

*Marathon[®] Series
Corrosion Resistant
Mounted Products and
Bearing Units*

*Composite Series
Standard Duty*



*HD_i Series
Heavy Duty Cast Iron*



*XD_s Series
Extreme Duty Cast Stainless*



Marathon® Series Corrosion-Resistant Mounted Products and Bearing Units

Few industries challenge bearings with a harsher operating environment than the food and beverage industries. Perhaps no industry works as hard to meet regulations governing contamination. When MRC® introduced the Marathon® Series Composite Mounted Bearing Units, it was possibly the best solution to the problems associated with bearing failures.

Now the composite units are joined by our **HD_i**—heavy-duty cast iron—and **XD_s**—extreme-duty cast stainless steel—to more thoroughly meet the needs of the industry.

The HD_i Series was developed to provide corrosion resistance together with the strength of cast iron but eliminate the problem of flaking nickel plating. These units consist of a ZMaRC® coated cast iron housing in combination with a ZMaRC coated insert bearing and are priced competitively with other nickel-plated versions. (See page 3 for more details.)

For extremely challenging applications, MRC offers the XD_s Series, with top-of-the-line corrosion resistance and the greatest housing strength available within the Marathon line. These housings utilize an AISI 300 series cast stainless steel housing together with MRC's proven stainless steel insert bearing. (See page 4 for more details.)

The entire maintenance-free Marathon Series is built to resist corrosion and is designed for extended service life.

At the heart of the units are high-quality, corrosion-resistant insert bearings, available with MRC's ZMaRC coating or with stainless steel construction. The units' multifunction low-friction, rubber seals are bonded to AISI 304 stainless steel for superior corrosion resistance, and sealed-for-life lubricants are USDA approved.



A Composite Housing with Integrated Performance Features



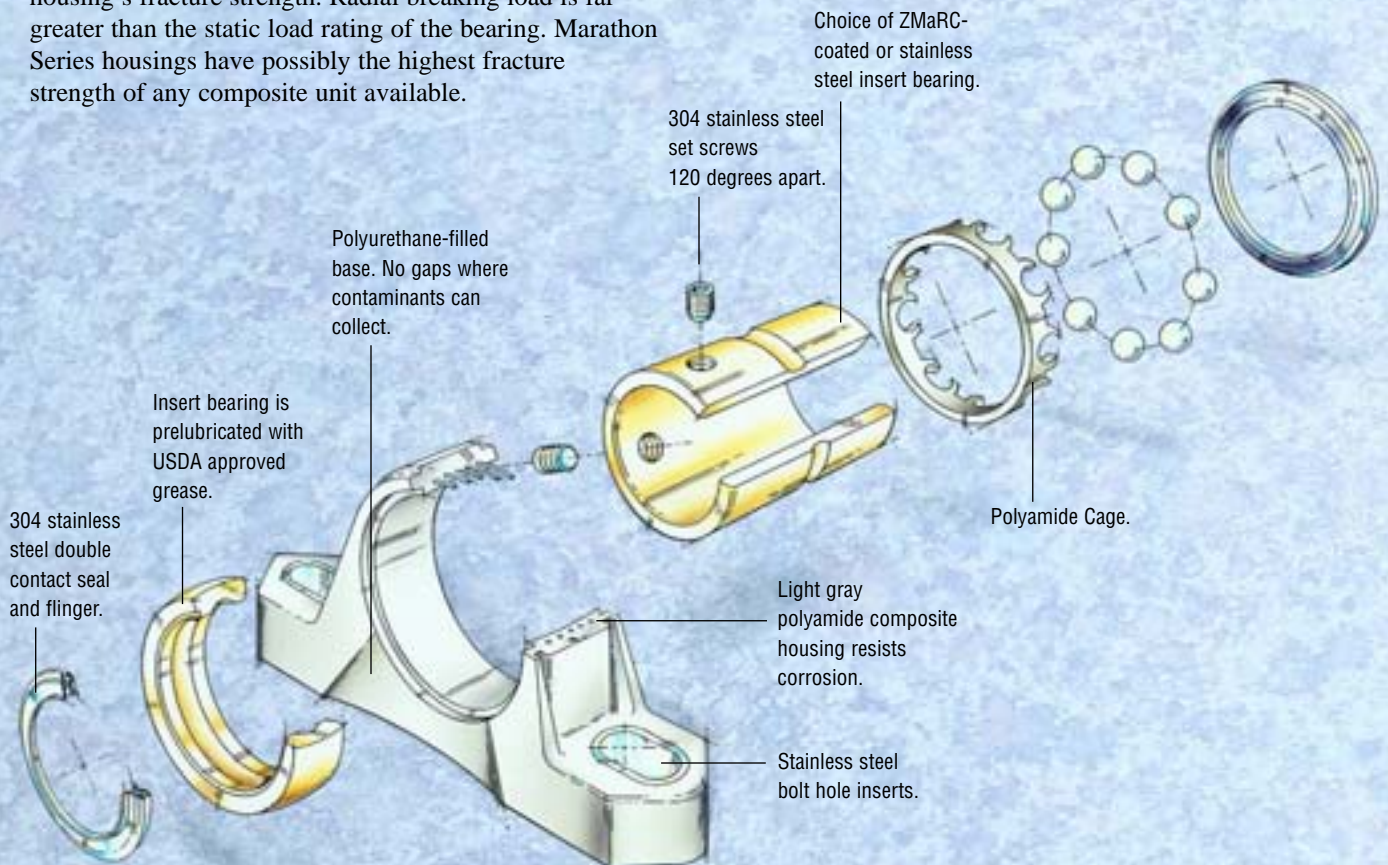
The Marathon Series' composite housing resists citric acids, cooking fats and most chemicals used in food and beverage processing. It is constructed of a thermoplastic composite material that can be up to 61% lighter than cast iron housings. Its spherical bore accommodates the insert bearing's spherical outer surface, enabling the unit to fully compensate for initial bearing seating misalignment.

