

DC Motor

Drives the world around

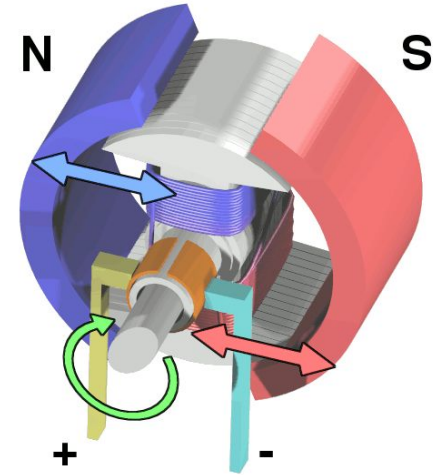


What is A DC Motor?

- Type of Motors

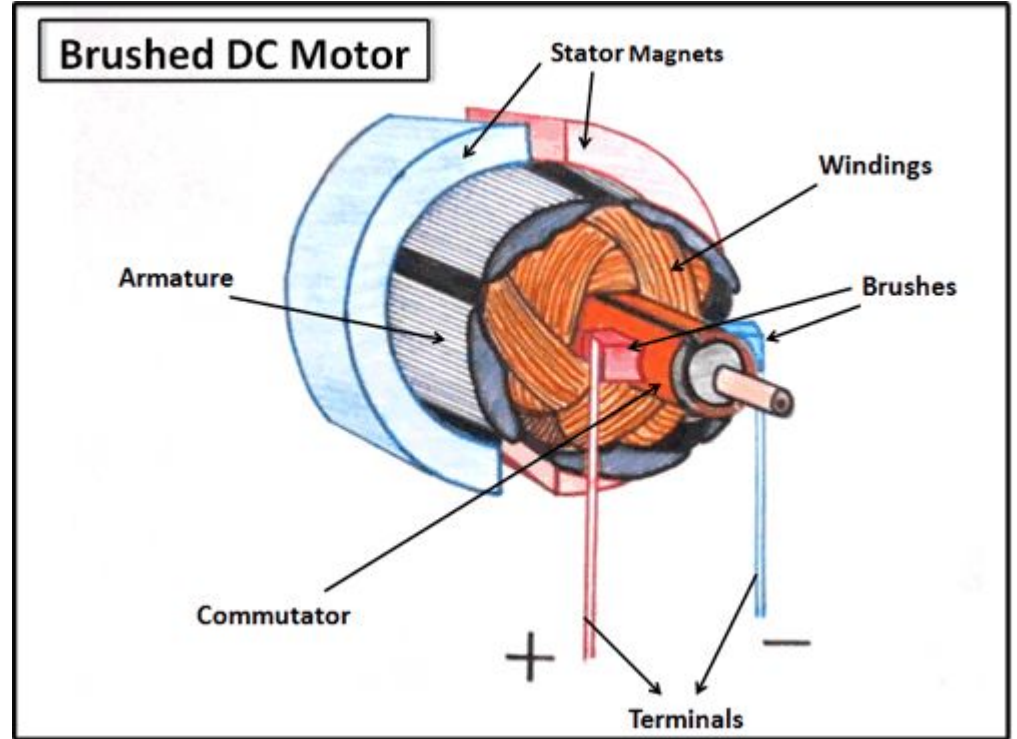
- **AC Motor:** Motor that runs on Alternating Current electricity
- **DC Motor:** Motor that runs on Direct Current electricity
- **Series:** high starting torque, speed reduces with increased load.
Crane. Electric vehicle
- **Shunt:** lower starting torque, speed fairly constant with varying load.
Conveyors, lathes where constant speed required
- **Compound:** combines the characteristics of the 2 previous types to produce the desired characteristic with respect to torque and speed

