Introduction

Kaydon Bearings has been one of North America’s leading producers of large diameter ball and roller bearings since it was established in 1941, and is considered one of the pioneers of large bearing technology.

Engineering Capability

In addition to a range of catalog slewing ring bearings, Kaydon can provide a wide range of custom manufactured bearings to meet your specifications. Upon request, Kaydon’s experienced and knowledgeable professionals can provide engineering expertise and analysis in a wide variety of areas. Our engineering team uses current computer technology supported by advanced resources to analyze the most challenging specifications. With these resources we are able to rapidly provide cost-effective solutions that will meet your demanding specifications. The breadth of our product line will allow you to select the appropriate bearing type to suit your requirements.

Manufacturing

Kaydon is able to produce bearings up to 20 feet outside diameter using the most modern facilities and equipment in the industry. The fully integrated manufacturing facilities enable Kaydon to have complete control over all aspects of quality and provide effective scheduling to meet customer requirements. Continuing expansion and manufacturing versatility have led to our position as a leading supplier of all types and sizes of bearings for a variety of load combinations. Manufacturing flexibility allows us to produce small quantity orders to meet your needs.

Coatings

To enhance corrosion resistance, Kaydon has the capability to provide a painted surface, a zinc thermal spray coating, or other coatings as specified by the customer. Additionally, we offer Endurakote® plating which provides corrosion resistance and is effective in increasing wear resistance in sliding surface contacts.

Quality

The Kaydon quality assurance program meets the requirements of ISO 9001:2000 in addition to many other stringent military and government requirements. Kaydon uses methodologies such as Six Sigma and Lean Manufacturing to maintain world-class operations. These support our commitment to establish and maintain an environment of continuous improvement. Product quality is further ensured by testing and measuring using the latest technology which allows us to meet the stringent requirements of our customers.

Support Network

From design to final delivery, a dedicated customer service team is available to support you all the way through the process. Kaydon has a strong team of highly trained field personnel to support both our direct customers and our extensive distribution network. Our experienced engineers are also available to provide on-site trouble-shooting and installation support as requested and appropriate. Worldwide, we have service facilities in strategic areas to provide the full technical and sales support that our customers deserve and expect.
Product Overview and Selection Guide

RK Series

- Four-Point Contact Ball
- Flanged cross-section on non-geared rings
- Internal, external, and non-gear versions available from stock

HS HT MT & KH Series

- Four-Point Contact Ball
- Rectangular cross-section
- KH Series are preloaded with precision runouts
- External and non-gear versions available from stock

XT Series

- Four-Point Contact Ball
- Wide range of diameters and various cross-sections
- More capacity potential than RK & MT Series due to size
- Internal, external, and non-gear versions

Design

- 20” to 47” OD
- 4” to 66” OD
- Up to 240” OD

Potential Capacities

- Moment – 141,000 ft-lbs
- Thrust – 175,000 lbs
- Radial – 35,000 lbs

- Moment – 900,000 ft-lbs
- Thrust – 1,150,000 lbs
- Radial – 230,000 lbs

- Moment – 10,000,000 ft-lbs
- Thrust – 6,000,000 lbs
- Radial – 1,300,000 lbs

Typical Applications

- Small cranes
- Industrial positioners
- Rotary tables
- Rotating displays
- Bottling machines
- Conveyors

- Cranes and Manipulators
- Aerial lifts
- Wind turbines/Solar panels
- Position/Index tables
- Radar & Satellite antennas
- Robots
- Medical equipment

- Cranes
- Aerial lifts
- Excavators
- Wind turbines/Solar panels
- Utility derricks
- Log loaders & feller bunchers
- Mining equipment

Sample Application

Bottling Machine

Robot

Excavator
# Product Overview and Selection Guide

## Design

<table>
<thead>
<tr>
<th>DT Series</th>
<th>XR Series</th>
<th>TR Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight-Point Contact Ball</td>
<td>Cross Roller</td>
<td>Three-Row Roller</td>
</tr>
<tr>
<td>Two matched rows of four-point balls</td>
<td>Single row of rollers having alternating orientation</td>
<td>Three independent rows of rollers, oriented for optimal performance</td>
</tr>
<tr>
<td>Potentially 80% more capacity than four-point of a given diameter</td>
<td>Greater stiffness and dynamic capacity than a four-point contact bearing</td>
<td>Greatest stiffness and capacity for a given diameter</td>
</tr>
<tr>
<td>Rectangular cross-section</td>
<td>Internal, external, or non-gear</td>
<td>Internal, external, or non-gear</td>
</tr>
</tbody>
</table>

## Size

<table>
<thead>
<tr>
<th>DT Series</th>
<th>XR Series</th>
<th>TR Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 240° OD</td>
<td>Up to 315° OD</td>
<td>Up to 315° OD</td>
</tr>
</tbody>
</table>

## Potential Capacities

<table>
<thead>
<tr>
<th>DT Series</th>
<th>XR Series</th>
<th>TR Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moment – 20,000,000 ft-lbs</td>
<td>Moment – 7,000,000+ ft-lbs</td>
<td>Moment – 50,000,000+ ft-lbs</td>
</tr>
<tr>
<td>Thrust – 9,000,000 lbs</td>
<td>Thrust – 3,000,000+ lbs</td>
<td>Thrust – 18,000,000+ lbs</td>
</tr>
<tr>
<td>Radial – 2,000,000 lbs</td>
<td>Radial – 1,400,000+ lbs</td>
<td>Radial – 4,000,000+ lbs</td>
</tr>
</tbody>
</table>

## Typical Applications

<table>
<thead>
<tr>
<th>DT Series</th>
<th>XR Series</th>
<th>TR Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excavators</td>
<td>Radar &amp; satellite antennas</td>
<td>Tunnel boring machines</td>
</tr>
<tr>
<td>Large cranes</td>
<td>Turrets</td>
<td>Cranes</td>
</tr>
<tr>
<td>Marine cranes</td>
<td>Machine tools</td>
<td>Excavators</td>
</tr>
<tr>
<td>Wind turbines</td>
<td>Tunnel boring machines</td>
<td>Stackers and reclaimers</td>
</tr>
<tr>
<td>Telescopes</td>
<td>Mining</td>
<td>Heavy mill equipment</td>
</tr>
<tr>
<td>Mining equipment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Sample Application
Applications - Renewable Energy

Wind & Solar
Applications - Medical
Applications - Heavy Equipment
Applications - Machinery

Applications - Military

Image Courtesy of US Army.

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