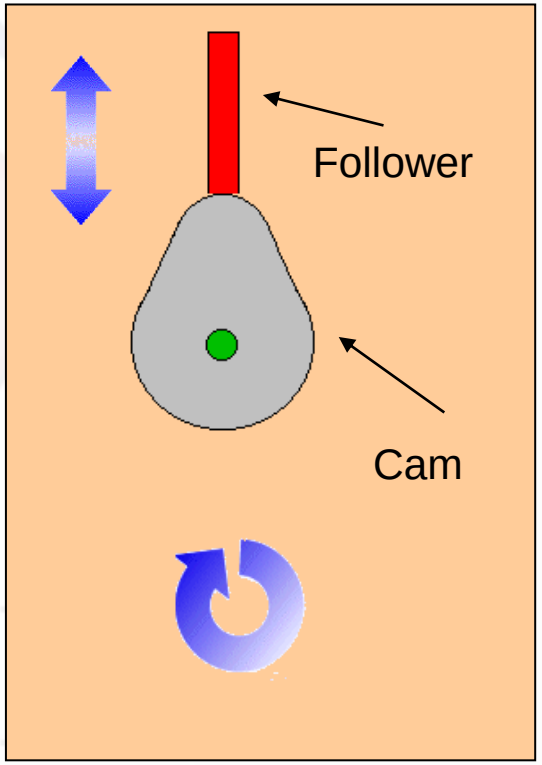
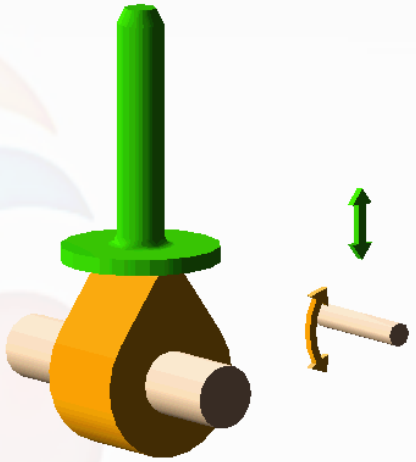
Cam and Follower

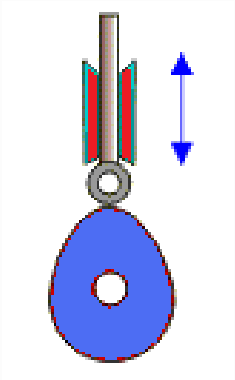
- The ***cam and follower*** is a device which can convert rotary motion (circular motion) into

  linear motion (movement in a straight line).

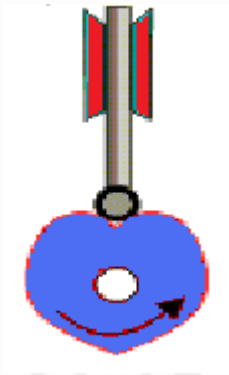


- ***The cam can have various shapes. These are know as cam profiles.***

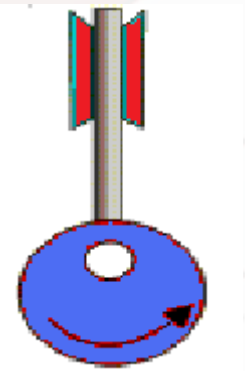




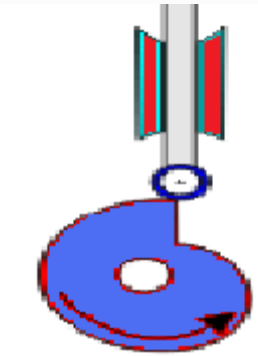
Pear



Heart

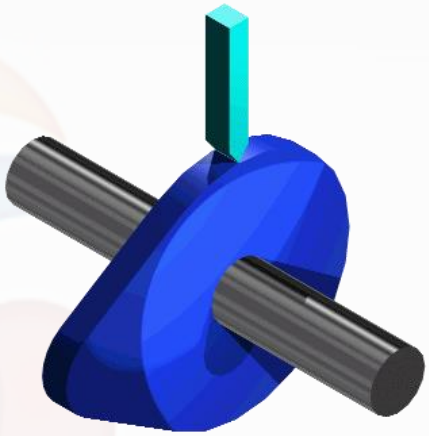


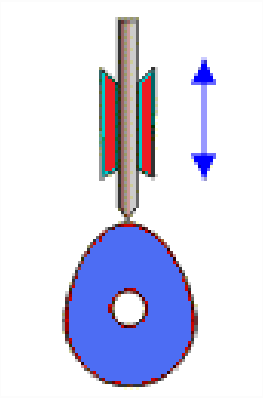
Circular



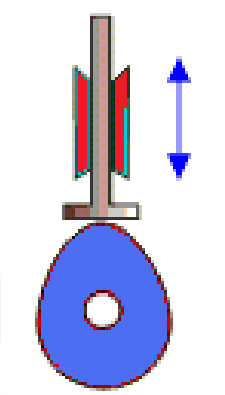
Drop

- A follower is a component which is designed to move up and down as it follows the edge of the cam.

