

Founded in 1891, Electric Machinery (EM), part of WEG Group, custom designs and manufactures the motors and generators that serve thousands of customers worldwide. Engineering cost-effective solutions for both simple and complex applications, we offer more than standard design; we build machines to your exact specifications, combining experience and innovation to deliver consistency and reliability in every unit.

EM has earned its reputation for designing, manufacturing, and servicing large, custom-engineered electrical motors and generators in the U.S. and worldwide by developing:

- First High-Starting-Torque Synchronous Motor
- First Automatic Starting System for Synchronous Motors
- First 2-Pole Induction Motor Design to Operate below its First Critical Speed
- First Solid-State Brushless Excitation System
- Pioneered the Duraguard™ insulation system in the early 1970's. Today, EM's Duraguard™ process, using epoxy resin tape and vacuum/pressure impregnation (VPI), is recognized as the benchmark of the industry.

Product Range:

	Induction Motors	Turbo Generator 2 poles	Synchronous Motors
Output Range:	2,000 - 25,000 HP	6,000-120,000 kW	400-150,000 HP
Speed:	200 - 3,600 RPM	3,000 / 3,600 RPM	150 - 3,600 RPM
Frequency:	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Voltages:	2,300 - 14,400 V	4,160-14,400 V	2,300 - 14,400 V
Construction	Horizontal & Vertical*	Horizontal	Horizontal & Vertical
Excitation	N/A	Brushless Excitation, Static with collector rings	Brushless or Static with collector rings
Standards:	NEMA, IEEE, IEC, API 541, ISO 9001	NEMA, ANSI, IEEE, IEC, API 546, ISO 9001	NEMA, IEEE, IEC, API 546, ISO 9001
Enclosures:	DP, DPG, WPI, WP11, PMDP™, TEWAC, TEAAC, TEFV	Room Air Cooled, TEWAC, TEAAC	DP, DPG, WPI, WP11, PMDP™, TEWAC, TEAAC, TEFV
Applications:	Pumps, Centrifugal Compressors, Extruders, Fans, Mixers	Steam and Gas Turbines	Reciprocating and Centrifugal Compressors, Condensers, Ball Mills, SAG Mills, Vacuum Pumps, Refiners, Chippers, Crushers, Grinders
Special Notes:	True Stiff-Shaft 2 pole design, options of semi-stiff or flexible shaft	Continuous or Peaking Duty	Industry leading synchronization system

* Vertical = Limited HP for 2 poles

Nuclear Safety Related Equipment:

- Motors and generators built and tested for Class 1E safety related applications.
- Quality assurance program meeting requirements of ASME NQA-1

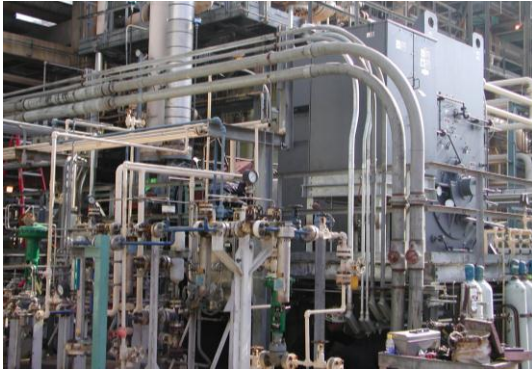
After Sales Support and Service:

- Installation, commissioning and start-up
- Field Service engineers 24/7 available
- Repair services and original parts available

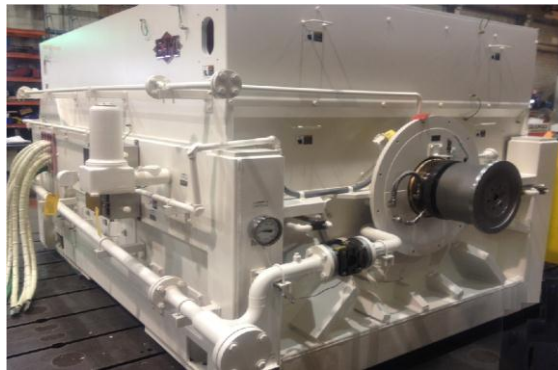


References:

Induction Motors



TESORO – Los Angeles Refinery – USA
Stiff shaft – 10.000HP, 4 Poles, 3PH / 60 Hz / 11.6 kV



Valero Refining Co. – San Antonio TX - USA
20.000HP, 2 Poles, 3PH / 60 Hz / 13. 2 kV

Turbo Generator 2 poles



Mondi Paper – South Africa
56.500 kVA, 2 Poles, 3PH / 50 Hz / 11.0 kV



Dresser-Rand – Arizona Public Service – USA
52.500 kVA, 2 Poles, 3PH / 60 Hz / 13.8 kV

Low Speed Synchronous Motors



Metso Minerals – Minera Alumbrera – Argentina
Ball Mill – 8000HP, 34 Poles, 3PH / 50 Hz / 6.6 kV



United Taconite LLC – Minnesota USA
Load sharing Ball Mill 3000HP, 44 Poles, 3PH / 60 Hz / 4.0 kV

