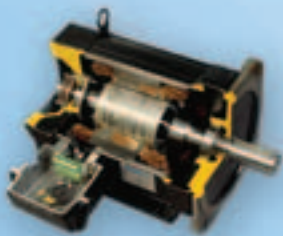




# POWERTEC INDUSTRIAL MOTORS

AFFILIATE OF **HBD** INDUSTRIES, INC.



# WHEN PERFORMANCE MATTERS... IT HAS TO BE

# POWERTEC INDUSTRIAL MOTORS

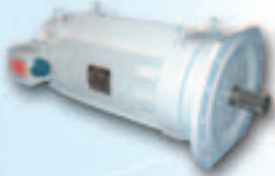
Started in 1987, **POWERTEC Industrial Motors, Inc.** quickly established itself as an innovative motor and drive manufacturing company delivering products to customers that had critical application requirements.

Engineers, product/system designers, end users and original equipment manufacturers covering a diverse range of industrial applications and niche markets have come to rely on the performance, reliability and size of the BL (brushless) motors and drive systems produced by **POWERTEC**. **POWERTEC** customers know the company's slogan, **WHEN PERFORMANCE MATTERS... IT HAS TO BE POWERTEC**, is a statement of fact and not just a great sounding, descriptive sentence. Throughout this brochure are some examples of the severe environments, demanding performance and unique customer applications being served by **POWERTEC** motor/drive products. In every example, **POWERTEC'S** products meet and exceeded the customer's application and performance requirements.

## MILITARY SYSTEMS

### POWERTEC Motors provide:

- Higher Performance Required for Modern Systems
- More Space for Firepower/Faster Response To Threats
- Efficiency Has Dramatic Effect on Reducing Naval Vessel Cost of Operation



*POWERTEC produced first Brushless Motor Certified for US Navy Service: High Shock Mil-S-901D, Vibration Mil -M-17060 with less than 13 inch diameter delivering 125 HP.*

### AMMUNITION MOTOR:

#### KEY ADVANTAGES:

- Continuous Stall Torque-no problem
- Low Inertia
- Accessory Mounting (brakes) -no problem



#### DDG-1000 Stealth Destroyer

*POWERTEC motors control the gun operations on the new US Navy DDG-1000 Stealth Destroyers.*



#### USS Roosevelt (The Big Stick)

*POWERTEC Motors are subjected to continuous stall conditions, high cyclic rates at very high overload torques, low inertia and performance demands require both extreme efficiency and precision. Frames: E182, E184, E218 and E259 Modified.*

*Other POWERTEC motors produced for the US Navy drive anchor windlass, capstan winch, warping winch, ventilation fans, pumps and other ship systems.*

### CUSTOM REQUIREMENTS:

- High Shock Mil- S-901D
- Splined Output Shaft
- Special Performance Requirements
- Special Painting/ Coatings
- IP67 Rated Enclosure
- Vibration Mil -17060
- Special Mounting Requirements
- Full Connectorized Feed Back/Power Leads
- Third Party Design Test Verification



*US Missile Defense Antenna*



*US Navy Warping Winch Drive*





# FOR CUSTOM APPLICATIONS AND/OR EXTREME ENVIRONMENTAL APPLICATIONS... TURN TO

**POWERTEC**  
INDUSTRIAL MOTORS

## POWERTEC offers:

- High Performance Motors
- Constant Torque for Any Speed
- Lower Inertia Compared to Other Motors
- Custom Mounting Flange
- Spline Output Shaft
- Design Engineering or Built to Your Print
- Continuous Stall Conditions
- Low Motor Losses Keep Down Heat
- Small to Large Frame Sizes
- Excellent quality Manufacturing
- Efficient/Reliable Service
- Production Capability for Any Job

*Brushless Motors Custom Modified and Manufactured...YOUR Way!*

## TEST STAND MTS Flat-Trac® Dynamic Roadway

### KEY ADVANTAGES:

- E320 Series has 16" Diameter
- High Dynamic Speed Accuracy with Torque Changes, Capable of 50 Hz Velocity Changes
- Handles Up to 6000 RPM
- Water Cooling is Standard Option

### CUSTOM REQUIREMENTS:

- Special Shaft Dimensions
- Custom Magnets for Low High-Speed Losses

*Steel Frame NVH Testing Low Vibration Motor*



*Ice Drilling Arctic.*



## DO YOU...

- Need fractional to over 400 HP NEMA standard motors with UL and CSA Certification?
- Need a custom motor with special paint, metric flange and shaft, standard or wall foot mount or brakes?
- Need lightweight motors that offer high efficiency, small size with bidirectional power production, low maintenance and handle heavy-duty cyclic rate (up to 100 cycles per second)?
- Have a High Speed (14,000 rpm) or High Torque (600lb. ft.) motor application?
- Need High Performance or Greater Precision?
- Want to replace Hydraulic Machines with user-friendly equipment that requires less maintenance?

IF **"YES"** IS THE ANSWER TO ANY OF THESE QUESTIONS, CONTACT:

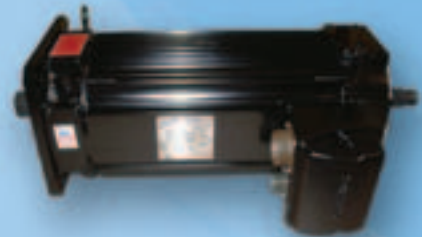
## POWERTEC CAN:

- Support You, The Customer
- Readily Handle Modifications to Our Standard Products
- Support Long Term Business Relationships
- Provide the On-Going Services You Require
- Guarantee Customer Satisfaction
- Build Motors That Meet and Exceed Your Needs

POWERTEC designs and builds brushless motor products that others wish they could. From the Antarctic to cruising the oceans of the world, from outer space to deep in mines around the world, POWERTEC motors and drives are on the job and ready to do their work 24/7. Chances are, if you have a difficult or even impossible sounding motor application... POWERTEC has probably already been there and done that!

**CUSTOMERS THAT KNOW MOTOR PERFORMANCE AND REQUIRE IT... CALL POWERTEC TO PROVIDE PRODUCTS THAT ANSWER THEIR NEEDS.**

POWERTEC Industrial Motors, Inc. is an affiliate of HBD Industries, Inc. HBD manufactures quality custom-designed and standard industrial products serving many diverse industries and markets. Products manufactured by HBD include: AC/DC/BLDC electric motors, aerospace precision components, budding strip, cemented tungsten carbide parts, closed die forgings, near-net shape forgings and precision-machined components for aerospace, orthopedic and surgical instrument applications, coated rubber fabrics, conveyor belting, drives, ducting, gear reducers, hoses (automotive, aviation, hand-built, industrial, marine and petroleum), material handling products (metal separators/detectors and electromagnetic lifting equipment), power transmission V-belts, rubber bands, rubber roll coverings and ventilation equipment (fans/blowers). For complete details on HBD Industries, Inc., log onto [www.hbdindustries.com](http://www.hbdindustries.com).



**POWERTEC**  
INDUSTRIAL MOTORS

AFFILIATE OF **HBD** INDUSTRIES, INC.



Phone: 803/328-1888

Fax: 803/328-1870

E-Mail: [sales@powertecmotors.com](mailto:sales@powertecmotors.com)

Website: [www.powertecmotors.com](http://www.powertecmotors.com) • [www.hbdindustries.com](http://www.hbdindustries.com)



ISO 9001:2000  
Registered QMS