

COST SAVINGS : \$ 136,308

Application : Transmission Leak Tester

Solution : NH Linear Guides with K1™ Lubrication Unit

INTRODUCTION

An aluminum transmission housing manufacturer was using Teflon-like bushings to transfer a housing into a leak tester. Each housing's casing is pressurized and electronically tested. The imprecise bushings and contamination were creating several test failures. Each failed product test required a new test which greatly affected production and produced 20% failure rate.

THE KEY FACTS

- › Application: Transmission Leak Tester (Country: USA)
- › End-product: automotive
- › Number of machines: 1
- › Status: Imprecise bushings were being used to carry housing into a leak tester
- › Problem: Lack of precision as well as contamination caused several test failures
- › Objective: Reduce failure rate and piece cost

VALUE PROPOSALS

- › NSK engineers evaluated the loads, speeds and environment of the applications and specified the product to be used.
- › NSK suggested that the bushing system be replaced with NSK NH stainless steel linear guides utilizing K1™ lubrication units.
- › After installation, the failure rate reduced to just 6%, which significantly improved their throughput and dropped per piece cost.

Pictured: NSK NH Linear Guide + K1™



PRODUCT FEATURES - NH SERIES

NH series linear guides offer maximum precision combined with extremely high load ratings. Outstanding accuracy means that the object in motion is positioned precisely and moves optimally. It also guarantees smooth, even running.

- › High-speed design is standard
- › High level of precision in different classes
- › Self-aligning feature accommodates misalignment and minimizes internal loads
- › Optional extras:
 - K1 long-term lubrication unit
 - High-temperature design
- › Quiet running
- › Various preload categories

PRODUCT FEATURES - K1 LUBRICATION UNIT

Linear motion made maintenance-free with K1™ Lubrication Units. These patented units provide long-term maintenance-free operation especially in environments where grease replenishment is undesirable or where grease is easily washed away. Fresh, continuous oil flows onto the rail or shaft during operation.

- › Long-term, maintenance-free operation
- › FDA approved option available
- › Available on standard NSK linear guides, ball screws, Monocarrier actuators and Robot Modules
- › Up to 10,000 km without maintenance

COST SAVINGS BREAKDOWN

	BEFORE	COST	NSK SOLUTION	COST
› Production Cost	810 parts per month	\$75,632	940 parts per month	\$64,273
	Total for 12 months	\$907,584	Total for 12 months	\$771,276
			Total Cost Savings for 12 months	\$136,308