

Linear Shafting

Engineered For Maximum Linear Bearing Performance



Introducing

simplicity **60 PLUS** S H A F T I N G



- Creators of Simplicity self-lubricating bearings
- Made in the USA

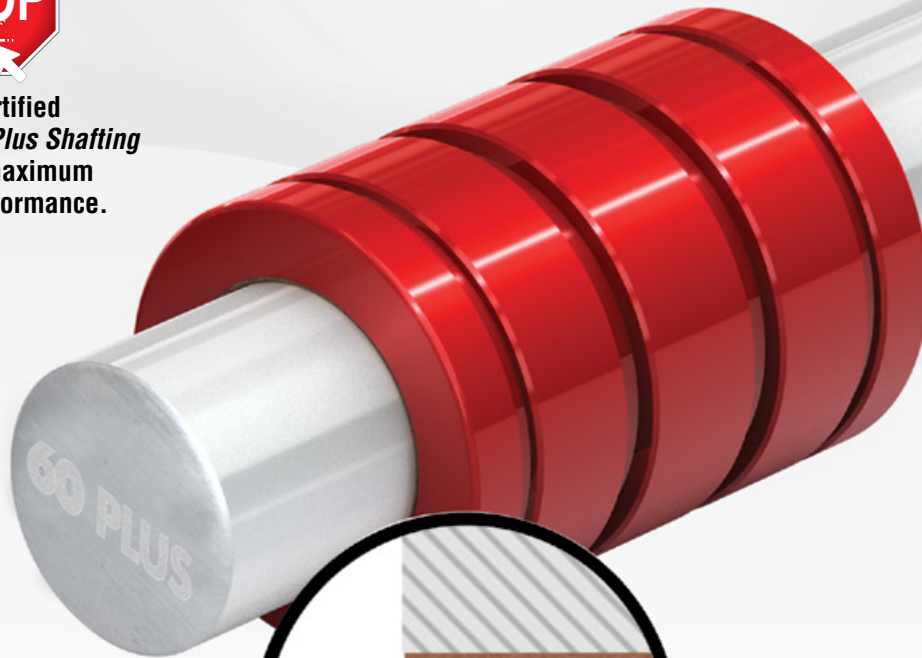


Only certified
Simplicity 60 Plus Shafting
provides maximum
bearing performance.

PBC Linear's® development team, working in close conjunction with engineers from **Lee Linear**®, have together formulated a linear shaft designed specifically for optimal bearing performance – **Simplicity**® **60 Plus**® Shafting.



- 40+ years of experience
- Largest USA manufacturer of shafting



Optimized Shaft Finish
for Frelon® Transfer

The Frelon® break-in and transfer process operates at maximum efficiency with **Simplicity 60 Plus Shafting** resulting in true self-lubrication and the longest life possible.

Get Maximum Performance with Optimized Simplicity 60 Plus Shafting

SIMPLICITY 60 PLUS SHAFTING

- Optimized shaft surface finish for plain bearings
- Faster break-in and better Frelon® transfer for plain bearings
- Longest bearing life possible, less down time and maintenance

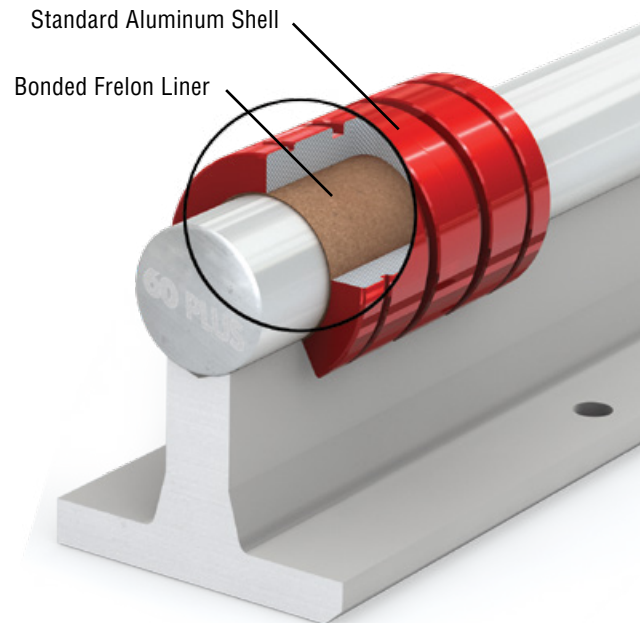
SIMPLICITY® PLAIN BEARINGS

The optimized shaft surface finish is engineered for the Frelon break-in and transfer process of Simplicity linear plain bearings. Frelon transfers to shaft surface creating a self-lubricating condition while fines embed in the liner eliminating shaft damage. Only Simplicity 60 Plus Shafting is optimized for plain bearings.

