



# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE GWALIOR

## Department of Mechanical Engineering

### REPORT OF SKILL BASED MINI PROJECT

Theory of Machine II (120411)

#### Title of Project: CAM AND FOLLOWER

**Introduction:** In mechanical engineering, a **cam follower**, also known as a **track follower**, is a specialized type of roller or needle bearing designed to follow cam lobe profiles. Cam followers come in a vast array of different configurations, however the most defining characteristic is how the cam follower mounts to its mating part; *stud* style cam followers use a stud while the *yoke* style has a hole through the middle.

#### Description of Model



The follower is hinged to a roller and this roller is in contact with the cam, this is called roller follower. This is the cam that rotates and the follower which is hinged here oscillates. It is used when a large force has to be transmitted like in stationary IC engines.

If there is not enough space to use a large roller because this pin has to be sufficiently big to transmit the force between the cam and the follower and the roller has to be bigger than the pin at least twice as big as the pin, then the roller needs a lot of space

#### Applications of Model

The Roller Follower is used in a wide range of applications such as cam mechanisms of automatic machines, dedicated machines as well as carrier systems, conveyors, bookbinding machines, tool changers of machining centres, pallet changers, automatic coating machines, and sliding forks of automatic warehouses.

#### What I Learned Through Project:

Through the project we have come across the working of the cam and followers. Also we have come to know about how we can make the best from using a cutted wooden piece and a small piece of pipe.

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