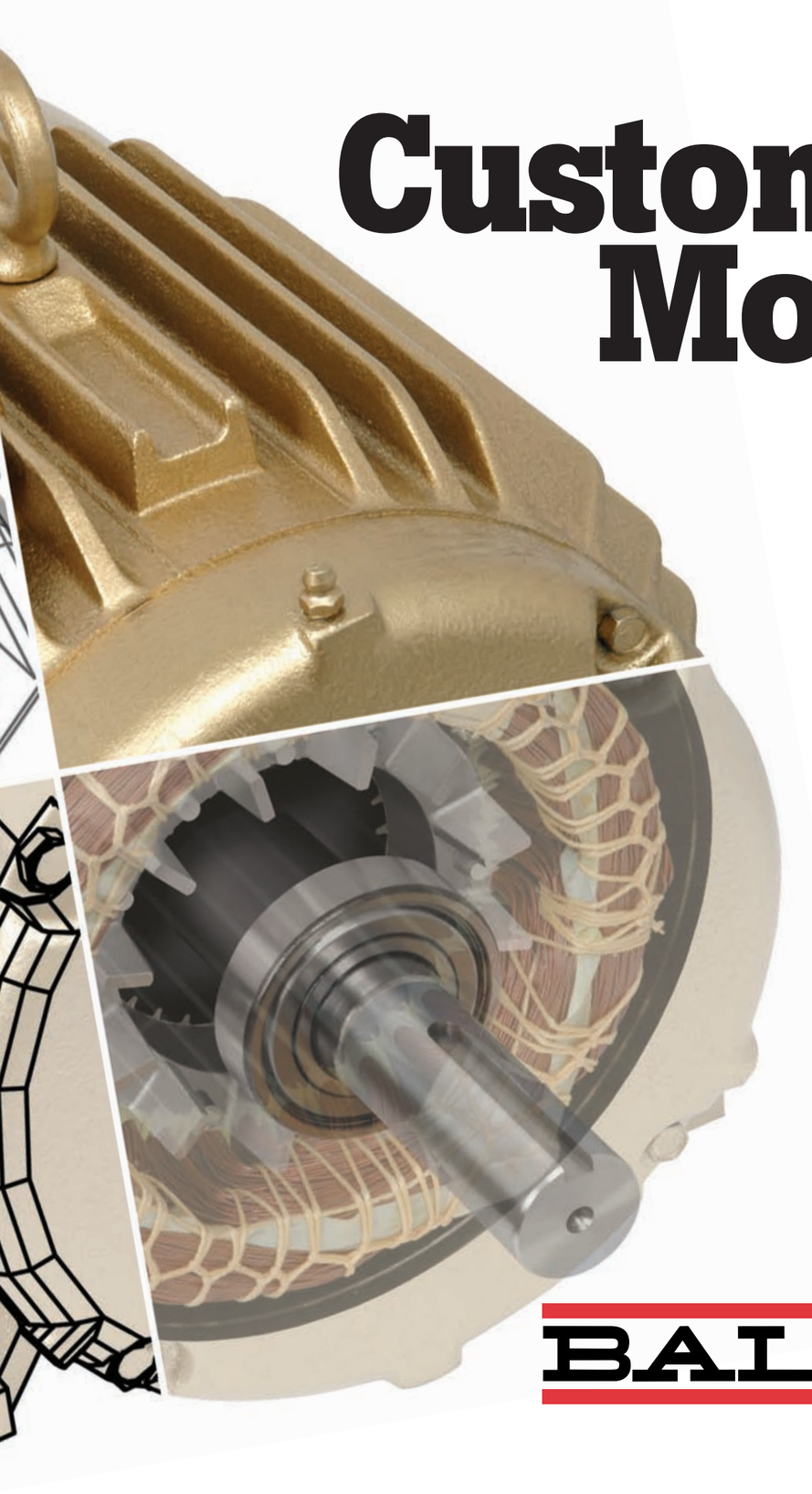
Custom Motors

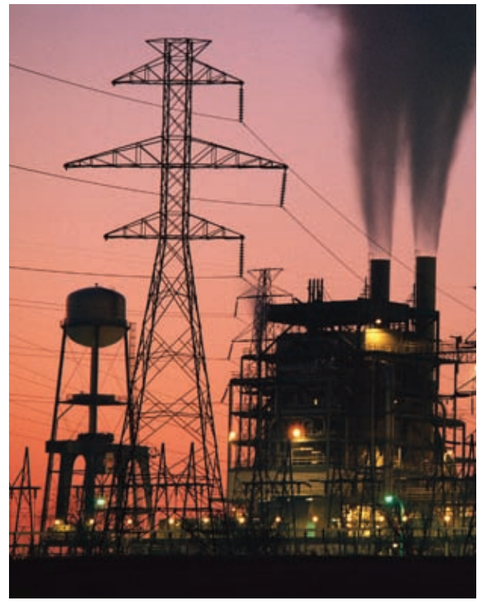


BALDOR®

Baldor Custom Motors

A Custom Approach Since 1920

Since our beginning in 1920, Baldor has earned a reputation throughout the world as a designer, marketer and manufacturer of the highest quality, most reliable electric motors you can find anywhere. Baldor has been a key partner to equipment designers, consulting/specifying engineers, plant maintenance, repair and operations personnel. Every day we design and manufacture a large variety of custom motors. In fact, our custom motor designs exceed 100,000 different specification types.



We Build Them Your Way…FAST!

And, because we know you can't wait forever to get them, Baldor guarantees the fastest delivery in the industry. In fact, your custom motor order will typically be shipped to you in two weeks or less.

CUSTOM BALDOR MOTORS

Any Application Any Spec

Whether you need special flange, foot or face-mount configurations, custom shafts, special windings and performance requirements… even custom colors and nameplates, you spec it and Baldor can build it. With decades of experience as product development partners with our customers, you can count on Baldor.

BALDOR®

We'll Never Say It Can't Be Done

We start with reviewing what YOU need. After all, it is your application. From an array of enclosures, finishes, colors, mountings, windings, shafts... the list of custom features available is almost unlimited. Rapid prototypes and extensive testing of every Baldor custom motor are two other reasons why Baldor custom motors consistently exceed our customer's expectations.

We can't possibly list all the customization features we can perform for your next project. But we can give you a general idea of the type of custom work we perform everyday. Contact us to discuss your particular custom motor challenge and see for yourself why Baldor is the custom motor leader. Custom motors built the way you want them, when you want them. That's the Baldor way!

Enclosures

Motors are available in Totally Enclosed Fan Cooled, Totally Enclosed Non-Ventilated, Totally Enclosed Air Over, Totally Enclosed Blower Cooled, Explosion Proof and Open Drip Proof. Stator housings are available in cast iron, stainless steel, steel and extruded aluminum. Weather Protected Type I and II are also available on above NEMA frames.

