



GE INDUSTRIAL MOTORS
a WOLONG company



Water & Wastewater

AC/DC Motors Up to 1750 HP

GEINDUSTRIALWOLONG
www.gemotorswolong.com



Electric motors make
an average **70%**
of total
power cost*

Challenges

- Multiple suppliers, designs and specifications tying up resources.
- Frequent unplanned maintenance disrupting operations requiring replacement motors onsite.
- Older low efficient motors eating profits.

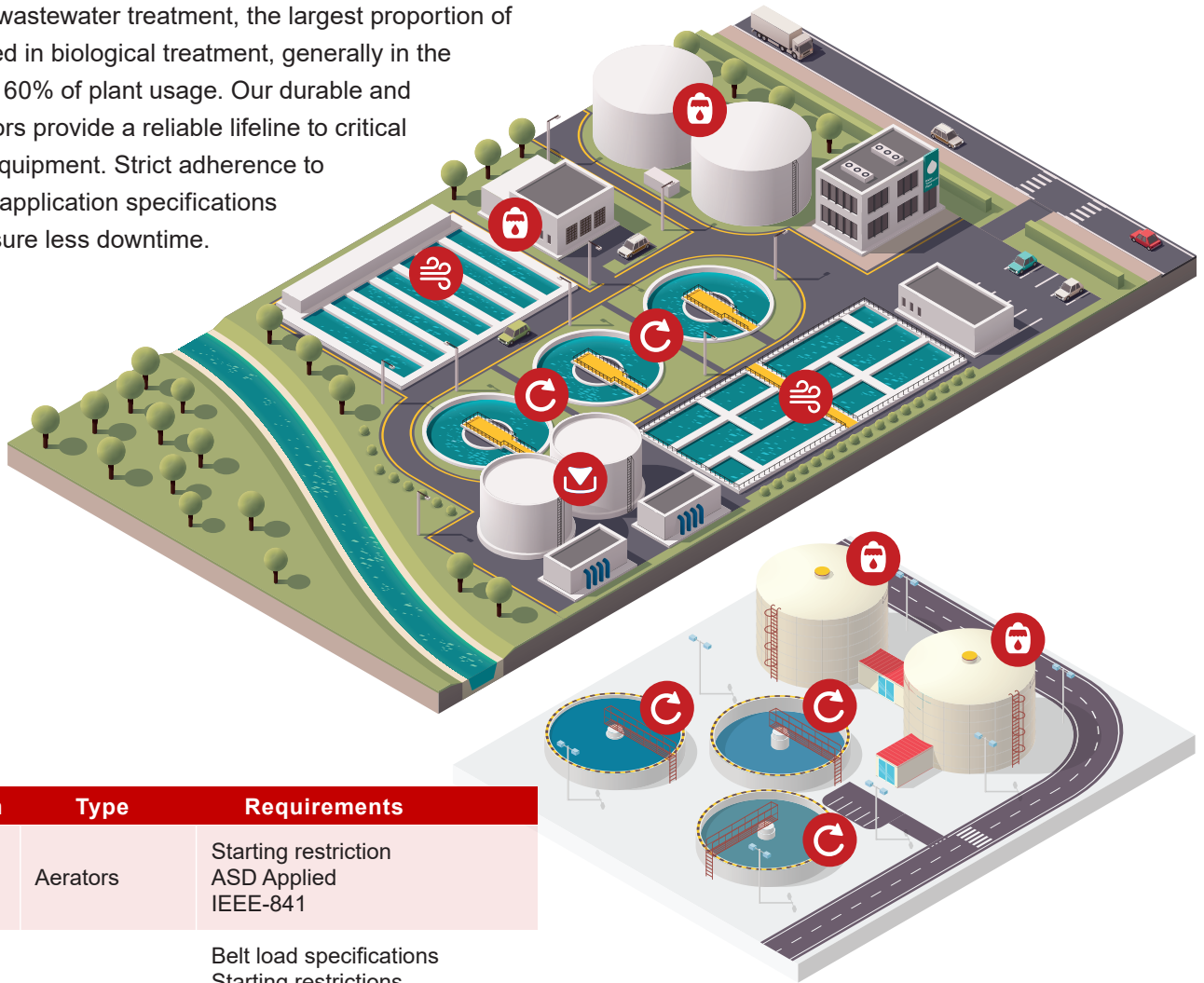
Our Solutions





- Frame agreements increase supply and specification efficiency freeing up resources.
- Less unplanned maintenance and downtime with more robust motor designs.
- +1% energy efficiency gains translate to less than a two year payback.



