APPLICATION DESCRIPTION:
The plastic bottle inspection system transfers new bottles in position for thread, wall thickness, and overall “red-lined” dimension inspection. Bottles are continuously inspected 24 hours a day, 7 days a week. A typical bottle molding machine can mold up to 80,000 per hour.

CHALLENGE:
Avid, Inc. from Greenland, NH provides vision-based measurement and inspection systems for on-line and off-line industrial applications. The challenge was to meet their strong demand for a competitively priced linear actuator that could provide repeatable, reliable, and predictable linear transmission of newly molded plastic bottles through a high speed laser inspection station running in a clean environment.

SOLUTION:
The PDU2’s extrusion design and clean lines were easily adapted to the 80/20 extrusion framework, blending in with other aluminum components. It replaced an outdated system which was about to be eliminated because of its industrial appearance, open carriage concept, and strong influence from other competitors designs. The close system construction offered many benefits when compared to other products that were considered. PDU2 provides a competitively priced linear slide, and features such as extrusion design, sealed mechanical wheels and track, low profile, and the ability to conveniently cut the extrusion to length on-site were important benefits to Avid. Having a local sales representative available along with excellent factory support were also significant considerations.