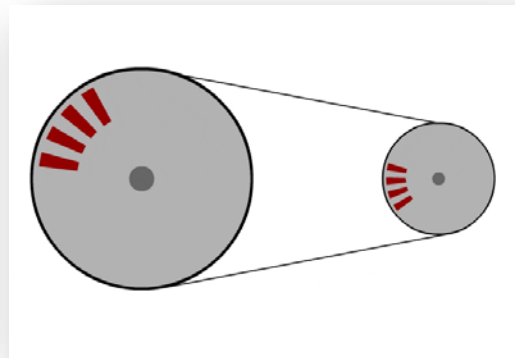
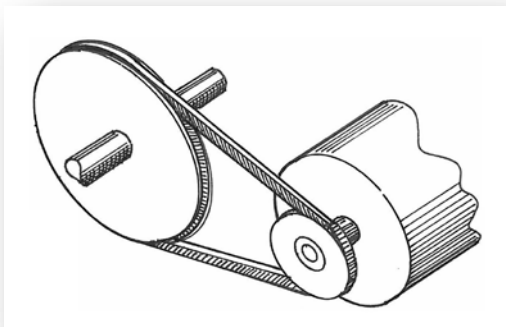


Pulley Systems

A simple pulley system

A pulley is simply a wheel with a groove in its rim. Using two pulleys and a flexible drive belt (to link the pulleys together), rotary motion and torque can be transmitted from one shaft to another.

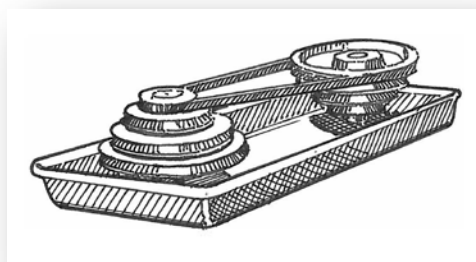


Features of belt and pulley transmission systems:

Advantages

The main advantages of belt and pulley transmission systems are that they are: quiet in operation, require no lubrication, and are relatively cheap to produce. They are used in domestic appliances for these reasons.

In certain circumstances, slip can actually be useful. For example, if a machine like a pillar drill jams, the drive belt can slip. This could protect the user from injury, and protect the drive motor from damage.



Disadvantages

The main disadvantage is that slip can occur. They should only be used therefore where slip will not affect the operation of the machine.

If a pulley system is to be used where slippage would be a problem, special belts can be used to eliminate the problem.

