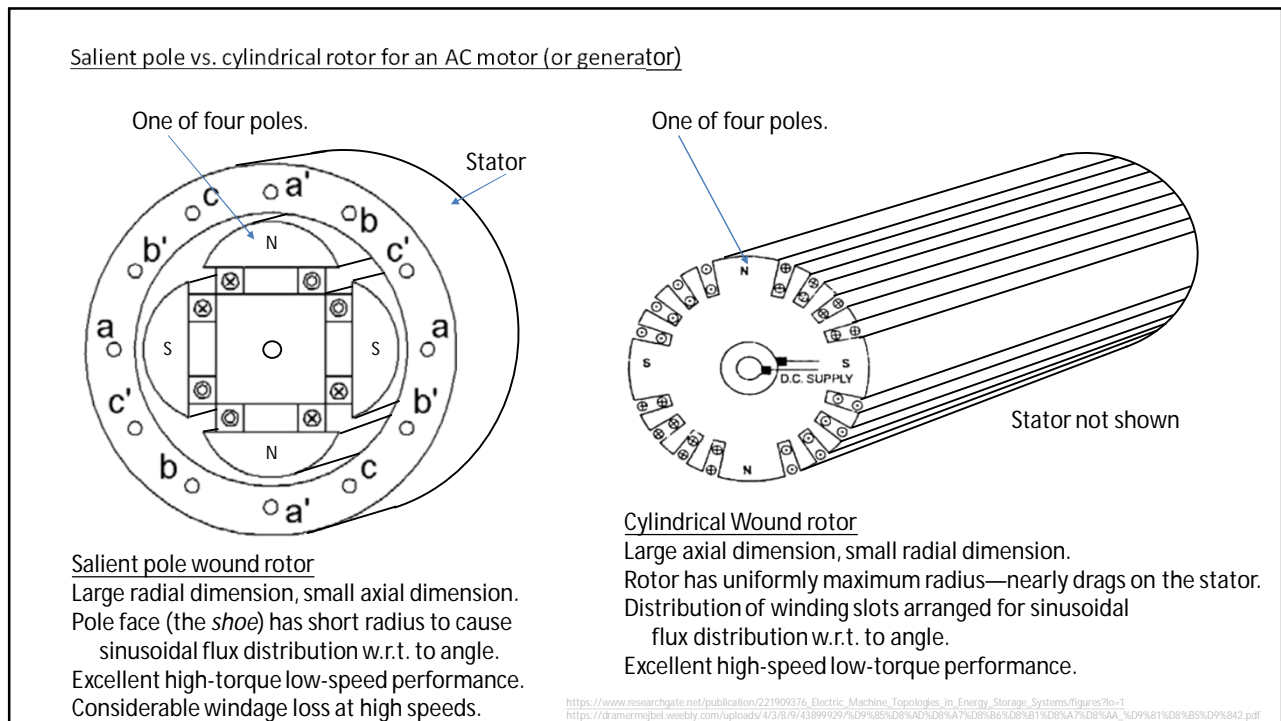


1



2

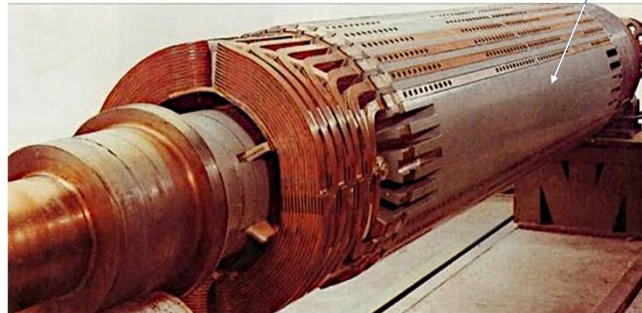
Salient pole vs. cylindrical rotor for an AC motor (or generator)

One of twelve poles—after finishing.  
This pole not yet constructed.



Salient pole wound rotor  
Large radial dimension, small axial dimension.  
Pole face has short radius to cause sinusoidal flux distribution w.r.t. to angle.  
Excellent high-torque low-speed performance.

One of two poles.



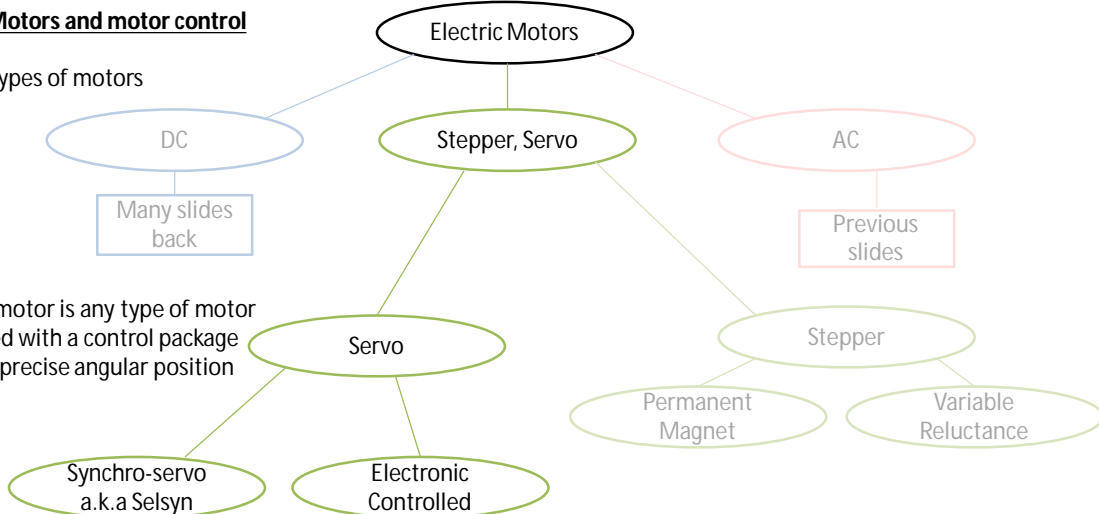
Cylindrical Wound rotor  
Large axial dimension, small radial dimension.  
Rotor has uniformly maximum radius—nearly drags on the stator.  
Distribution, depth, of winding slots arranged for sinusoidal flux distribution w.r.t. to angle.  
Excellent high-speed low-torque performance.

<https://www.quora.com/What-is-the-difference-between-a-salient-and-a-non-salient-synchronous-machine>

3

**Motors and motor control**

Types of motors



A servo motor is any type of motor combined with a control package to allow precise angular position control.

Two servomotors can be connected back-to-back such that they act like a single axle, connected by wires.

<https://www.youtube.com/watch?v=9PnkSxXDRho>

One motor (any type) with positional control via an electronic controller.

<https://www.youtube.com/watch?v=LXURLvga8bQ>

4