Meeting Heavy Industrial Application Requirements

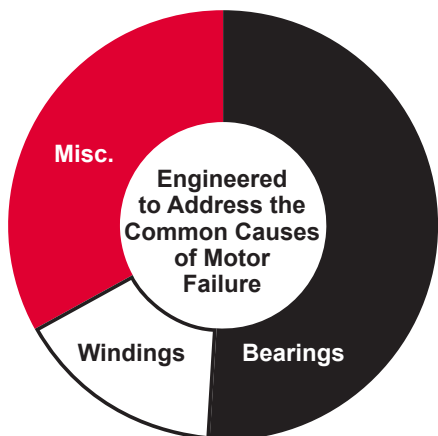
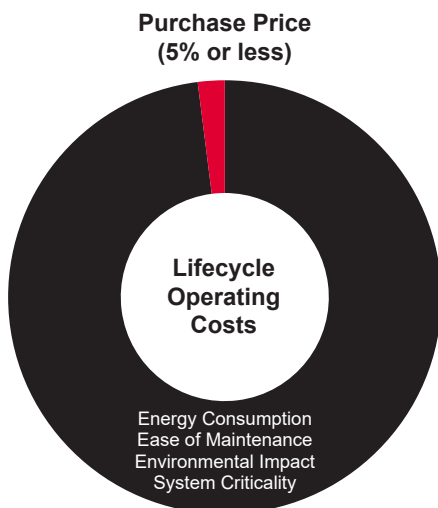
In municipal wastewater treatment, the largest proportion of energy is used in biological treatment, generally in the range of 50 - 60% of plant usage. Our durable and efficient motors provide a reliable lifeline to critical processing equipment. Strict adherence to industry and application specifications also help ensure less downtime.



Application	Type	Requirements
 Blowers	Aerators	Starting restriction ASD Applied IEEE-841
 Mixers	Mixers Agitators Flocculators	Belt load specifications Starting restrictions ASD applied / Low inrush Special shaft and load designs Torque pulsation High rotor inertia IEEE-841
 Pumps	Axial Jockey Pipeline	Starting restrictions ASD applied Vertical thrust loads Low inrush IEEE-841
 Compressors	Centrifugal Axial	Starting restrictions ASD applied / Low inrush Special shaft and load designs Torque pulsation High rotor inertia

Consider Lifecycle Operating Costs First

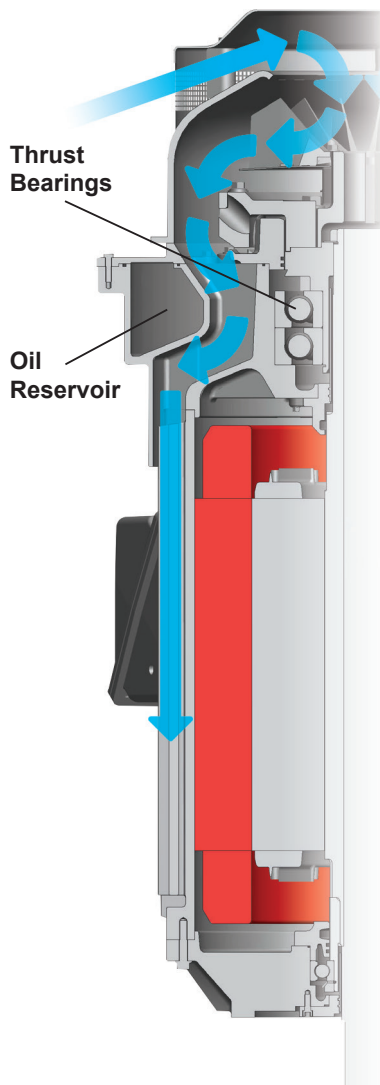
The initial cost of an electric motor makes up 5% or less of the total cost of operation. So all aspects of the motor operation should be considered when purchasing motors.



