



POWERTEC INDUSTRIAL MOTORS



**HIGH PERFORMANCE
BRUSHLESS MOTORS & DRIVES TO 400 HP**

We Can Do It Your Way!



CUSTOM DESIGNS? *We Can Do It Your Way!*

Started in 1987, Powertec Industrial Motors, Inc. quickly established itself as an innovative motor and drive manufacturing company delivering products customers needed to meet their application requirements and make their projects successful.

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 BLDC (brushless) motors and drive systems produced by Powertec.

Powertec designs and manufactures a broad range of BLDC motors and pre-engineered drive systems, ranging in power from fractional to 400 HP. Housed in NEMA standard frames, many of the products designed and produced by Powertec are utilized for power transmission and various motor control applications. Operating a large manufacturing facility in Rock Hill, SC, Powertec engineers and employees have developed and produced a wide variety of custom designed, motor and drive products for customers that control velocity, torque and position helping them boost their productivity, efficiency of motion and deliver the performance required for the job.

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. Time after time, Powertec's application-engineered motors and drive products have delivered the kind of performance and reliability required to meet and exceed the toughest applications.

Outlined below is a brief listing of some standard motor and drive products available from Powertec. However, designing and manufacturing custom motor and drive products others can't is what Powertec does best. We welcome tough, motor design problems and the opportunity to produce an application-engineered motor and/or drive product to meet your specific need. Shown throughout this brochure are just a few examples of the severe environments, demanding performance and unique customer applications being served by motor and drive products designed and produced by Powertec. In each example, Powertec products met and exceeded the customer's application and performance requirements.

FACTORO BRUSHLESS SERVOMOTORS

- E 180 Frame
- E 210 Frame
- E 250 Frame
- E 280 Frame
- E 320 Frame

BRUSHLESS DC MOTORS

- NEMA 42 Frame
- NEMA 140 Frame
- NEMA 180 Frame
- NEMA 280 Frame
- NEMA 320 Frame
- TENV Enclosure
- DPFPG Enclosure
- TEAO Enclosure
- DPBV Enclosure

FLEXMAX BRUSHLESS DRIVES

- 1750 RPM Rated Systems – 0.75 to 400 HP
- 2500 RPM Rated Systems – 0.75 to 400 HP



New improved dipper control process for earth/mining shovel buckets is powered by custom designed motor from Powertec. Photos provided by P & H Mining Equipment (Milwaukee, WI).

DIRECT DRIVE APPLICATIONS? We Can Do It Your Way!

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HI-TORQ BRUSHLESS SERVOMOTORS

With torque up to 2685 lbs.-ft. (3640 Nm), the Hi-Torq series of brushless servomotors pack a remarkable amount of torque into a low profile package, making them perfect for your direct-drive applications. These motors provide a superior alternative to many conventional gearbox and belt solutions for your motion control applications.



Powertec Industrial Motors, Inc. is an affiliate company of HBD Industries, Inc. HBD manufactures quality, application-engineered custom designed and standard industrial products serving many diverse industries and markets. Products manufactured by HBD Industries, Inc. include AC/DC/BLDC electric motors, aerospace precision components, budding strips, cemented tungsten carbide parts, closed die forgings, coated rubber fabrics, conveyor belting, drives, ducting, gear reducers, hose (automotive, aviation, hand-built, industrial, marine and petroleum), material handling products (metal separators/detectors and electromagnetic lifting equipment), power transmission belts, rubber bands, rubber roll coverings and ventilation equipment (fans and blowers). For complete details on HBD Industries, Inc. log onto www.hbdindustries.com.

SHIPBOARD APPLICATIONS? *We Can Do It Your Way!*



When the USS Roosevelt (The Big Stick) was deployed to the Middle East, we were there.



Powertec motors and drives power the Warp Winch Drive on the USS Roosevelt.

WHY POWERTEC?

Whenever Size, Efficiency and Performance Matters!

- Product PERFORMANCE is measured by torque, power and response unequalled in the world.
- Company PERFORMANCE is measured by our ability and willingness to deliver a custom product to specification on time.



This is just one of the many Powertec successful shipboard applications, both military and commercial.

MILITARY APPLICATIONS? *Powertec Can Do It!*

Powertec has become the vendor of choice on US Defense projects and military/defense projects for countries around the world requiring high-performance motors and controls.

WHY?

Powertec designs and manufactures the broadest range of permanent magnet brushless motors in the world. Everyone knows the advantages PM Brushless Motors provide:

- Small Size/Weight
- High Efficiency
- High Performance
- High Reliability

Equally as important, Powertec has a proven track record on projects such as:

- US Navy Advanced Gun System
- US Missile Defense System
- US Shipboard Applications
 - Warring Winch
 - Anchor Windlass
 - Padeye Motor
 - Ventilation Fans
 - And more!



Padeye Motor



Antenna Drives for US Missile Defense System



Advanced Gun System
– one of five axis drives

SEVERE ENVIRONMENTS? *We Can Do It Your Way!*

From the Antarctic to the Atlantic Ocean, from outer space to deep in a mine or from an explosive atmosphere to no atmosphere, Powertec motors and drives are on the job. Chances are, if you have a difficult application in a severe environment... we've already been there. And if we haven't, we'd love to go there with you!



Coal conveyor drive
for mine duty



Ice drilling application in the
Antarctic!



On-deck ocean going duty, fiber optic cable
laying application.

POWERTEC
INDUSTRIAL MOTORS

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