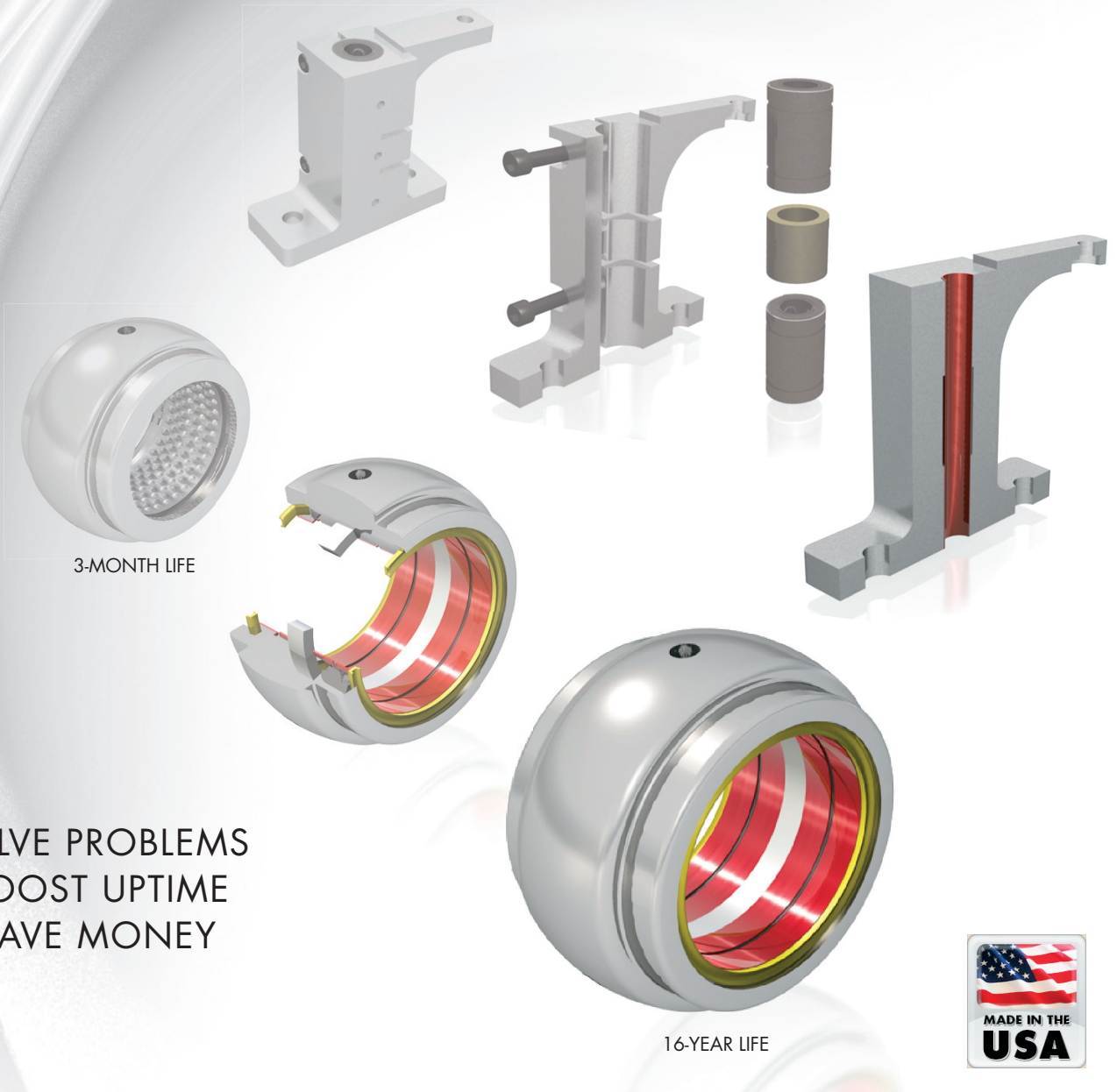




CUSTOM SOLUTIONS

simplicity[®]

