



APPLICATION STORIES

The Application:

Simplicity Tolerates High Load Capacity

In this material handling application, the ball bearings would catastrophically fail because the pillow blocks couldn't handle the high load capacity required by the Strator Shaft Loader.

The front positioned pillow blocks on the X axis kept losing ball bearings due to the concentrated load from the Z axis. The original system was built with four re-circulating ball pillow blocks on each axis. The Z axis used 1-1.25 inch x 34 inch unsupported parallel case hardened shafting, and the X axis used 1 inch x 50 inch fully supported parallel case hardened shafting.

Cycle Information

Saddle Load: 100 lbs. @ 6" C.G. from rear of front most bearings. Z axis load of 75 lbs. @ 8" C.G. From front of bearings, plus a gripper load of 20 lbs. @ 16" C.G. from front bearings.

Bearings per rail: 2 @ 20.5 inch cen.

Actuation: pneumatic cylinder

Stroke: 29 inches

Cycle time: 42 Sec.

The Solution:

The Pacific Bearing territory manager and local distributor recommended retrofitting the shaft loader with a total eight Simplicity® Pillow Blocks, four PN-16s and four P-20s. Because the Simplicity bearings offer a higher load capacity, this customer can avoid changing the entire system over to a larger size re-circulating ball system. Using Simplicity products in this application saved the customer time and money.



Call today! Talk to a real person who is eager to help you.

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