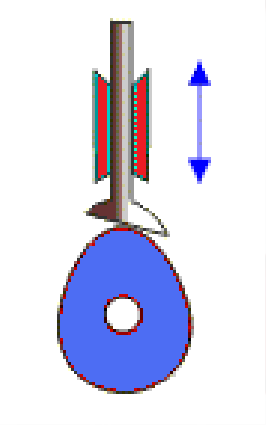




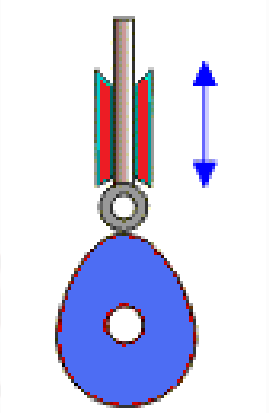
Knife edge Follower



Flat foot follower



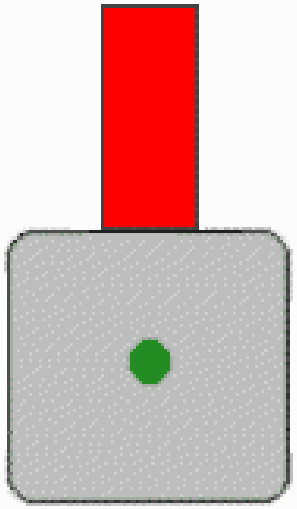
Off set follower



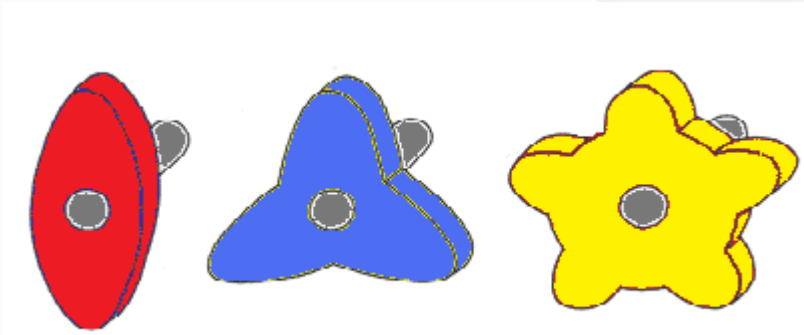
Roller follower

- ***The 'bumps' on a cam are called lobes***.

- ***The square cam illustrated has four lobes, and lifts the follower four times each revolution.***

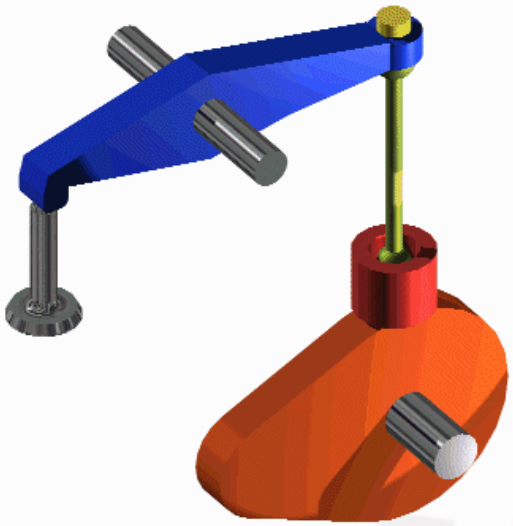


Square cam

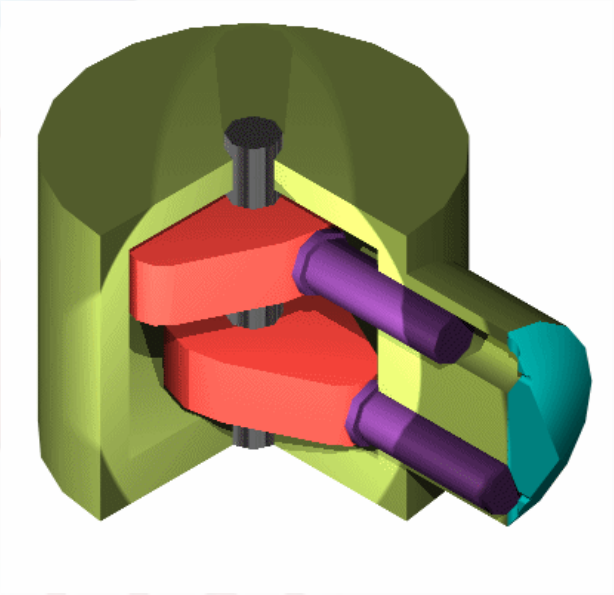


Examples of other rotary cam profiles.

Examples of a Rotary cams in operation.