- Converts **Electrical power** into **Mechanical Power**

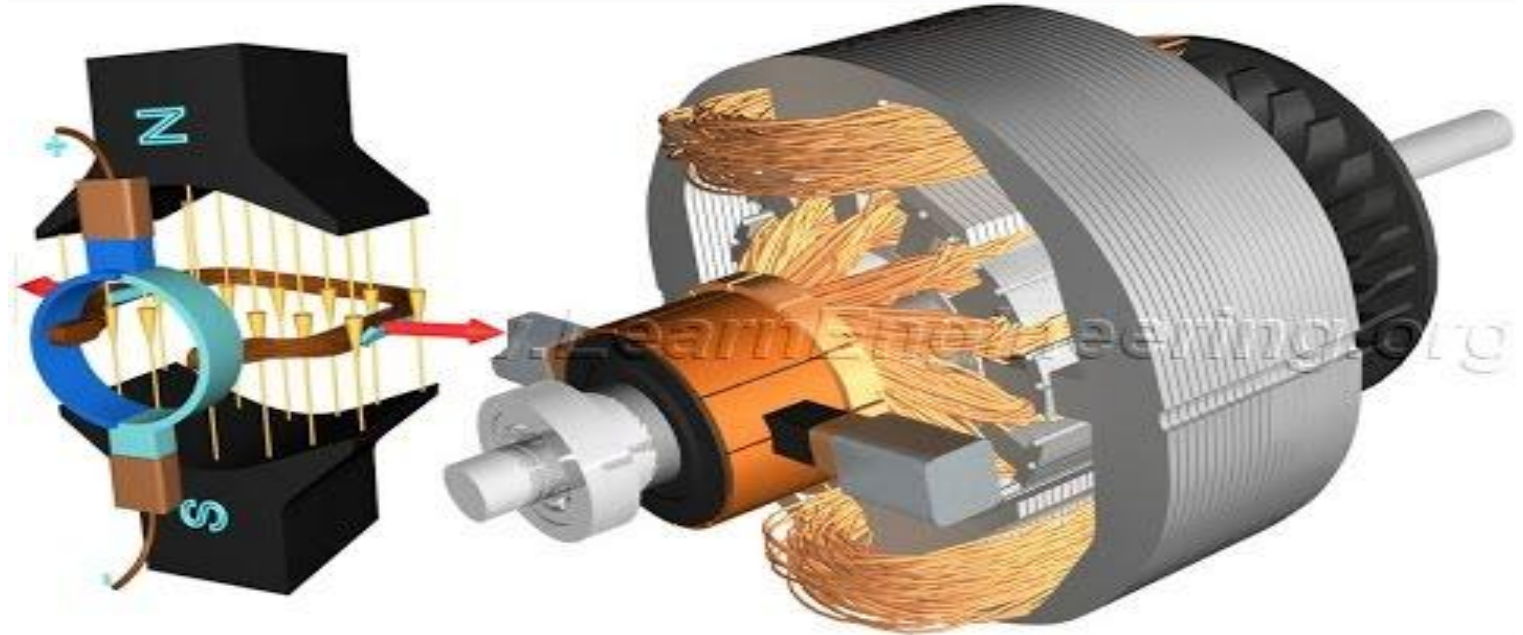


How is it Made?

- On the right are key elements of the DC motor that make it DC motor, such as the Terminals from where the electricity goes in & out from, Also the Windings which is used to interact with the Magnetic Field of the Stator Magnets.

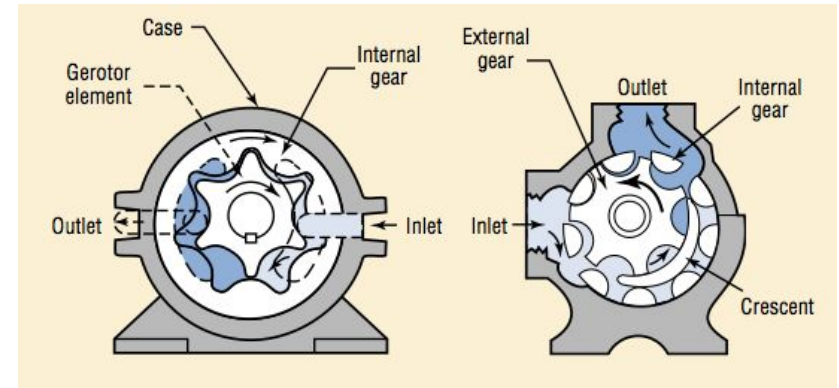
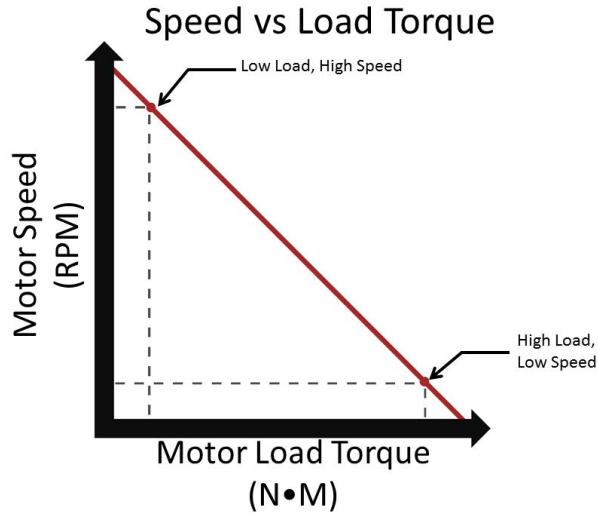


How does it Work?