- Heat Load
- Inverters
- Contamination
- Voltage Issues
- Heat
- Vibration
- Misalignment
- Contamination
- Lubrication Issues
- Electrical Discharge
- Stress, Load, Fatigue

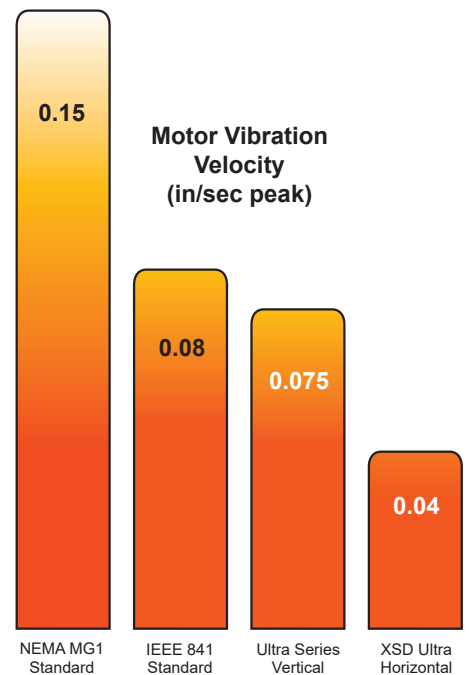
Innovative Patented Air-Cooling Technology

GE engineers found a better way to air cool bearings in larger frame vertical TEFC motors. The design improvements result in an amazing ~30OC temperature reduction helping to dramatically extend bearing and winding life.



Low Vibration Means Long Life

Vibration is bad for motors and driven equipment. Motor bearings, in particular, begin to wear faster with high vibration levels. Beyond focusing on proper alignment, base, and voltage, users should also pay more attention to the design of the motor itself. In most cases, manufacturers are content to simply stay within the NEMA or IEEE standards because many engineers, of course, specify these limits.



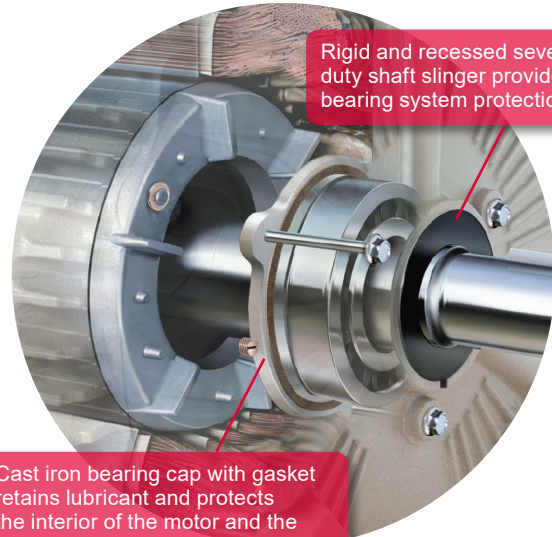
It is well documented that motors designed with low vibration have longer bearing life.

Since bearing wear is one of the leading causes of motor failure, reducing its chances reduces your unplanned downtime. Our application engineers have been told by many users that their driven equipment tends to run smoother with low vibration motors. All of this leads to lower maintenance costs on the entire drive system.



