

Department : **Mechanical**

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Group No: **1**

Guided By

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## **SMT. S. R. PATEL ENGINEERING COLLEGE, UNJHA**

### **Project Title**

### **DESIGN AND DEVELOPMENT OF AIR CASTER**

#### **Abstract:**

Material handling equipment are widely use in industry to handle the heavy process Equipments like boiler, end shield and for movement of heavy materials and machineries.

This dissertation work contributes for the development of a material handling equipment, which is use for movement of heavy loads So, for this application, air caster is designed because of its feature like easily movable heavy loads and positional accuracy in movement.

The present work includes design and modeling of 100kg air caster. The components of air caster like base plate, load landing plate form, air bag, supporting rings. The selection of the sub components like connectors, nipples, hose pipe, elbows, five way air junction, fasteners are taken standard.

Also 3D components and assembly drawing of air caster have been prepared by using auto desk inventor software.

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