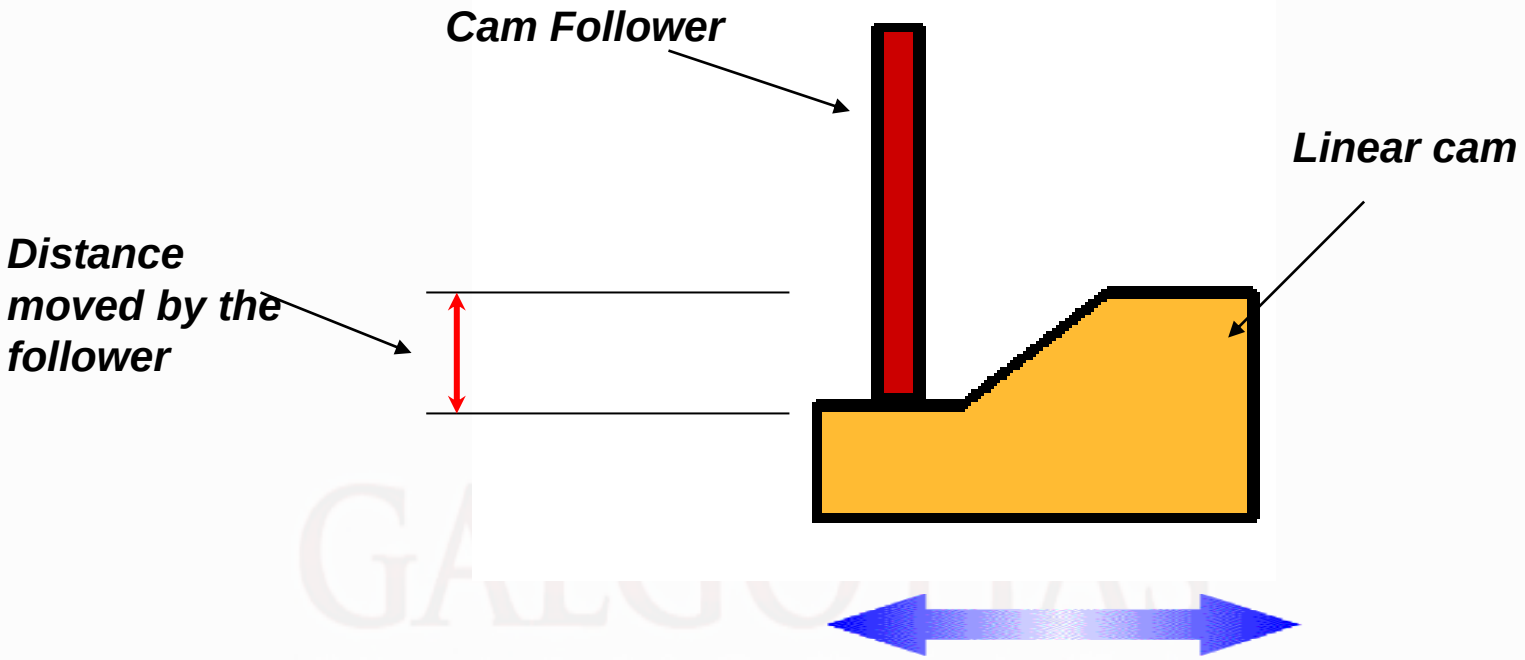


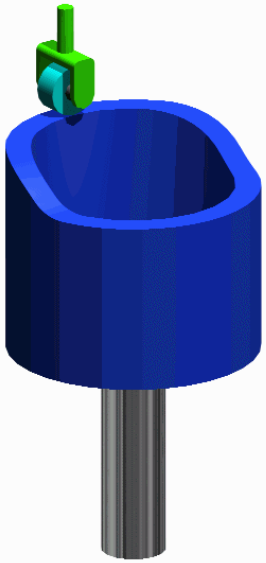
Control the movement of the engine valves.



Cams used in a pump.

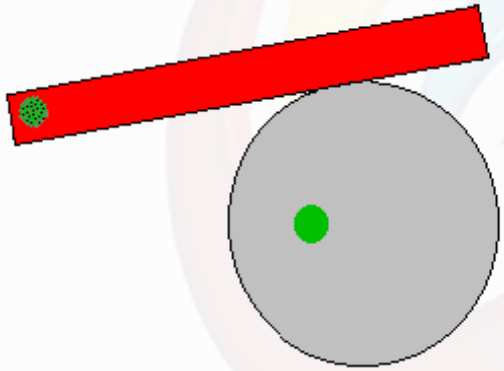
The linear cam moves backwards and forwards in a reciprocating motion.



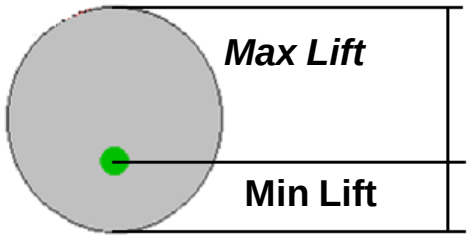


- ***Cams can also be cylindrical in shape***
- ***Below a cylindrical cam and roller follower***.

- ***The cam follower does not have to move up and down - it can be an oscillating lever as shown above.***



Cam rise and Fall



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Thank you