Custom Colors and Finishes

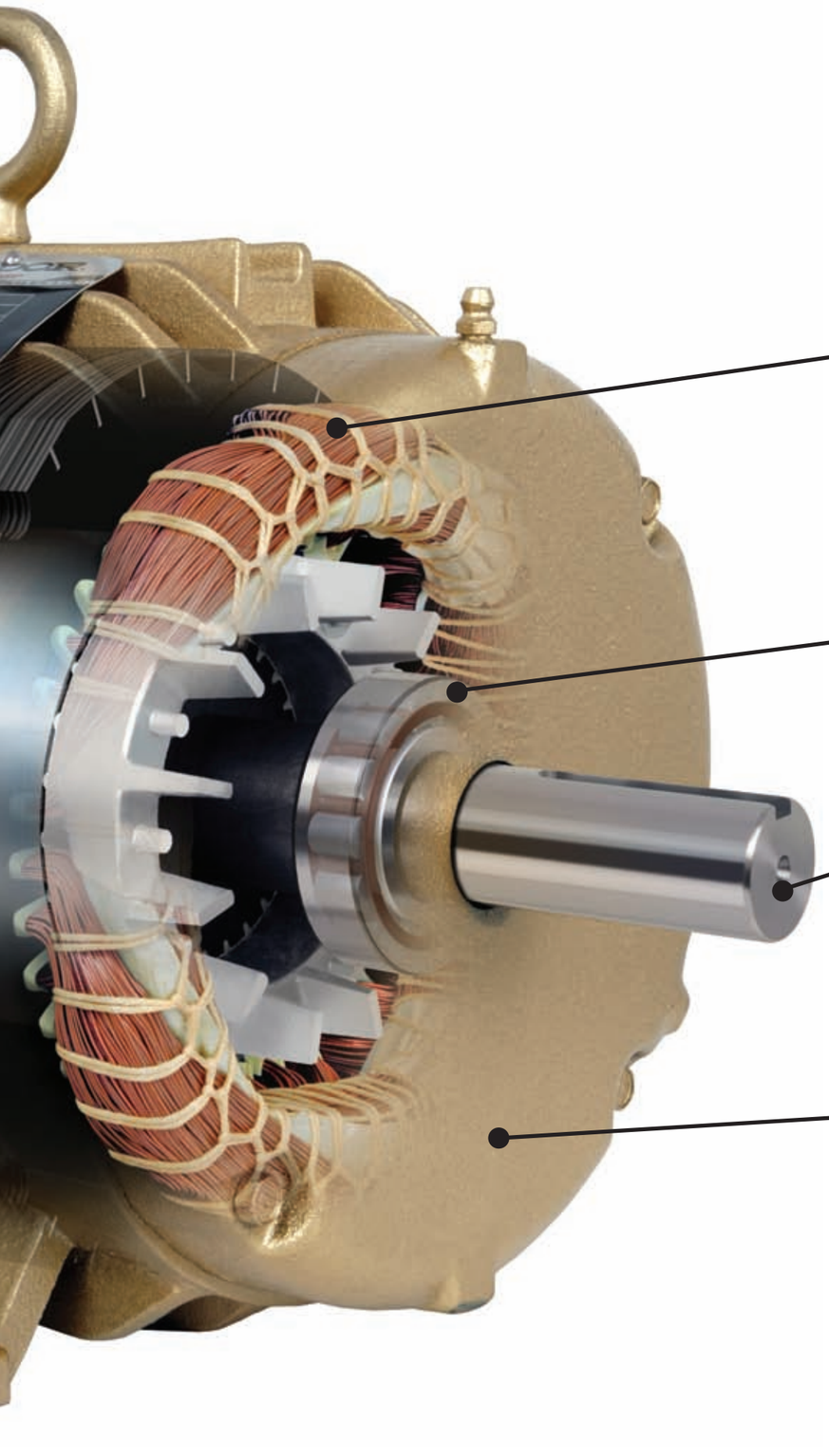
Baldor is able to supply motors in practically any color, shade or finish. Just provide the color you want and we'll match it. Hammer tone, epoxy finishes or food grade paints are also available.

Conduit Box

Conduit box location can vary depending on your application. Terminal blocks can be provided. Special boxes for Explosion Proof, Severe Duty and Washdown applications are also available.

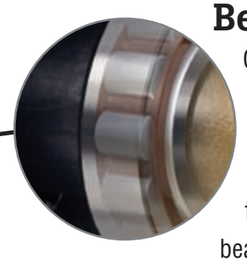
Base Mounts

In addition to the standard NEMA mounting, IEC metric, pre-1964 and pre-1952 NEMA mountings can be produced. We also manufacture numerous sidewall and ceiling mount designs. Unique mounting configurations can be developed to match your specs.



