B&B Benchmark

B&B ELECTRIC MOTOR CO. WICHITA, KS

THE NEWS FROM B & B

We want to thank our many customers for their continued patronage of our business this past year. Our customers are the greatest. We strive to give you the very finest quality of workmanship and the best service in the area. Our workmanship is second to no other service shop in the area. We are here to keep your manufacturing lines running and your customer service to your customers at the utmost highest quality and service. With our highly technically trained employees we can handle any of your electromechanical and mechanical needs. Our machine shop facilities can repair or fabricate new blower shafts, weld, repair and machine your mechanical parts, rebuild gearboxes, all types of pumps as well as sales and service of new motors, pumps, and Variable Frequency Drives. We are distributors of genuine parts and service for Bell & Gossett, **Armstrong,** and **ABS** commercial pumps. We are an electric motor distributor for Lesson. Lincoln, TECO-Westinghouse, Baldor and **A. O. Smith** motors, as well as many other motor manufacturers. We are a distributor for several Variable Frequency Drive manufacturers, TECO-Westinghouse, Yaskawa, Baldor, Leeson, Motortronics, and Benshaw. We service everything we sell. We do on site electromechanical services. Balancing and Vibration Analysis, Laser Alignment, motor and pump repairs at your facility or manufacturing locations and many other services to make your job easier. Give us a call the next time you have an electromechanical need.



WHO'S WHO AT B & B

We want to introduce you to one of our newer employees. His name is Darin Bell. Darin was born and educated in Wichita, Kansas. Darin attended USD 259 and Graduated from West High School in 1987. After graduation he worked for several local grocers until 1991. In 1991 he started working for Foley Tractor as a heavy equipment mechanic, rebuilding transmissions, hydraulic pumps, motors and cylinders. He learned to do line boring and automatic welding processes. In 1998 he started working for Cessna Aircraft as a special equipment fabricator. He designed and fabricated ground support equipment as well as one-off test equipment for testing labs and experimental. He was laid off due to the recession and was unemployed for some time. We heard about his capabilities through a friend of his and we were able to make him an offer and he began his employment January 4, 2010. He hired in as a machinist helper. That did not last long as he learned the task quite readily and learned to do balancing, welding techniques and electric motor repairs. He has become another valuable asset to our company, strengthening the many talents of our employees. He is married and has four sons. We are proud of Darin and his very strong work ethic.





EFFECTIVE DECEMBER 19, 2010 "ALL ELECTRIC MOTORS SHALL BE PREMIUM EFFICIENT"

The National Electrical Manufacturers Association (NEMA), along with the Energy Independence & Security Act (EISA), signed into law on December 19, 2007, that all motors manufactured after December 19, 2010 shall be Premium Efficient manufactured motors. Any motors manufactured prior to the date can be sold from manufacturers and distributor inventories. In 2005 NEMA Premium Efficient motors were required to be retrofitted for all Federal Facilities. Not all of the motors were properly applied. The lack of information by motor manufacturers and the National Electrical Codes caused many motors to be installed in applications that caused more consumption of electricity rather than a reduction of electrical usage. Previously the motors effected by the guidelines were 200 HP and less.

Under the new NEMA Energy Efficient Guidelines all motors to 500 HP of low voltage (not more than 600 volts) shall be Premium Efficient and will comply with NEMA MG1, Table 12-11 Energy Efficient Levels.

PREVIOUS DESIGNS NOW COVERED BY NEW GUIDELINES

- U-Frame Motors
- Design C Motors
- Close Coupled Pump Motors
- C-Face or D-Flange Motors with Base
- Vertical Solid Shaft Normal Thrust Motors (P Base)
- 8-Pole Motors
- 3 Phase Motors of Not More Than 600 Volts, This Includes IEC Metric Frame Motors 90 Frame-up
- 201-500 HP Low Voltage 2-8 Pole General Purpose Motors