SELF-LUBRICATING BEARINGS



SOLVE PROBLEMS
BOOST UPTIME
SAVE MONEY





Since 1983, PBC Linear™, A Pacific Bearing Company has been an in-house manufacturer of linear bearings and specialized bearing materials for medical, packaging and many other applications requiring solutions specifically tailored to the customer. Our 150,000 ft² manufacturing floor is fully equipped to produce custom designs on time and on budget using a multitude of machining processes:

- CNC Turning
- CNC Milling
- Inside & Outside Diameter Grinding
- Center-Less Grinding
- Straightening
- High-End Assembly



MODIFIED STANDARDS

Need a special adjustment to an existing product? PBC Linear is up to the task. We can specially modify, integrate or adjust our products to custom-fit your application. From additional tap holes, lengths and mounting to fully optimized bearing solutions.

Custom bearings and bearing assemblies can be designed (or re-designed) to solve specific application problems, lengthen service intervals, improve equipment performance or save energy. PBC Linear welcomes the opportunity to explore how a new design, or an existing updated design, can result in lower cost, longer bearing life, and better system performance.

MODIFIED STANDARDS

► CUSTOM ID, OD AND LENGTHS

- Inside diameter lengths ranging from 1mm-400mm
- Outside diameter lengths ranging from 3mm-500mm
- Cut-to-length products made to order

► FLANGE, SPLIT AND PILLOWBLOCK CONFIGURATIONS

- Full assortment of size interchangeable flange, die set, sleeve and pillow block housing assemblies
- Customized for ensured application fit
- Capable of tight tolerances

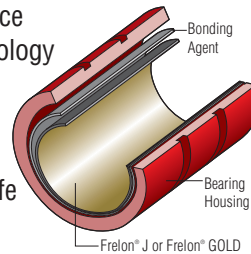
► MILLING, TURNING & MACHINING

- Limitless mounting, tap hole and dowel options provide superior assembly and installation

► FRELON® LINER SURFACE MODIFICATION

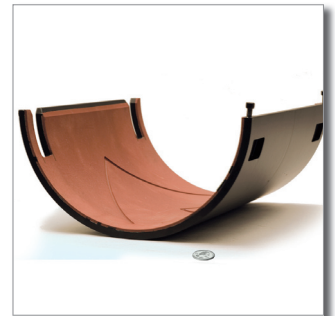
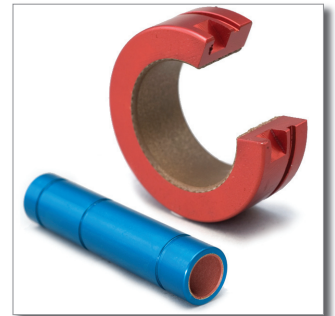
- Improved machine performance with proven Simplicity® technology (*see side bar*)

- Custom milled oil reservoirs and chevrons enhances Frelon's self-lubrication and life



► ACCESSORIES (SEALS, O-RINGS ETC.)

- Complete stock of seals, scrapers, o-rings, zerk fittings and felt wicks to optimize application performance



TO LEARN MORE ABOUT PBC LINEAR CUSTOMS SOLUTIONS CONTACT AN APPLICATION ENGINEER AT 1-888-777-1375.

PBC LINEAR CASE STUDIES

OPTIMIZED SOLUTIONS

How about a fully optimized bearing assembly? Put our engineering team and in-house manufacturing resources to the test. PBC Linear can work with you to create a solution that simplifies assembly, improves performance and reduces cost. View some of our case studies below:



CASE 1: Simplicity® Doctor Bearing for Paper Mill

Problem: A paper mill's rolling element doctor bearings were pre-maturely failing; causing high replacement costs and unplanned machine downtime on a monthly basis.

Optimized Solution:

- Custom doctor bearings with Frelon® liner
- Specially milled oil reservoirs for product longevity
- Double-lip seals contain lubrication

RESULT: The paper mill noticed immediate and long-term improvement in running performance. 16 years later, the bearing was still operating at full capacity.

