



## Application Story

# Automation and Robotics

### Robotics manufacturer utilizes bearings from PBC Linear for the auto industry

A manufacturer of robotics for a major auto maker needed a slide system that would tolerate tough foundry conditions. Heat, sand, and dirt were common and disruptive to the robotic end effectors. Not only was a linear bearing needed to withstand these tough environmental conditions, but weight reduction in the slide design was also a critical consideration.

### The PBC Linear solution

Simplicity bearings and pillow blocks were recommended for the new slide design. The lightweight aluminum shell reduced overall weight and the bearing also outperformed the linear ball bearing competitors. Shock loads and high temperatures were tolerated, and the sand was kept out of the bearing by tough molythane seals. The result was/is a smooth, quiet operation.

### Results / ROI

Customer is pleased with the performance and weight reduction gained by using Simplicity bearings. Shock loading, temperature extremes and tremendous contamination do not prevent Simplicity from providing long trouble-free bearing life.

#### Details

Components:  
**FL16, FL24, FL32**

Retrofit or OEM: **OEM**

Application: **Automotive**

**Problem:**  
A manufacturer of robotics for a major auto maker needed a slide system that would tolerate tough foundry conditions while reducing the weight of the slide.

**Solution:**  
Simplicity plain bearings and pillow blocks reduced overall weight and outperformed the linear ball bearing competitors under harsh conditions.