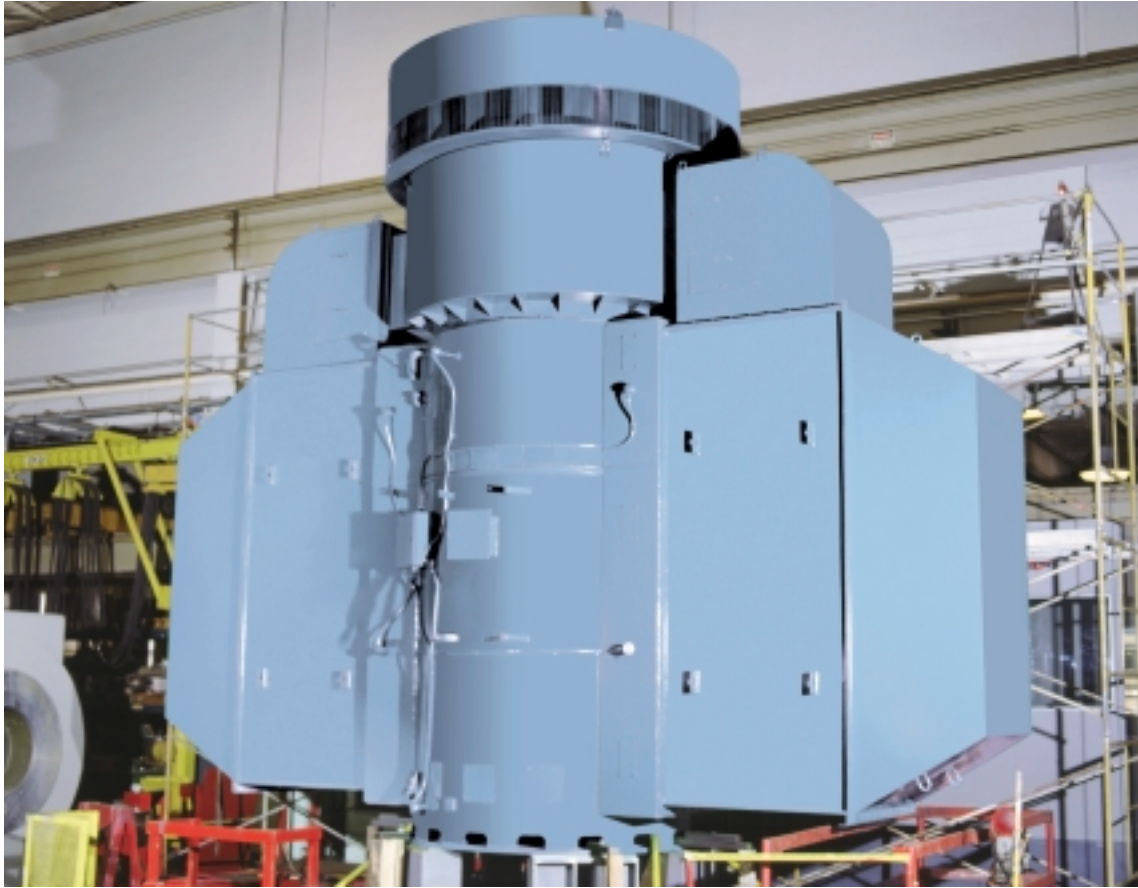




Horizontal & Vertical

500 - 25,000 HP



- ▲ Capabilities range from 500 to 25,000 HP, up to 3600 RPM, 50 or 60 Hertz.
- ▲ EM induction motors are custom built to handle high load and high starting torque requirements.
- ▲ Custom designed to meet equipment ratings and foundation requirements.
- ▲ Manufactured in vertical, horizontal bracket, or pedestal bearing configurations.
- ▲ Ability to design motors to be compatible with all variable speed applications.
- ▲ Simple, rugged construction ensures long life with minimal maintenance.
- ▲ Available in two-speed, two-winding configuration for increased efficiency to handle off-peak load/flow requirements.
- ▲ Installed for a wide variety of applications including extruders, fans, pumps, mixers and compressors.
- ▲ Duraguard VPI insulation is fully Class F rated and uses a two-part epoxy-mica system to provide industry-proven long life.
- ▲ Enclosures available in traditional open and enclosed NEMA and IEC designations as well as EM's exclusive PMDP™ (paper mill drip-proof) design.
- ▲ Motors designed to API standards include precision balancing and special frame to ensure maximum dependability and long life.
- ▲ Proven benefits of copper construction are standard on all rotors.

