



an SKF Group brand

Kaydon **infinite**<sup>®</sup>  
bearing solutions

for Commercial Aerospace Applications



# High-performance bearings that save weight

Reali-Slim® thin section bearings not only meet the demanding performance requirements of the commercial aviation industry, they help you save weight and improve fuel economy.

Designed with a cross-section that stays constant as bore diameter increases, these precision components from Kaydon Bearings

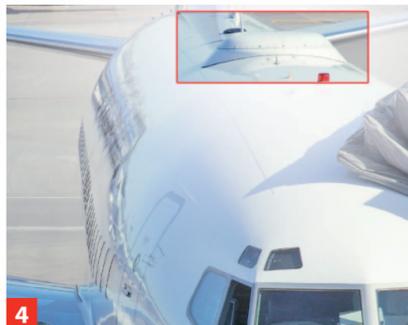
give you the dynamic capacities of heavier bearings in a smaller envelope. Key benefits include:

- weight savings
- space savings
- long life and reduced maintenance
- excellent stiffness
- reduced friction and low torque (even in extreme temperatures)

Over the past six decades or so, Reali-Slim bearings have helped designers overcome countless challenges. They can help you, too. For a no-obligation consultation with one of our expert application engineers, call Kaydon Bearings today.

## Typical Applications

1. Flight control systems (flap gearboxes and actuators)
2. Landing gear
3. Rotorheads and transmissions
4. Radar and antenna



# Bearings designed with your needs in mind

## Many styles and sizes

Kaydon offers the industry's most comprehensive range of thin section bearings, with bore sizes from 3/4" to 40" (19mm to 1m) and cross-sections from .187" x .187" to 1" x 1" (4.75mm to 25mm).

Here is a summary of available styles; you'll find full details in Kaydon's Catalog 300, available in print or in PDF format at [www.kaydonbearings.com](http://www.kaydonbearings.com).

- Radial
- Angular
- 4-point contact
- Metric
- Open
- Sealed



**Open bearings** – keep friction low and are easily cleaned and lubricated

- Ultra-Slim® bearings
- Extra-light versions
- Stainless steel
- Corrosion resistance (e.g. Endurakote® plating)



**Sealed bearings** – seals and/or shields retain lubricant without increasing space requirements

- Duplexed face-to-face
- Duplexed back-to-back
- Ground for universal duplexing

## Materials and options

Every Kaydon bearing is designed to meet or exceed specific requirements, then precision-manufactured for top performance and long life.

Races are typically made of AISI 52100 steel or 440C stainless steel with steel or ceramic spacer balls. We also make

them of high-temperature alloys, like M50 steel, Pyrowear® and BG42® (trademarks of Carpenter Technology Corp.). A variety of seals, shields and separators can be specified, as well as coatings and lubricants to meet specific customer requirements.

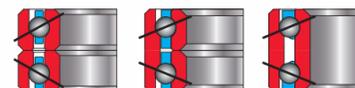
## Duplex mountings

Duplex mounted bearings provide the best combination of low torque and high stiffness in demanding applications.

Kaydon Super Duplex bearings have a single common race (outer or inner) with two ball paths, both ground in the same operation to minimize runout and torque. This maximizes precision, assures alignment between the rows

despite load conditions or thermal cycling.

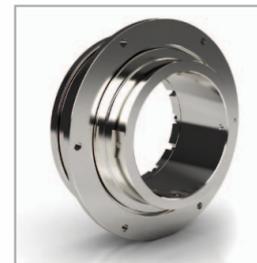
Kaydon Cartridge bearings go a step further, with a single inner and single outer race for optimal performance.



Duplex Super Duplex Cartridge

## Assemblies

Kaydon often applies its considerable expertise in high-precision design and manufacturing to integrate flanges, gears, mounting tabs, and more. We can also integrate bearing races into surrounding components, creating high-value assemblies that enhance capacities and performance.

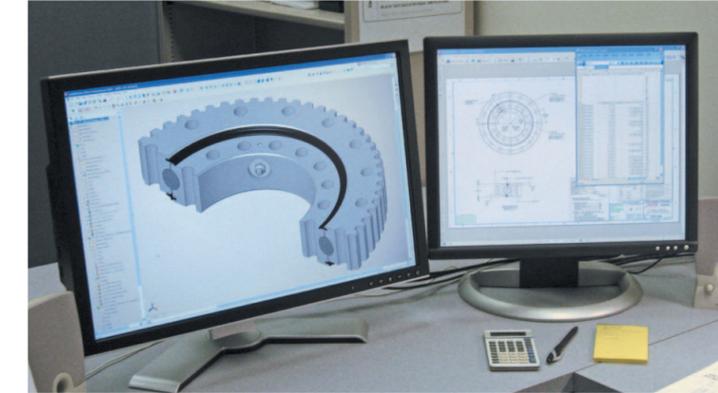


Integrated bearing assemblies are custom-engineered to meet specific needs.