- PTFE deposits fill the gaps or valleys in the surface of the shaft creating a self-lubricating condition
- No added grease or oils are required



Only certified *Simplicity 60 Plus Shafting* provides maximum bearing performance.



STANDARD SPECIFICATIONS

Surface Finish: Optimized for Frelon transfer

Stock Lengths: 8 to 16 feet. Joinable longer lengths.

Ends: All ends are chamfered. End machining options are available.

Hardness: 1060 steel to RC 60 Plus
440C stainless steel to RC 50 Plus

Straightness: 0.001" - 0.002" per foot cumulative for 1/2" diameter and up

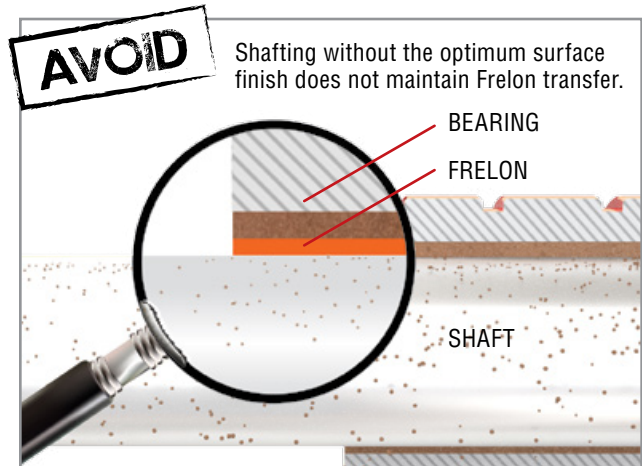
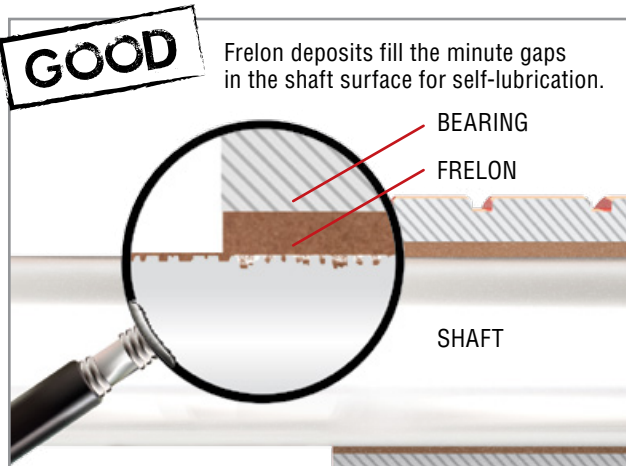
Length Tolerances:	NOMINAL SHAFT DIAMETER	TOLERANCE
	1/4" to 1-1/4"	± 1/32"
	1-3/8" to 2"	± 1/16"
	2-1/2" to 3"	± 1/8"

LINER-TO-SHAFT TRANSFER PROCESS

When a Simplicity bearing is installed, the Frelon material experiences a transfer process. Small amounts of the liner are transferred to the surface of the shaft creating a truly self-lubricating condition. Simplicity 60 Plus Shafting is optimized for this process.



WARNING If a shaft is finished to less than 8 Ra, the lubricating Frelon liner deposits have nowhere to settle and fall away from the shaft. The bearing liner continues to transfer material to the shaft resulting in premature wear and shortened bearing life.



