# CASE STUDY



# EXTEND LIFE IN WINDOW LIFT CABLES

**INDUSTRY:** Automotive

**APPLICATION:** Window Lift System

COMPONENT: Cable

LOCATION: China



## BACKGROUND

A growing Chinese company that specializes in auto manufacturing took part in a Nye lube seminar. The company was interested in learning more about how synthetic lubricants can improve quality and extend the operating life of their applications. They introduced Nye to their window lift application that is run on a cable system. The lift was using a petroleum-based product that the company wanted to replace to lubricate all components of the window lift system. Compared to petroleum, synthetic lubricants have a longer operating life, broader service temperature range, and are less likely to form carbon deposits that hasten wear.

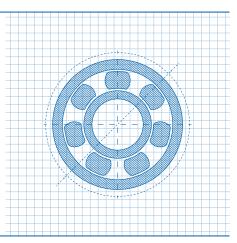
## CHALLENGE

· Can a synthetic grease from Nye outperform the petroleum-based grease in life testing?

### SOLUTION RHEOLUBE<sup>®</sup> 368F

A lithium soap thickened, medium viscosity, synthetic hydrocarbon grease

- · PTFE grease extends operating life better than PAO-based products
- Broad operation temperature
- Enhanced friction reduction capabilities



# RESULTS

Rheolube<sup>®</sup> 368F proved to be superior in temperature and longevity over all PAO-based products tested. The grease was chosen to replace the petroleum product and was also able to lubricate all moving parts of the window lift system. Rheolube<sup>®</sup> 368F has now become the lubricant of choice for this company, as it is used in automotive cables, door locks, and HVAC systems.

Base Oil Properties	Conditions	Rheolube <sup>®</sup> 368F	Test Method
Chemistry		PAO / Lithium Soap	
Temperature Range		-40 to 125°C	
Kinematic Viscosity	100°C	24.68 cSt	ASTM D-445
Viscosity Index		151.4	ASTM D-2270
Grease Properties			
NLGI Grade		1.5	ASTM D-217
Penetration	Worked (60x)	306	ASTM D-217
Oil Separation	24 hrs, 100°C	1.5%	ASTM D-6184
Evaporation	24 hrs, 100°C	0.01%	NYE CTM

#### Since 1844: Our performance is reflected in the value we bring to our customers.

Nye Lubricants is a leader in the innovation, formulation and provision of synthetic lubricants, enabling and improving breakthrough products and critical new technologies. We bring proven experience, deep technical knowledge and customer focus to solve our customers' toughest challenges, adding tangible value to products in a wide range of industries and applications.

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