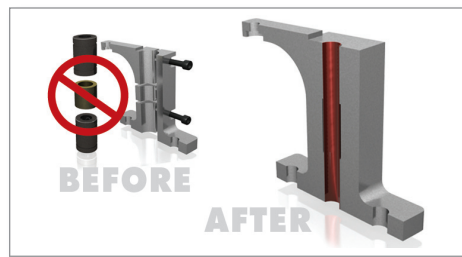
CASE 2: Simplified Specialty Bearing Assembly

Problem: A linear bearing assembly containing numerous components was costing a specialty equipment manufacturer thousands of dollars in annual parts and labor costs.

Optimized Solution:

- PBC Engineers worked with manufacturer to simplify design
- Custom bearing assembly eliminated mounting components and alignment steps
- Integrated Frelon® liner provides smooth performance

RESULT: The complex assembly process was reduced down to a single step, single component installation to decrease labor costs and enhance application fit.



OPTIMIZED SOLUTIONS

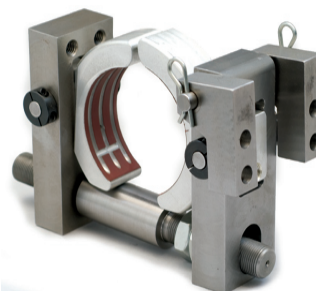
CASE 3: Roller Bearing vs. Custom Plane Bearing on Wood Sander

Problem: Misalignment and heavy shock loads led to failed roller bearings, unplanned downtime and constant replacement costs for the wood-working manufacturer.

Optimized Solution:

- Custom mounting clamps eliminate misalignment
- Simplicity Frelon liner absorbs shock and tolerates extreme heat
- Specially milled oil reservoirs ensure long operation under continuous use

RESULT: The wood sander's operational lifetime was increased from 1 week to 1 year under continuous use, saving the manufacturer \$15,000.00 in parts and labor.



simplicity®

A SOLUTION BUILT FOR ALL EXTREMES

Temperature extremes, heavy particulate, wash-down/submersion and shock vibration are all common obstacles that cause failing ball bearings.

PBC Linear designed the Simplicity® linear bearing as the solution. With no rolling elements to cause stick-slip, the maintenance-free Simplicity® bearing CANNOT catastrophically fail and ensures a long wear life; even in the most demanding environments.

No additional lubrication required; the Simplicity® bearing is a clean, green and widely applicable linear motion solution.

APPLICATION WORKSHEET

CONTACT INFO

Company _____

Name _____

Phone _____

E-mail _____

GENERAL

New Design Replacement Part

Part # _____

Current Problems: _____

PBC parts per machine: _____ # of machines: _____

Annual Quantity _____

Current Parts Cost \$ _____

Current Assembly Cost \$ _____

TOTAL COST _____

Target Cost \$ _____

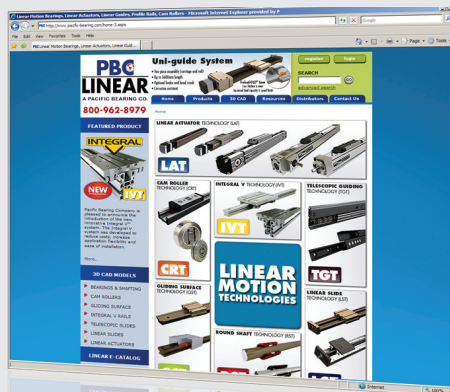
SPEED & LOAD

Static Loading: _____ min. _____ max.

Desired Stroke: _____ mm/in.

Cycles per Hour: _____

Hours per Day Operated _____



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TECHNICAL DATA

CAD Drawing Provided: Yes No

3D Models Provided: Yes No

Assembly Drawing Provided: Yes No

Please send files to: appeng@pbclinear.com

Timeline: Urgent Future

3-6 Months 6-12 Months

Follow-up: Salesman Contact

Application Engineer Contact

Send CAD files

Send Catalog

Send Quotation

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www.pbclinear.com

6402 Rockton E. Road Roscoe, Illinois 61073 USA