outputs

Cost Expenditure ₹ 8000 {Materials Cost + Processing Cost + Miscellaneous}

Project Group | **B33**

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