# Advanced engineering and manufacturing capabilities

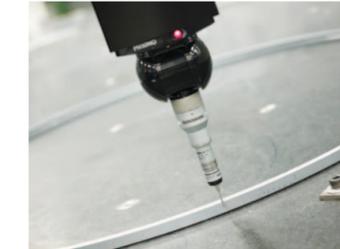
## Custom designs

When it comes to bearing design, you'd be hard-pressed to find a more qualified source than Kaydon Bearings. With an average of over 20 years of experience (much of it bearing-specific) and the latest design software, Kaydon product engineers have what it takes to solve the toughest design problems. Custom solutions are a specialty.



## AS9100C certification

Kaydon's strategically-located manufacturing operations have earned AS9100C certification, and assembly departments are ISO-certified. Six-Sigma, Lean Manufacturing and other proven methodologies assure that customers get the quality and attention to detail they deserve.



Certified production facilities assure Kaydon of control over quality and scheduling to meet your requirements.



## Inspection and Analysis

Kaydon technicians conduct comprehensive bearing inspections with state-of-the-art equipment. They analyze everything from standard dimensions to raceway shape, geometry and surface topography, and apply decades of real-world experience to interpret the results.



A Scanning Electron Microscope (SEM) analyzes material, contamination and surface features.

## Customer support

Kaydon customers are supported by a dedicated service team from design through delivery, and beyond. Field service engineers are available globally from our Michigan headquarters and a network of qualified local distributors.

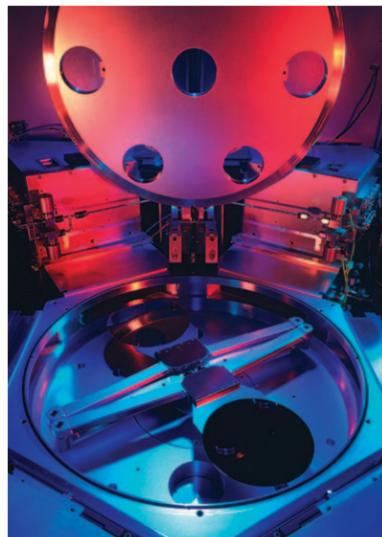
# Kaydon Bearings: a proven partner

Kaydon Bearings, an SKF Group company, has been the foremost global manufacturer of standard and custom thin section bearings since introducing the thin section concept in the 1950s. We are also a leading manufacturer of high-level bearing assemblies and slewing ring bearings, and a major supplier of remanufactured and new replacement bearings.

Kaydon's history of innovation began when the fledgling Kaydon Engineering Corporation took on the challenge of designing and manufacturing large gun mount bearings for the U.S. Navy in World War II. We've been solving customers' problems — in a wide range of markets — ever since.

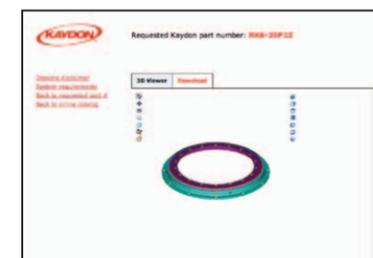
Engineered solutions proved a very successful strategy, and the company grew steadily through expansion and acquisitions. In 1984 it went public as Kaydon Corporation, producing a variety of performance-critical products for aerospace, industrial, energy, medical, and electronics customers. Kaydon joined the SKF Group in 2013.

Today Kaydon Bearings supplies leading companies in aerospace and other industries with high-precision bearings and assemblies they can count on, cycle after cycle. For more information, we invite you to visit [www.kaydonbearings.com](http://www.kaydonbearings.com).



Visit [www.kaydonbearings.com](http://www.kaydonbearings.com) for the latest releases, newest features, and downloads of catalogs, white papers, software, and CAD drawings.

For catalogs, white papers, software and more, click on **"Resources"**



For 3-D CAD drawings, register/log in and click on the **"Products"** tab:

1. Choose a bearing type (e.g. Slewing ring bearings) from the drop-down menu, then a Series (e.g., RK slewing ring bearings)
2. Scroll to the bottom and click on a part number (e.g., RK6-25PIZ)
3. In the new screen, click the "Download" tab



**Kaydon Bearings**  
2860 McCracken Street  
Muskegon, Michigan 49441 U.S.A.  
231.755.3741 tel  
800.514.3066  
231.759.4102 fax  
[bearings@kaydon.com](mailto:bearings@kaydon.com)  
[www.kaydonbearings.com](http://www.kaydonbearings.com)

