SOLVING PROBLEMS

With Pitchlign® Heavy Duty Needle Roller Bearings

Our housing envelope is limited, yet we need greater bearing load capacity."

RBC's unique TJ TandemRoller®, Pitchlign heavy duty needle roller bearing design delivers 10% to 40% greater load capacity than equivalent sized single roller per pocket designs.

The TandemRoller advantage is the use of a larger number of rollers per bearing.

Full roller complement bearings provide more rollers but loose a significant amount of capacity due to roller skewing and consequential heat build-up. They also contain less space for lubricants.

TJ TandemRoller bearings utilize precision cages that provide close tolerance roller guidance.

"Bearings are the "weak link" in our products' longevity. We need longer life!"

An increase in fatigue life that accompanies higher load capacity is an additional benefit of the TJ TandemRoller design.

Typically, fatigue life will be 37% to 200% greater in a TJ bearing compared to an equivalently sized single roller per pocket bearing.

Long service life applications such as pumps have greatly benefited from the use of TJ TandemRoller bearings.

"There are several seal designations called out in the RBC Pitchlign catalog. Which one is right for my application?"

R (single seal) or RR (double seal) designation: The seal lips face inward to retain lubricant for maximum service life.

S or SS designation: The seal lips face outward to exclude foreign matter.

R and S combinations: Can be designated to provide both lubricant retention and exclusion of foreign matter.

A new style is under development at RBC that will provide the benefits of both the R and S style in a single seal.

"Economy is very important to us. How can we reduce Pitchlign bearing costs?"

Many of our bearings use fully machined roller retainers (cages).

If the volume can support tooling costs, economical "wrap and weld" cages can be specified.

RBC® BEARINGS

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"The load in our application exceeds even the capacity of the TJ TandemRoller bearing. We have no available room to increase the housing bore dimension."

Consider using RBC's DTJ Double Row TandemRoller Bearing. This is essentially the equivalent of two TJ bearings in a single outer race.

The resultant bearing is twice the width of a single TJ TandemRoller bearing.

The advantage presented by the DTJ is a reduction in components and ease of assembly.

"We'd rather not heat treat our shafts to provide the proper running surface for the rollers of the Pitchlign bearings in our application."

Our hardened and ground inner rings are ideal for use as a running surface for our bearings.

Consult our Pitchlign catalog for proper bearing to inner ring combinations.

"The size we need isn't in your catalog."

Specials are a way of life for RBC. Make sure to present the details of the modifications or special work needed.Blueprint review often yields an acceptable solution.

"We're currently assembling loose rollers into machined raceways to provide for a planetary roller array. Can RBC offer an alternative?"

Our unique Inverted Pitchlign roller bearings are possible time and money savers for these types of applications.

Rollers are pre-assembled into precision inner raceways. Assembly is simplified and the need to handle many individual parts is reduced.

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