Windings

Part winding, start, wye-delta, multi-speed and other special winding configurations, in 50 or 60 Hz are available. Special winding protection includes vacuum pressure impregnation (VPI), epoxy encapsulation, tropicalization and weatherproofing. Power cords with plugs, connectors, or special lengths and lead colors are available.

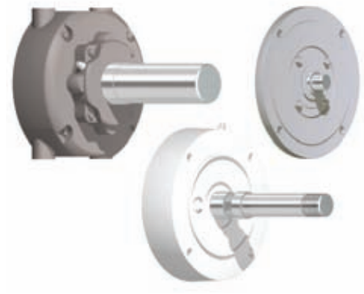


Bearings

Open, single shield, double shield or sealed bearings can be provided. Depending on your application, rolling element bearings (ball, roller, thrust or sleeve bearings) may be available. All bearing choices can be provided with standard temperature, low temperature, high temperature, food grade or customer supplied grease. Thermocouples added to the bearing housing or BTDs (bearing temperature detectors) can be included.

Shafts

Baldor has designed and manufactured custom shafts in over 30,000 different configurations. Motor shafts can be designed to fit applications requiring special lengths, diameters, materials or custom machining. A few other custom shaft features available include: flats on shafts, threads, drilled and tapped holes, tang shafts, tapered shafts, and shafts requiring internal or external splines. Motors can be ordered in double shaft configurations with custom machining on both ends. Shaft materials include many types of steel alloys including stainless steel.



Mounting Configurations

Numerous face mounting designs are available including standard NEMA C or D flanges as well as P base designs. Metric faces and flanges can also be ordered. Other mounting types include hydraulic two and four bolt pump mounts, square flange pump mounts and close-coupled pump mounts. Custom variations on any of the listed mountings can be performed.

Custom Solutions

Reverse Osmosis

Baldor excelled in designing and producing a special motor to power reverse osmosis equipment used on ships to transform seawater into fresh water. The application required a motor that would not stress the load of the generators on the ship as the water treatment equipment ran. Baldor engineers determined a high torque, low starting current motor was the answer. Our engineering group developed new winding and rotor designs to meet the customer's needs. After extensive testing, a custom motor with a unique rotor slot geometry was produced. This new design reduced the inrush current of the motor at startup while providing the required torque…all without affecting the onboard generator performance.

A Huge Challenge

Baldor engineers provided a solution for an OEM who asked us to develop a custom motor for use on their 300+ ton payload mining trucks. These trucks are driven by electric motors on each wheel. The customer needed a way to dissipate heat caused from regeneration of electricity when the trucks were braking. The motor also had to handle constant vibration during the time the truck was in motion. Baldor designers created a custom 100 Hp DC motor to power a fan that cooled load resistors as the truck brakes were applied. Special high strength bolts were incorporated into each motor to hold the field coils in place and protect against vibration. The field and interpole coils, as well as the motor armature, were vacuum pressure impregnated to protect from constant on the job contaminants. Special insulation was used to combat high voltage spikes and epoxy paint was applied inside and out to resist rust and corrosion.

Performance Under Pressure

Baldor designers used their expertise and experience to design and produce a 700 Hp motor for an OEM to power a fan inside the high heat environment of their autoclaves. The motor shaft had to operate in the extreme heat produced by the autoclave and the motor itself had to operate in very high ambient temperatures for extended periods of time. Working closely with the local Baldor office and the OEM, our engineers designed a premium efficient Super-E® motor with a 22-inch long stainless steel threaded shaft to drive the blower fan inside the autoclave. Special high temperature grease, insulation and thermocouples were designed into the motor along with 7-foot long power leads to enable the motor to operate in the area of the autoclave.

- Energy Efficient
- Unmatched Quality
- Superior Reliability
- Quickest Delivery Available

BALDOR®

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