## **Nuclear Energy Products**



Responding with Nuclear Energy solutions for over 40 years.

### **Nuclear Experience**

- "Lowest life cycle cost"
- Over 600 WEG Electric Machinery extensive, high powered nuclear rotating machines in nuclear plants worldwide including:
  - Induction & Synchronous Motors
  - Generators
  - MG Sets
  - Pump Applications
- Proven track record for:
  - High performance
  - Outstanding quality
  - Reliable designs
- Proven Insulation System
- Provide specialized technical product support and respond promptly to customer demands
- Provide "like-for-like" replacements
- Availability of original Electric
   Machinery designs, parts, and service
   which will match existing motors fit,
   form and function with no changes to
   the foundation and no design changes
   required
- Ability to recommend ways to improve your equipment efficiency and reduce operation costs with improvements such as alternative motors and upgrades



# **Environment / Qualification Testing**

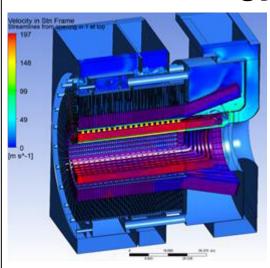
- Mild or harsh environment applications
- Seismic Analysis
- Material Qualifications
- Insulation aging test/thermal qualification

<b>Environment Qualification</b>				
IEEE 115, 308, and/or 323	IEEE 344, 379, and/or 382			
IEEE 383, 387, 420 and/or 627	NEMA MG-1			

Quality Assurance			
10 CFR 50/Appendix B	Commercial Grade Dedication		
10 CFR Part 21	ASME NQA-1 and/or ISO 9001		

Engineering/Process			
AWS D1.1	AWS D1.2		
AWS D1.6 and/or D9.1	ASME Section IX		

### **Nuclear Energy Products**



#### **Innovative Engineering**

- Proven Design
- Finite Element Analysis (ANSYS)
- Failure Mode Effects Analysis
- Seismic Qualification
- Drop-in Replacements
- Environment Aging Analysis and Evaluation
- Duraguard<sup>™</sup> Insulation System, Nuclear Certified
- Mechanical and Electrical Design

### Quality

WEG Electric Machinery designs, manufactures and tests products and processes to meet and exceed industry standards across our range of products. As the recognized leader in overall product life value and durability, WEG Electric Machinery's quality has sustained brand integrity through proven performance in the nuclear power industry for decades. Development of new technologies that provide added functionality and performance continue the tradition of a recognized leader in safe reliable energy conversion solutions for primary and redundant requirements specific to the nuclear power industry and covered under our Appendix B Quality Program.

Product Range:	Induction Motors	2-Pole Turbo Generators	Synchronous Motors	MG Sets
Output Range:	2,000 - 25,000 HP	6,000 - 160,000 kW	400 - 150,000 HP	200 - 2,000 kW
Speed:	200 - 3,600 RPM	3,000 - 3,600 RPM	150 - 3,600 RPM	400 - 1,800 RPM
Frequency:	50 Hz / 60 Hz	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	120 - 4,000 V
Construction:	Horizontal & Vertical*	Horizontal	Horizontal & Vertical	Horizontal
Excitation:	N/A	Brushless or Static with collector rings	Brushless or Static with collector rings	Brushless
Standards:	NEMA, IEEE, IEC, API 541, ISO 9001	NEMA, ANSI, IEEE, IEC, API 546, ISO 9001	NEMA, IEEE, IEC, API 546, ISO 9001	NEMA, IEEE, IEC
Enclosures:	DP, DPG, WPI, WPII, PMDP™, TEWAC, TEACC, TEFV	Room Air Cooled, TEWAC, TEAAC	DP, DPG, WPI, WPII, PMDP™, TEWAC, TEAAC, TEFV	Room Air Cooled, TEWAC, TEAAC
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 Duty semi-stiff or flexible shaft	Continuous or Peaking	Industry leading synchronization system	

<sup>\*</sup> Vertical = Limited HP for 2 poles

For more information, please contact:

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