



ELECTRICAL MACHINES IN ROBOTICS AND AUTOMATION

UNIT III - GEARING MECHANISM

Design Principle – Types of Gearboxes – Selection of a Gear Unit – Operation Factor – Equivalent Power – Factors that affect operation factor – Geared Motor Applications



Types Of Gear Box





What is A GEAR ??



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What is GEAR ??

A gearbox is a transmission device which is used between engine's output shaft and the final drive in order to transfer required torque and power to the wheels of the vehicle, a gearbox consists of the set of gears(i.e. spur, helical, bevel, worm and epicycle depending on the types of gearbox used)which are arranged





Types Of Gear Box

Spur gears : The most common and simple gears are spur gears.

Planetary Gears : Planetary gears or epicyclic gears consist of a ring gear, one or more outer gears (planet gears), revolving around a central gear (sun gear).

- Bevel Gears
- Worm Gears
- Lead Screws
- Ball Screws. ...
- Idler gears
- Compound Spur Gears.