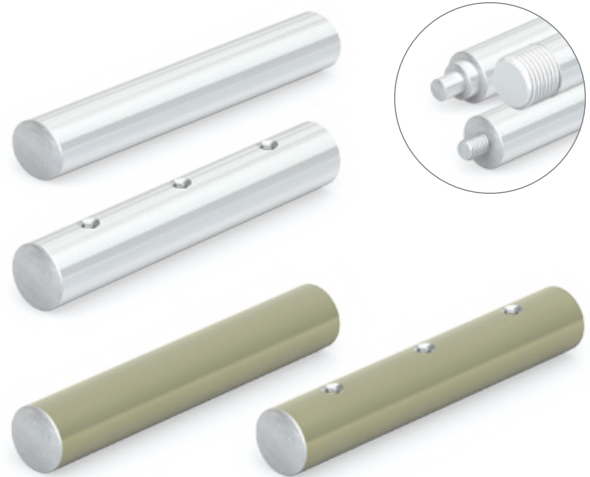
Types of Shafting, Support Rails, and Assemblies

Shafting is cut-to-length. Max lengths vary per size. Machining options available.

RC60 STEEL & 440 STAINLESS STEEL

- RC 60 Plus® case hardened steel & 440 stainless steel RC 50 Plus™
- Straight to within .001" to .002" per foot cumulative (1/2" dia. and up)
- Optimized for linear ball and Simplicity® plain bearings

I Inch Series **M** ISO Metric Series



CERAMIC COATED

- Aluminum alloy base material, RC70 ceramic coated finish
- Optimized for Simplicity Frelon GOLD® lined bearings
- Non-magnetic and vibration resistant
- Weld splatter, paints, contaminants will not stick

I Inch Series **M** ISO Metric Series



SUPPORT RAIL

- Anodized aluminum support rail
- Undrilled and predrilled aluminum support rail in inch sizes from 1/2" - 3"
- Lengths up to 48", can be end joined for longer lengths
- Can mount shafting vertically or horizontally

I Inch Series



RAIL ASSEMBLY SUPPORT RAIL & SHAFT

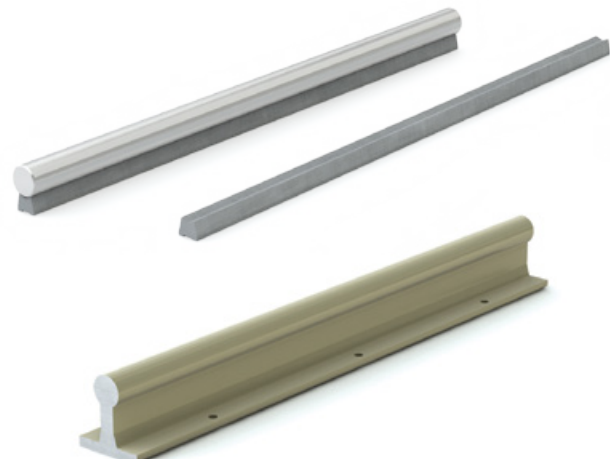
- (2) piece assembly RC60 steel shaft and aluminum support rail standard
- Other shaft materials – 440 stainless steel & ceramic coated aluminum

I Inch Series

LOW SUPPORT RAIL

- AISI C-1018 steel LSR shaft support has a 40% lower profile than other support rails
- Standard length is 48"

I Inch Series



ONE-PIECE RAIL ASSEMBLY

- Aluminum alloy base material and RC70 ceramic coated finish
- One-piece integrated design eliminates assembly time
- Economical, lightweight alternative to traditional steel shafting
- Optimized for Simplicity Frelon GOLD® lined bearings

I Inch Series

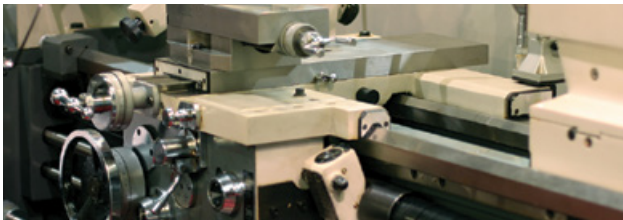


- Made in the USA
- Quality shafting and superb customer service
 - 40+ years of experience
 - Fast quotes and fast deliveries
- Engineered for accuracy and performance



THE RIGHT MATCH FOR YOUR ENVIRONMENT

General Industrial



RC 60 Steel

Washdown



300 Series Stainless Steel

Weld Slag



Ceramic Coated Aluminum

Special Treatments



RC 60 Steel, 300 Series Stainless Steel, 400 Series Stainless Steel, Ceramic Coated Aluminum, Special Plating and Machining Available

Learn more about **Simplicity[®] 60 Plus[®] Shafting**
at www.pbclinear.com or call (800) 962-8979.



Watch the shafting video
on www.pbclinear.com



Email an Application Engineer