# WEG Electric Machinery Minneapolis, MN - USA



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 costeffective 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.

WEG 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<sup>™</sup> insulation system in the early 1970's. Today, WEG EM's Duraguard<sup>™</sup> process, using epoxy resin tape and vacuum pressure impregnation (VPI), is recognized as the benchmark of the industry.



### **Product Range:**

	Induction Motor	ST20 Turbogenerator Line	Synchronous Motor
Output Range:	1,000 - 25,000 HP	6,000 - 200,000 kVA	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 Excitation, 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, WPII, PMDP™, TEWAC, TEAAC, TEFV	Room Air Cooled, TEWAC, TEAAC	DP, DPG, WPI, WPII, 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

Special ratings not found above are available upon request as WEG Electric Machinery can design and manufacture to your exact specifications.

# 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



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# **References:**

Induction Motors



**TESORO – Los Angeles Refinery – USA** 10000HP, 4 Poles, 3PH / 60 Hz / 11.6 kV

ST20 Turbogenerators



Mondi Paper – South Africa 56500 kVA, 2 Poles, 3PH / 50 Hz / 11.0 kV

Low Speed Synchronous Motors



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



Valero Refining Co. – San Antonio TX - USA 20000HP, 2 Poles, 3PH / 60 Hz / 13. 2 kV



Dresser-Rand – Arizona Public Service – USA 52500 kVA, 2 Poles, 3PH / 60 Hz / 13.8 kV



**United Taconite LLC – Minnesota USA** 3000HP, 44 Poles, 3PH / 60 Hz / 4.0 kV

For more information, please contact service-em@weg.net or 24 Hour Customer Support +1 (612) 247 9232



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