ELECTRIC MACHINERY COMPANY
800 Central Avenue
Minneapolis, MN 55413-2400
(612) 378-8000 Fax: (612) 378-8050

Horizontal & Vertical

INDUCTION MOTORS

Electric Machinery's heavy-duty induction motors are designed to meet the needs of industry with continuous, dependable, trouble-free operation. Our induction motors are designed for a wide variety of applications including compressors, fans, mixers and pumps.

STATOR

- Stator frame is sturdy, reinforced fabricated steel plate construction. Motor frames built to API 541 utilize continuous welds.
- The stator is composed of a supporting structure, a core of electrical laminations and insulated windings. High grade silicon steel laminations that build up the core are precision punched from coreplated sheets. Pressed and held between end plates, these laminations are stacked in the support structure and spaced for radial ventilation to ensure even cooling throughout the core.
- The windings are vacuum pressure impregnated with a two-part epoxy resin. This VPI system provides excellent dielectric properties, superior resistance to moisture and chemicals, outstanding mechanical integrity and long life.

ROTOR

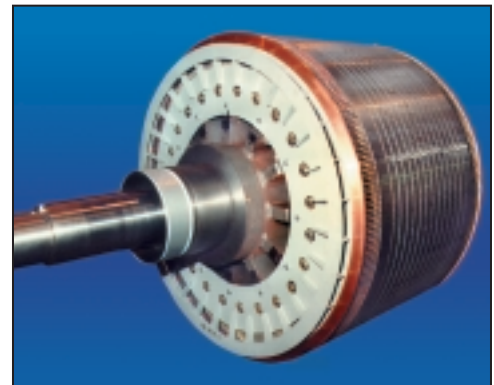
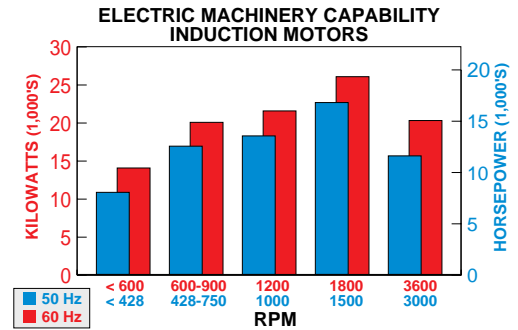
- Starting and acceleration is typically the point at which the motor experiences the greatest stress. Copper cage bars are brazed into individual milled pockets in the copper end rings on all motors destined for high inertia and other severe duty applications. This increases the integrity of the joints by permitting high heat absorption for starting high inertia loads and prevents rotor bar cracking or breaking. Ultrasonic testing of each "pocket" ensures that the joints are secure.
- Individually insulated laminations are made from premium grade electrical steel, shrunk and keyed to the shaft or spider.
- Rotors are balanced to meet low levels of vibration.

BEARINGS

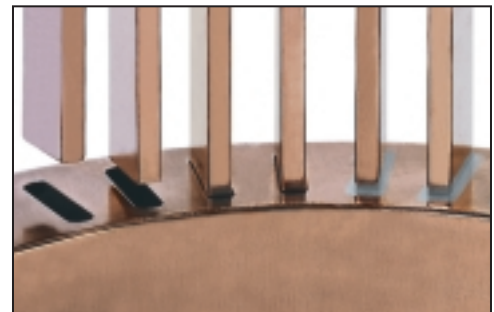
- Roller, sleeve or tilt pad bearings are designed to match the application.
- Lubrication of sleeve bearings is achieved through either ring lubrication or a combination of ring and forced lubrication.
- Extra large bearing oil reservoirs ensure a clean oil supply to the bearings.
- Special bearing designs available for vertical applications.

OPTIONS

- Rotor temperature monitor (RTM) can be provided to monitor restart readiness.



Slow speed rotor construction.



Simulated placement of rotor bars in milled end ring pockets.



Horizontal application.



1300-PRD-400A

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