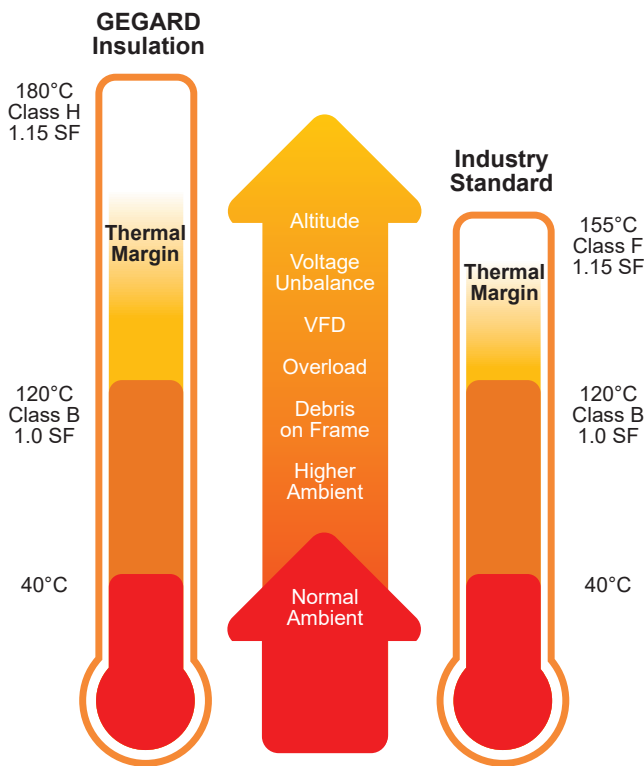
GEGARD™ Insulation offers added protection in severe applications.

Our Class H GEGARD insulation system is designed to excel in variable frequency drive applications where lesser designs often short circuit and cause overcurrent trips.



Rigid and recessed severe-duty shaft slinger provides bearing system protection.

Cast iron bearing cap with gasket retains lubricant and protects the interior of the motor and the bearing system from contaminants.



Larger Thermal Margin = Longer Motor Life

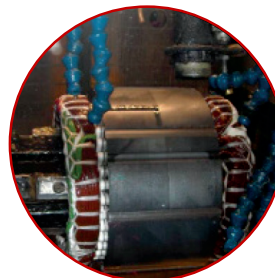
Guarding Against Bearing Failure

Common shaft currents create voltage spikes that reach bearings causing them to vibrate in operation. Over a short period, this vibration (fluting) will degrade bearings to the point of failure. We include bearing insulation for higher ratings and Aegis™ shaft grounding rings are optional on all ratings.



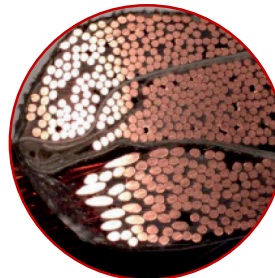
Rotational Varnish Application

Motor coils are rotationally varnished with a "Trickle Treat" process while an electric current is passed through the windings to ensure a penetrating, thorough and even coating. This proven process fills air gaps that could cause corona inception damage during operation.



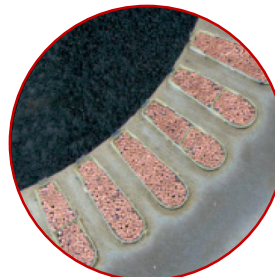
Wire Bonding

Resin penetrates deep into tightly packed coil wire creating a strong bond that guards against end-turn vibration.

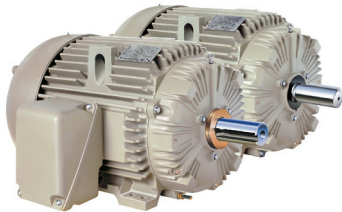


Moisture Protection

Contaminants can't penetrate carefully and tightly packed stator coils bonded by deep resin penetration into the slots.



Severe Duty NEMA IE3



NEMA Premium Efficient

This versatile and robust design is ideal for a wide range of challenging industrial applications and environments.

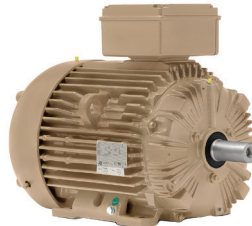
MODELS

- XSD Ultra
- XSD Ultra 841
- Energy Saver

Technical Capabilities

0.75-300 HP, 900-3600 RPM
 230/460, 460, 575V / 60 Hz
 Alternate 50 Hz data on nameplate
 TEFC (IP55) and ODP
 Frame sizes: 143T-449T
 NEMA, UL, CSA, IEEE 45, 841, 112B,
 and GM 7E-TA
 Division 2 applications
 C-Face and high-torque
 Design "C" models available
 VFD ready with GEGARD Class H (XSD
 Ultra) or Class F (ES) insulation
 Five Year Warranty

Severe Duty IEC IE3



Rugged and Reliable

Based on the XSD Ultra mechanical and electrical design for the global market. Ideal for extreme environments.

