For the Paper Industry

SYNCHRONOUS MOTORS

- **Ratings range to meet all synchronous motor applications for the paper industry.**
- **Custom designed to meet customer starting and pull-in torque based on electrical system limitation and load requirements.**
- **Designed to match your existing machines, space limitations, shaft heights, and mounting foot locations to minimize installation costs.**
- **Extra large oil reservoir provides ample clean oil supply to bearings for protection and long life.**
- **Innovative designs offer access covers to a large internal cross section and provide easier accessibility for inspection and maintenance.**
- **Duraguard VPI insulation is fully Class F rated and uses a two-part epoxy-mica system to provide industry proven long life.**
- **Field windings are sealed to protect them from moisture and chemicals.**
- **Abrasion-resistant coating is available for protection in demanding environments.**
- **Industry-proven brushless exciters or collector rings can be used, depending on preference.**
- **Synchronous motors are highly efficient and have power factor correction capabilities to provide reactive power and/or reduce operating costs and demand charges.**
- **EM Experience... a supplier of synchronous motors to the paper industry for over 100 years.**

ELECTRIC MACHINERY COMPANY
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SYNCHRONOUS MOTORS

For the Paper Industry

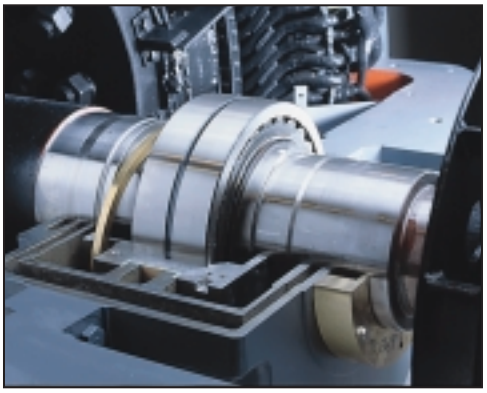
PAPER MILL CONSTRUCTION FEATURES

Electric Machinery's synchronous motors incorporate special features which make them the right choice for use in the corrosive H_2S environments found in paper mills. Over 100 years of experience has enabled us to design dependable motors that satisfy the industry's special needs which is why you can find EM motors driving chippers, refiners, vacuum pumps, grinders, fan pumps, and variable speed fans. EM's exclusive PMDP™ (paper mill drip-proof) enclosure design incorporates the following features which improve motor performance and promote long life.

- PMDP™ enclosure provides splash-proof protection for wet locations.
- Phosphorous-free brazing of cage bars prevents chemical corrosion which can cause machine failure.
- Durable high tin base babbitt bearings to withstand higher temperatures.
- Stainless steel collector rings on brush type motors last longer, reduce maintenance, and resist corrosion.
- Durable epoxy prime and finish paints protect your investment from corrosion.

PMDP™ enclosure

Vacuum pump drive



EM patented ring-oiled bearing

SPECIAL DUTY APPLICATIONS

These special features are standard when the application is specified.

Chippers

- Stiffer frame construction has larger cross section at base to accommodate the intense shock and vibration associated with rigorous chipper duty.
- Rotor construction has higher strength materials incorporated with a larger rim cross sectional area at the spider hub to resist high torsional peak vibration.
- End rings are copper or copper alloy construction to withstand heat cycling and provide long life.
- Motor is anchored with extra stator-to-base hold-down bolts and grouted in foundation.

Refiners

- Equipped with EM patented oil-lubricated thrust bearing with high bidirectional axial thrust capability.

Vacuum Pump Options

- Stator shift feature is available to fully expose rotor for easy maintenance.
- Double shaft extensions permit driving machines from both ends.

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