

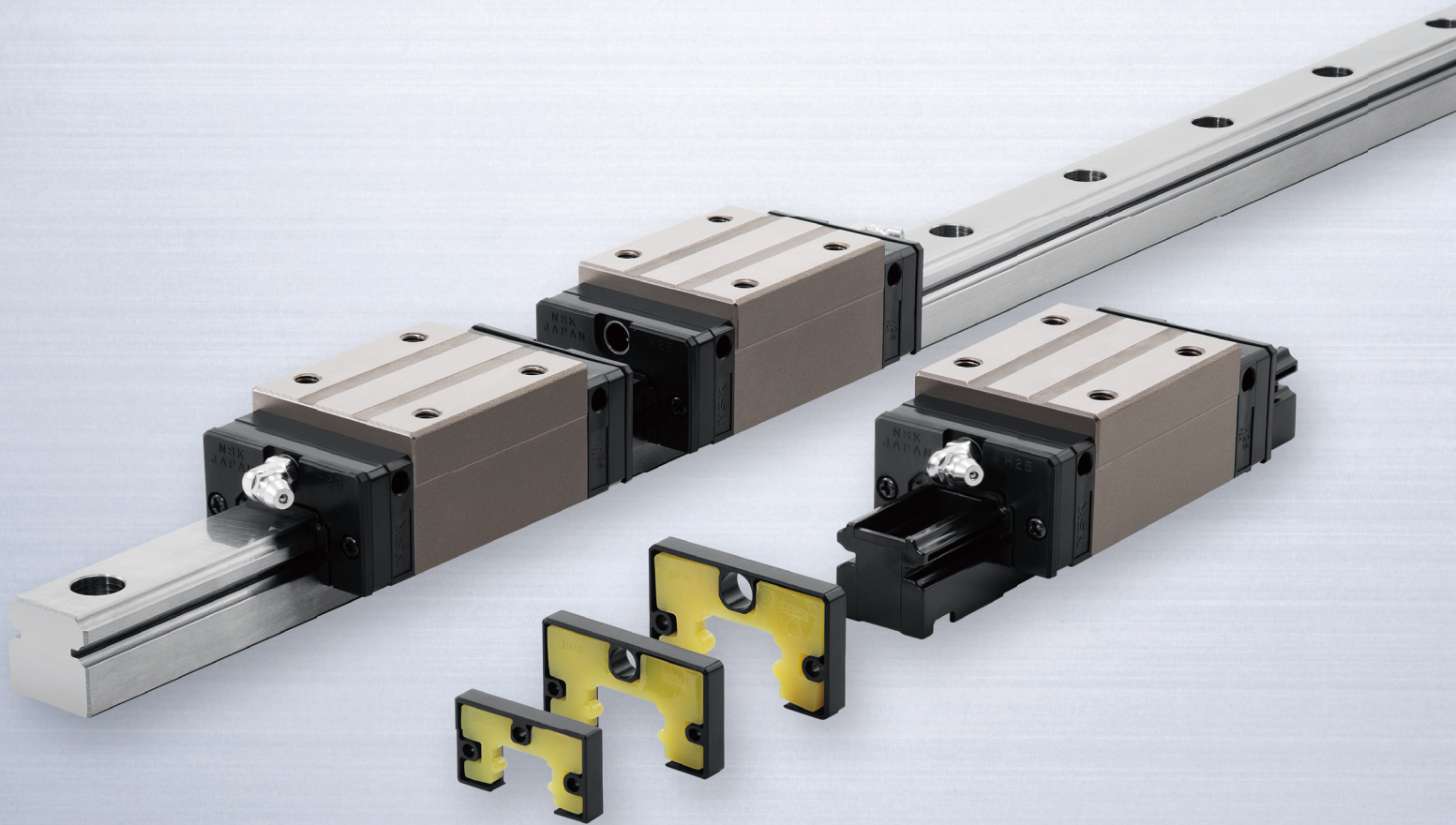
# NSK Linear Guide™

## NSK K1-L Lubrication Unit

**New!**

Patent pending

Extend maintenance interval by  
improving lubricating oil supply capacity



### ■ NSK K1-L Features

#### 1. Low Maintenance, Longer Lasting Lubricating Oil Supply

Newly developed oil-impregnated material supplies lubricating oil for even longer than the revolutionary original K1, contributing to extended machine maintenance intervals.

#### 2. Lower Dynamic Friction Force

Lubrication unit reduces dynamic friction force when driving the ball slide, contributing to energy savings during machine operation.

