

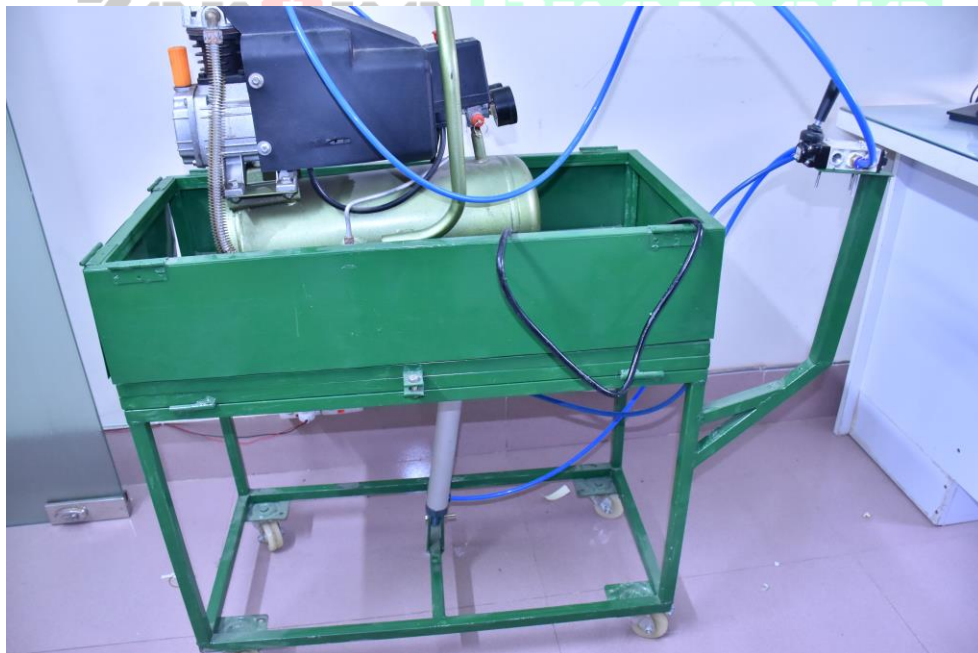
## Three Dimensional Product Unloading Pneumatic System.

### About This Project:

In industrial and domestic considerations, tippers can pull a variety of products including gravel, grain, sand, fertilizer, heavy rocks, etc. The older dropping trolley or dumper has been conceived by observing the difficulty in unloading the materials. The survey in this regards in several automobile garages, revealed the facts that mostly some difficult methods were adopted in unloading the materials from the trolley. The three way mechanism is more efficient and economical, and it is easy to unload the materials in three ways or sides. A dumper is a vehicle use for carrying various materials from one place to another and dump to a specific place. A Dumpers a vehicle designed for carrying bulk material, often on building sites such gravels, sand, debris or rubbles. Dumper are distinguished from tippler trucks by configuration. A dumper is usually an open 4- wheeled vehicle, has its cab in front of the load. A typical dump truck is equipped with an open-box bed, which is hinged at the rear and equipped with pneumatic pistons to lift the front, allowing the material in the bed to be deposited ("dumped") on the ground behind the truck at the site of delivery. The existing dump truck drop the material in backside only. But there is a problem when we want to put the material in right and left side of tippler at congested place or area. So In this project, we made the dumper which can unload the material in the three direction right and left with the help of pneumatic actuator, stepper motor, pneumatic pump and rotating mechanism.



### Demo Project Picture:



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### Required Instrument:

- Solenoid Valves.
- Air Compressor.
- Pneumatic cylinder.
- Air Regulator.
- MS box & GI Sheet.
- Wheel.
- Air Pipe.
- Hinge.

### Advantages:

- Less power Free from wear adjustment.
- No Oil consumption
- consumption
- Less skill technicians is sufficient to operate.
- It gives simplified very operation.
- Installation is simplified very much.
- Less time and more profit.
- Reduced stroke length of cylinder
- Reduced cost in pneumatics
- Simple construction
- Reduced weight of the system.
- Ease of operation

### Applications:

The project has a major application in the

- It can be used for dump trucks.
- It can be used in factories for tilting large equipment

*[N.B: Any modification of this project can be done as per your requirement. We will make the project according to your needs. Contact us with your any innovative engineering projects idea. We will help you to implement your project.]*

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