MODEL

- XSD Ultra 841 IEC

Technical Capabilities

0.55-220 kW, 750-3000 / 900-3600 RPM
 200, 400, 400/690, 690V / 50 Hz
 230/460, 460, 575, 690V / 60 Hz
 TEFC (IP55)
 Frame size: 90S-280H
 IEC, IEEE 841, IEEE 45, ATEX, and
 IEC Exn
 Zone II, ABS
 VFD ready with GEGARD Class H
 insulation
 Five Year Warranty

Aerator NEMA IE3



Premium Energy Savings

One of the most robust, reliable and energy efficient aerator motors in the industry today. Engineered and built to last.

MODEL

- XSD Ultra 841 Aerator

Technical Capabilities

1-200 HP, 1200 RPM
 Variable Torque Freq. 0-60 Hz
 TEFC
 Frame sizes: 180-449
 NEMA, IEEE 841
 Five Year Warranty



Heat Exchange NEMA IE3



Stable, Reliable, Efficient

Specially rated and ideally suited for harsh outdoor heat exchange applications.

MODELS

- XSD Ultra 661

Technical Capabilities

0.75-300 HP, 900-3600 RPM
 460, 575V / 60 Hz
 TEFC (IP55)
 Frame sizes: 184T-449
 NEMA, UL, CSA, API 661,
 IEEE 841, 45, 112B and GM 7E-TA
 CE, ATEX Zone 2
 Division 2 application
 VFD ready with GEGARD
 Class H insulation
 Five Year Warranty

Vertical Pump NEMA IE3



Inverter-Duty and Efficient

Combines extra severe duty engineering with advanced thrust and cooling technologies.

MODELS

- Ultra Series Vertical
- Large Custom Vertical
- Vertical Fire Pump
- ULTRASNOW -V Pump

Technical Capabilities

3-1000HP, 600-3600 RPM
 460, 575, 2300/4160 V
 60Hz or 50Hz
 WPI and TEFC Enclosures
 Hollow and Solid Shaft
 Normal, High, and Extra High Thrusts
 Frame Size: 182-5013
 API 610 12th Edition
 P-Base mountings
 VFD ready with GEGARD
 Class H insulation
 Three Year Warranty

Medium Voltage NEMA



Severe Duty, Long Lasting

Designed to operate in extreme Petrochemical, Power Generation, Mining and general process environments and applications.

MODEL

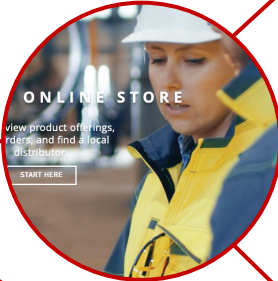
- Quantum LMV
- Quantum V
- Quantum 580

Technical Capabilities

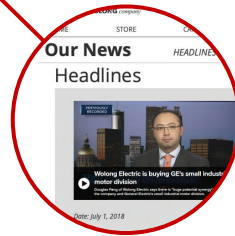
100-1750 HP
 900-3600 RPM / 60 Hz
 900-3000 RPM / 50 Hz
 460, 575, 2300/4000, 6600V
 TEFC
 Available in IEEE 841 config.
 Frame sizes: 440-7000
 NEMA, CSA, UL, IEEE 112B, AEx nA
 API 547 and 541, Division 2, Zone 2
 Class F insulation
 Three Year or Five Year Warranties
 (IEEE 841)

Access has never been easier!

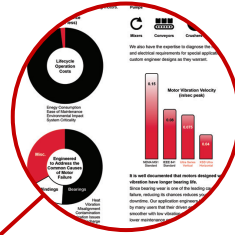
search
Google
Type keyword
"gemotorswolong"



Follow us
on LinkedIn



Motor Catalog
View updated information about standard motors on your mobile device. It can also be viewed offline and printed.



E-Commerce
Find a distributor. Download datapacks. Access support library.

News
The latest developments, new product introductions and special industry events.