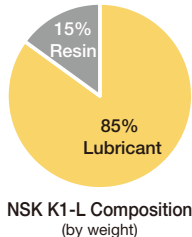


# NSK K1-L Lubrication Unit for NSK Linear Guide™

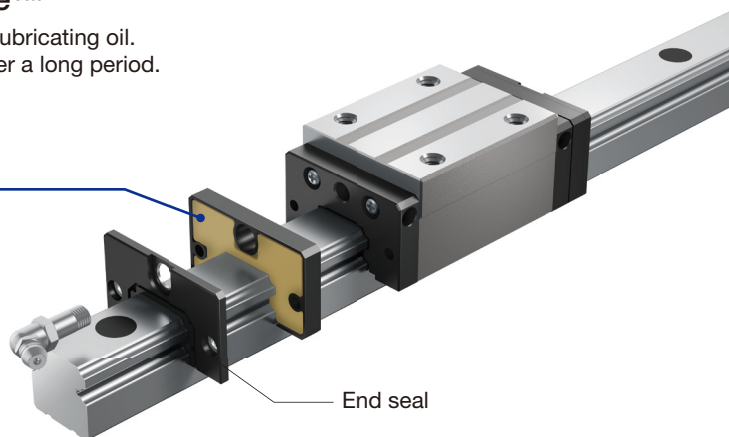
NSK K1-L is made of porous synthetic resin containing abundant lubricating oil.  
The oil gradually seeps out, thereby lubricating the linear guide over a long period.

## NSK K1-L Lubrication Unit

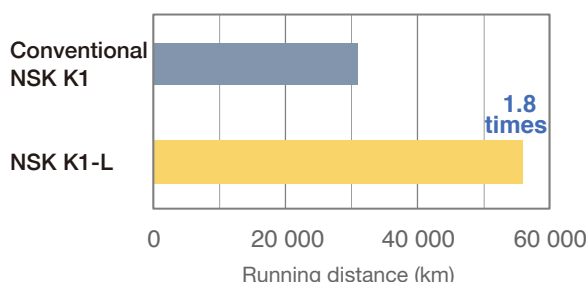
- About 85% lubricant by weight
- Lubricating oil supply period nearly doubled compared to conventional K1 Unit<sup>1</sup>.



<sup>1</sup>Compared with conventional NSK K1 unit. Lubrication performance is affected by operating environment. No warranty is given regarding lubrication performance in actual usage in machinery

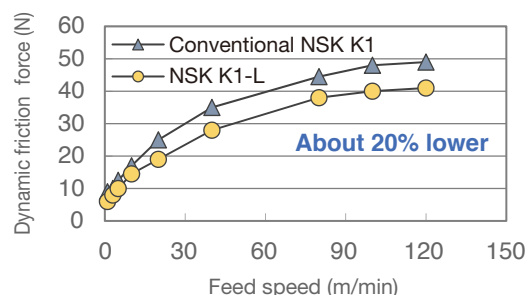


## Durability Test Result



Sample : NH25 (slight preload)  
Lubrication : Only lubrication unit  
Feed speed : 3.2 m/sec  
Stroke : 2.5 m

## Dynamic Friction Force Measurement Result



Sample : NH25 (slight preload)  
Lubrication : Lubrication unit and AS2 grease  
Feed Speed : 1 to 120 m/min

## Applicable Models

NH15, NH20, NH25

## Designation for Preloaded Assembly

(Pre-assembled) **NH 25 1200 AN C 2 \*\*\* L5 3**

NH Series  
Size: 15, 20, 25  
Rail length (mm)  
Ball slide shape code: AN, BN, AL, BL, EM, GM  
Material/surface treatment code:  
C: Special high carbon steel (NSK standard), K: Stainless steel  
D: Special high carbon steel with surface treatment, H: Stainless steel with surface treatment

Preload code  
Accuracy code  
Design serial number  
Number of ball slides per rail

## Designation for Random-Matching Type

**NAH 25 AN S Z -L**

NAH Series (Random-matching ball slide)  
Size: 15, 20, 25  
Ball slide shape code: AN, BN, AL, BL, EM, GM  
Material code  
No code: Special high carbon steel (NSK standard), S: Stainless steel

Option code  
-L: Equipped with NSK K1-L  
Preload code  
No code: Fine clearance, Z: Slight preload, H: Medium preload

## Handling Precautions

1. Permissible operating temperature:  
50°C maximum (80°C can be tolerated for brief periods)
2. Chemicals that should not come into contact with NSK K1-L:  
Do not leave NSK K1-L in organic solvents, such as hexane or other thinners that remove oil, nor in anti-corrosion agent containing kerosene.

### Accuracy Code

	Preload assembly					Random-matching	
	Ultra precision	Super precision	High precision	Precision grade	Normal grade	High grade	Normal grade
Without NSK K1-L	P3	P4	P5	P6	PN	PH	PC
NSK K1-L	L3	L4	L5	L6	LN	LH	LC

### Preload Code

Preloaded Assembly			Random-matching		
Fine clearance Z0	Slight preload Z1	Medium preload Z3	Fine clearance ZT	Slight preload ZZ	Medium preload ZH
0	1	3	T	Z	H

### NSK K1-L Thickness<sup>2</sup>

Model No.	Thickness (mm)
NH15	5.3
NH20	5.3
NH25	5.8

<sup>2</sup>Same dimensions as conventional NSK K1. However, when mounting NSK K1-L, ball slides will be longer than conventional products.

For more information about NSK products, please contact:

[www.nsk.com](http://www.nsk.com)

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