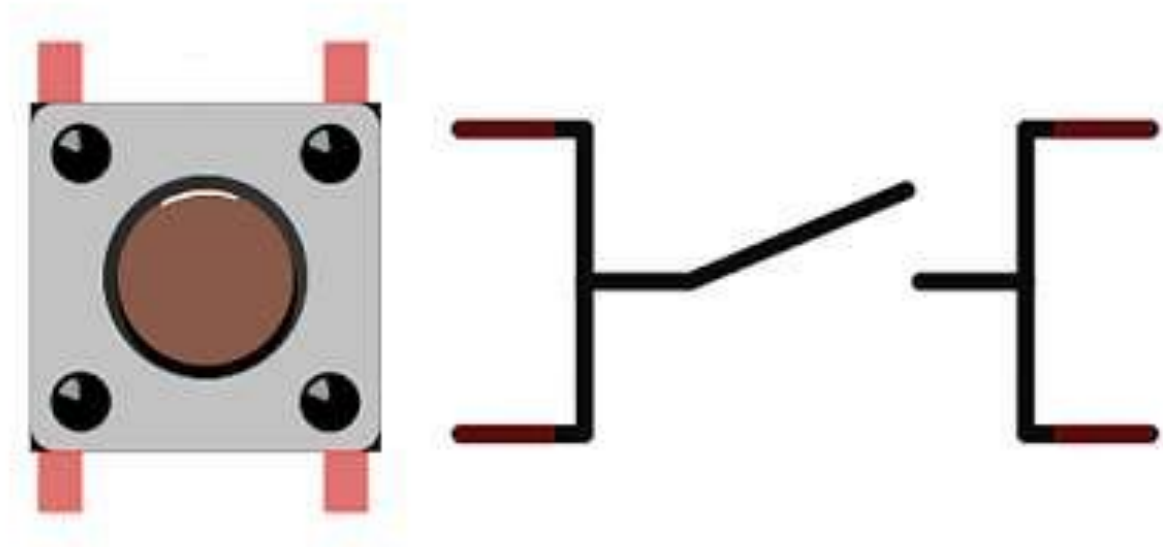


DC Motor vs Gear Motor

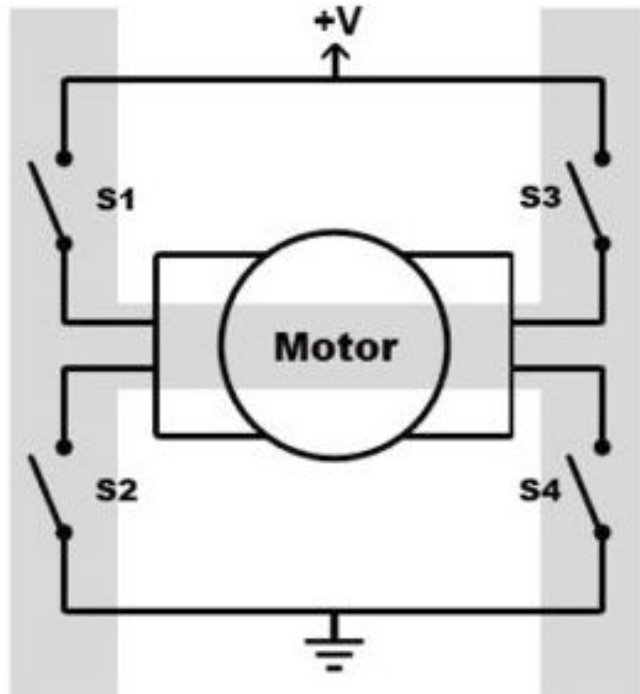
- Gear Motor consists of gear(s) to adjust it's torque & speed
 - As Torque goes up, Speed Comes Down
- An Example:
 - A microwave has Gears so it doesn't go fast & throw the stuff inside everywhere.



N.O. Push Button - new component



H-Bridge



H-Bridge