PRODUCT CATEGORIES THAT ARE COVERED

- 1-200 HP General Purpose Motors
- 230/460 Volt 3 Phase Design B Motors
- Foot Mounted Motors
- C-Face Foot Mounted Motors
- TEFC, ODP Motors
- Explosion Proof Motors
- Severe Duty Motors
- Washdown Duty Motors
- Brake Motors where the brake can be removed and the motor used alone
- NEMA 140 Frames to 449 Frames
- IEC Metric 90 Frames and Larger

PRODUCT TYPES THAT ARE NOT COVERED

- Single Phase Motors
- D.C. Motors
- 48-56 Frame Motors (single & three phase)
- Multi-Speed Motors
- Medium Voltage Motors (2300-6000 Volts)
- Design D Motors (High Slip)
- Adjustable Speed Motors (Motors that can't be line started as Design A or B Motors)
- Definite and Special Purpose Motors
- Intermittent Duty Motors
- Integral HP Motors with Gearing or Brake Units that cannot be separately removed
- Submersible Motors

Motor manufacturers must manufacture and ship only Premium Efficient motors after December 19, 2010. They will be able to sell and ship any motor designs previously manufactured before December 19, 2010. All Imported motors and equipment must be compliant. Most of our American Electric Motor Manufacturers Import Electric Motors. All Imported and IEC Metric motors have to be Premium Efficient compliant and meet the Premium Efficient Standards effective December 19, 2010. The enforcement of the manufacturing standards will be handled by Customs and the Department of Energy staff under current Federal Laws. The Department of Energy wants to require small motors to be Premium Efficient. NEMA has testified twice before the DOE asking that the small single and three phase motors not be included in the requirements. DOE is to review the testimonies and make a determination on the proposed requirement. The DOE wants to reduce Electricity usage by 15 percent by 2020. DOE wants to cut overall Power Consumption by 30 percent by 2020. Over 60 percent of all Electrical Power is consumed by electric motors. The DOE wants to reduce Industrial Plant Energy costs through efficient motor drive systems. The use of Premium Efficient Motors and Variable Frequency Drives will give you a Premium Efficient system for your manufacturing plant, office building or anywhere a motor is driving a piece of equipment.

FACTORS TO CONSIDER WHEN CONVERTING TO PREMIUM EFFICIENT MOTORS

No Pre-Epact motors can be rebuilt to meet Premium Efficiency standards. All pre-epact motors can still be rebuilt. The law applies only to new manufactured motors not rebuilt or repaired motors or equipment. The efficiency level of a premium efficiency motor varies from .5 to 2.5 percent more efficient than the standard high efficiency Epact motors. The Premium Efficient Motor is expensive to purchase and the payback will vary as to the hours of running time and the load conditions of the motor. It is a Must to put a Variable Frequency Drive on a Premium Efficient motor. Premium efficient motors have a much higher inrush of current on startup compared to a standard or high efficient motor. In some cases it may be necessary to up size the wire size feeding the motor to keep the conductors cool during startup. You may be required to increase your protective devices to keep from tripping breakers and blowing fuses due to the increase of inrush current. This is the reason for using a Variable Frequency Drive to give you a soft start and speed control. The Premium Efficient motors run at a higher RPM which is getting close to the synchronous speed of the motor. When you have a piece of equipment that has been running on a standard duty motor and you replace the motor with a Premium Efficient motor, you will overload the new motor causing the motor to consume more energy than the old motor due to the RPM change. Premium Efficient motors can be rebuilt and rewound providing the electric motor repair shop follows the proper procedures for rebuilding. Not all service shops have the proper equipment or staff to rebuild a Premium Efficient motor and maintain the efficiency level of the motor.

B & B Electric Motor Co. has New Premium Efficient motors in Stock. B & B Electric Motor Co. has highly skilled technicians and the equipment to properly rebuild and rewind your Premium Efficient motors. Your motor will be rebuilt and returned without loosing any of its performance or efficiency.



B & B Electric

Motor Co.

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24 HOUR EMERGENCY SERVICE

CALL

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OUTSIDE WICHITA CALL (TOLL FREE) (800) 499-1238

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New
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Efficient Motors

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Serving our Customers Since 1969

