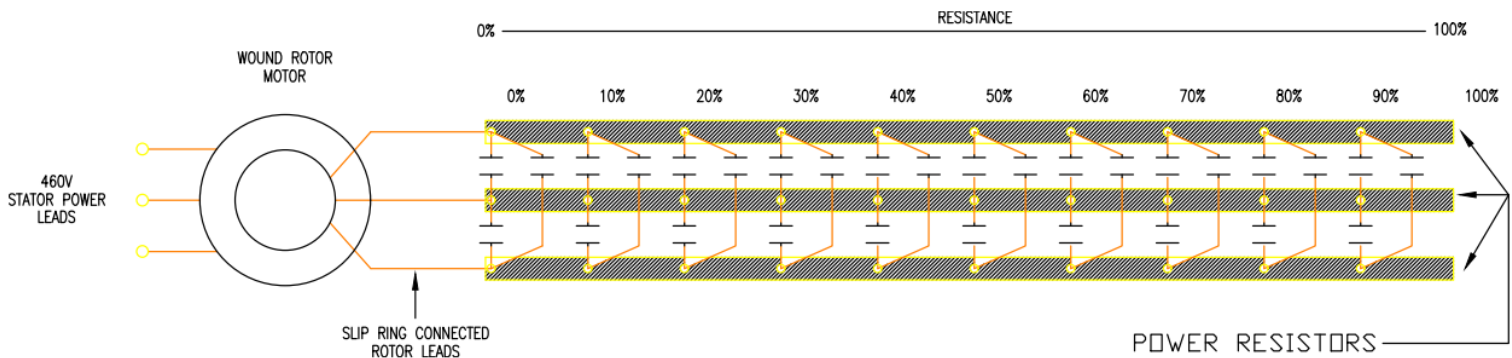


Wound rotor motors were once reliable machines for controlling the speed and/or torque applied to equipment before the advent of cost effective power electronics. By changing the resistance of the rotor windings, the slip experienced by the rotor can be manipulated. As resistance is increased, up to a “break-down” point, high levels of torque can be achieved with full load speed being a fraction of rated motor speed. Beyond the “break-down” point, torque generation diminishes. Wound rotor motors were typically used for starting large loads or adjustable speed applications. When used for starting large loads, the large resistor banks were typically not rated for continuous power dissipation. This meant each resistance “step” was disconnected from the rotor in succession until the rotor windings were shorted (effectively non-existent) and the motor behaved more like a modern-day squirrel cage induction motor. For applications requiring constant speed changes, the resistors were required to be 100% duty cycle rated.



At Prokuma, we have successfully upgraded many systems utilizing wound rotor motors using one of the following techniques.

- Applying VFDs to existing motors and shorting slip rings
- Replacement of wound rotor motors with new squirrel cage motors and VFDs

Our designs are proven in hoisting, torque control, and speed control applications.

Call for a quote: 1 812-461-1681 or email questions to [sales@prokuma.com](mailto:sales@prokuma.com)