

DODGE

Dodge® modified mounted bearings

Solving mounted bearing relubrication issues



Challenge: Relubrication not delivering full bearing life

A pumpkin processor experienced noise from a mounted ball bearing on their pulper application after only a month in service, then failure and replacement after 6-8 weeks. Recommended relubrication was not effective. With their prime operation period approaching, they needed to eliminate this downtime to meet demand.



Solution

The immediate cause of failure was not obvious to the customer. Working with the Dodge sales engineer and engineering team, it was determined that the bearing failures were caused by grease wash out as well as preload of bearing at installation.

ABB provided a modified Dodge mounted ball bearing that minimized heat build up. The design included a simpler shaft attachment design to ensure proper installation. A patented bearing cage was added which maintained a cooler operating temperature as well retained grease in spite of daily washdown.

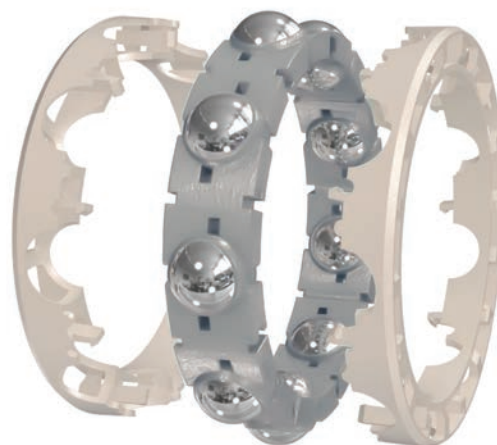
Dodge Max life cage

Patented two-piece design that creates a constant grease compartment around each of the rolling elements.

- Compartments provide constant contact between balls and grease to prevent wear and minimize friction.
- Holds in the grease to prevent it from being washed out during high pressure cleaning

Result

The modified bearing solution stopped grease wash out and provided an easier installation. The pumpkin processor saw downtime due to bearing failure eliminated, saving \$35,000 in lost production.



*Grey represents grease in cage

Dodge modified mounted bearings

Mounted bearings that meet your application needs

Local manufacturing and customer service

Building Dodge mounted bearings locally, with modification capability, means that you get the bearing you need, when you need it. Being local also means that you get the availability and personal customer service you deserve.

Local sales engineers can work with you to review your specific standard bearing challenges and find the modification required for your specific application.

Dodge application engineering

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Local Manufacturing Video

Mounted bearing modification capabilities include:



Sealing

- Accommodate high speeds and temperatures
- Minimize drag
- Protect bearings from harsh environments

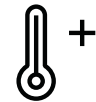


Lubrication

- Supply specific greases and factory fill rates
- Provide bearings without grease for customer fill
- Plug bearings to reduce maintenance
- Plug bearings to avoid the addition of potentially incompatible grease by customer

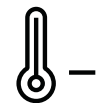
Other modifications are available upon application and product review. Multiple modifications within a single unit may also be available.

Application specific mounted bearing modification capabilities include:



High temperature applications

- Designed especially for use in temperatures ranging from 215° to 400° F



Low temperature applications

- Designed especially for use in temperatures ranging from -20° to -40° F



Air handling applications

- Specifically designed and tested for high speeds and quiet operation