Plus, the housing is loaded with design and performance advantages:

- Steel coils embedded in the housing contribute to the housing's fracture strength. Radial breaking load is far greater than the static load rating of the bearing. Marathon Series housings have possibly the highest fracture strength of any composite unit available.

- A polyurethane-filled housing base enables the unit to meet flush with its mounting surface. Flush surface-to-surface mounting eliminates gaps—potential areas for contaminants to collect.
- 300 Series stainless steel bolt hole inserts provide added strength to each housing foot and prevent corrosion.
- Marathon Series units are available in the following housing designs to meet the needs of most food and beverage processing applications:

- pillow blocks
- two- or four-bolt flange
- tapped base
- three-bolt bracket flange
- narrow and wide slot take-up
- low backing height pillow block
- low profile two- and three-bolt flange
- four-bolt piloted flange
- hanger



NEW! ZMaRC® Coated Cast Iron Units with ZMaRC coated Insert Bearings

MRC's newest solution to the unique needs of the food processing industry is **Marathon HD_i**—a *new* corrosion-resistant, heavy-duty cast iron series of bearing units.

The cast iron housings, protected with MRC's proven ZMaRC coating, eliminate the flaking problems associated with nickel-plated products. The housings are matched with our ZMaRC-plated, lubed-for-life, quality insert bearings.

The HD_i series provides a number of cost-saving and performance benefits. As with all Marathon products, MRC's patented two-part stainless steel seals allow the units to operate in heavy washdown environments without regreasing. And since there is no need for relubrication, continuous grease purge is never a problem.

Advantages of the HD_i Series:

- Complete ZMaRC coating on all housing surfaces for long-term corrosion resistance.
- ZMaRC coating will not flake off.
- Housings and bearings are resistant to the majority of common washdown solutions.
- HD_i units require no relubrication, even in a washdown environment—saving time and money—while providing a cleaner-running unit.
- Open spaces on bases and backs of ZMaRC-coated housings are filled with polyurethane, eliminating areas

where moisture and product can collect, resulting in a more sanitary housing design.

- All HD_i units are factory lubed-for-life with USDA approved H1 grease.
- Two-part sealing for maximum protection

Like all Marathon bearing units, Marathon HD_i units contain an AISI 304 stainless steel inner seal and outer seal. These components work in tandem to form an extremely effective sealing system. (See page 5 for more details.)

The added strength and durability of the Marathon HD_i housings make them particularly well suited for applications in red meat, pork and poultry processing facilities where both housing strength and corrosion resistance are a concern.

The HD_i Series is available in the following housing designs:

- pillow blocks
- two- or four-bolt flange
- tapped base



Extreme Duty Cast Stainless Steel Mounted Units

Composite housing units are suitable for many food and beverage industry applications. However, there are extremely challenging applications that require an even more durable unit—the XD_s line of Marathon units. These housings are AISI 300 series cast stainless steel with MRC's proven stainless steel insert bearings.



The cast stainless housings are the strongest housings offered in the Marathon family. For any application where loads are very heavy or where shock loads are possible, the extra strength and toughness of the stainless steel housings are a benefit. Also, in applications where failure of the housing could result in injury, such as in cases where workers pass below a portion of a machine, the safety factor inherent in the cast steel housing is desirable.

Exposure to extremely aggressive washdown chemicals is another reason to choose these stainless units. While composite and plated housings are resistant to most of the chemicals in use today, they can be susceptible to some strong concentrations of chlorine, hydrogen peroxide and other chemicals. The cast stainless housings, made of an AISI 300 series stainless material, are not affected by those same chemicals.

The XD_s cast stainless housings were designed from the ground up for use in food and beverage applications. The bases are cast flat with no recesses to trap debris and bacteria, and the exposed surfaces of the housings have no unnecessary crevices or pockets. Consideration was given to surface roughness as well. The XD_s units' smooth cast surfaces minimize the material trapped on the surface allowing a more thorough cleaning.

Like the other members of the Marathon family, the XD_s series incorporates the proven insert bearing design and patented sealing arrangement (see page 5), and are also greased for life and maintenance free.

Marathon XD_s is MRC's top of the line unit. Whether

the application involves heavy loads, aggressive chemicals or intolerance to bacteria buildup, the XD_s units are up to the challenge.

Housing styles available include:

- pillow block
- two- and four-bolt flange
- tapped base

MRC XD_s Extreme Duty Machined Stainless Steel Mounted Units

MRC can also offer additional housing styles in machined stainless steel. These units also utilize AISI 300 series stainless steel but, rather than using a cast housing, these units are machined from solid stainless plate. Due to this manufacturing difference, these housings offer even better surface roughness since all surfaces are machined.

These are especially suited for applications where surface roughness is critical, such as instances where chronic bacterial problems have existed. As with the cast housings, there are no unnecessary recesses or cavities to trap debris.

Just like the cast stainless units, MRC's excellent stainless steel insert bearings are used.

In addition to the styles listed above, are available in housing styles:

- three-bolt bracket flange
- wide and narrow slot take-up units
- compact two- and three-bolt flange
- piloted flange units

All machined housings are available through the MRC MTO (Made To Order) program.

