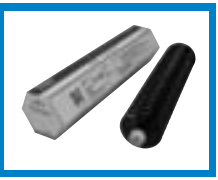
THK Original Grease

AFF Grease

●Base oil: high-grade synthetic oil
●Consistency enhancer: lithium-based



AFF grease uses high-grade synthetic oil as its base and a lithium-based grease as its consistency enhancer, while also featuring special additives. This gives it excellent anti-fretting and low dust-generating performance. It also features a level of stable rolling resistance not found in other conventional vacuum and low dust-generating greases.

[Features]

(1) Stable rolling resistance
Since the viscous resistance is low, the rolling resistance fluctuation is also low. Thus, superb conformity is achieved at low speeds.

(2) Low dust generation
It generates very little dust, making it ideal for use under micro-stroke conditions.

(3) Fretting resistance
Since AFF grease is more resistant to wear from micro-vibrations than other low dust-generating greases, it allows the greasing interval to be extended.

[Representative Physical Properties]

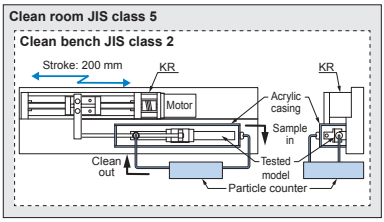
Item		Representative value	Test method
Consistency enhancer		Lithium-based	
Base oil		High-grade synthetic oil	
Base oil kinematic viscosity: mm²/s (40℃)		100	JIS K 2220 23
Worked penetration (25℃, 60 W)		315	JIS K 2220 7
Mixing stability (100,000 W)		345	JIS K 2220 15
Dropping point: ℃		220	JIS K 2220 8
Evaporation amount: mass% (99℃, 22 h)		0.7	JIS K 2220 10
Oil separation rate: mass% (100℃, 24 h)		2.6	JIS K 2220 11
Copper plate corrosion (B method, 100℃, 24 h)		Accepted	JIS K 2220 9
Low-temperature torque: mN·m (–20℃)	Starting	220	JIS K 2220 18
	Rotational	60	
4-ball testing (welding load): N		1236	ASTM D2596
Service temperature range: ℃		–40 to 120	
Color		Reddish brown	

[Low Dust-Generating Performance Test Data]

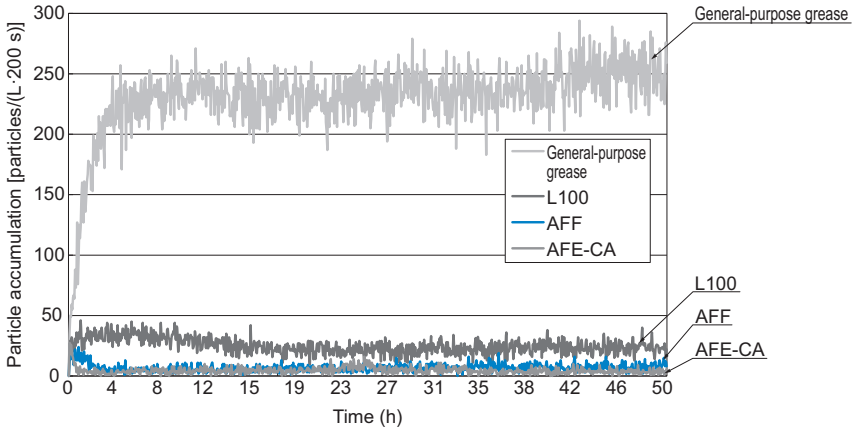
● AFF Grease Test Data (Comparison of Dust Generation)

Test conditions

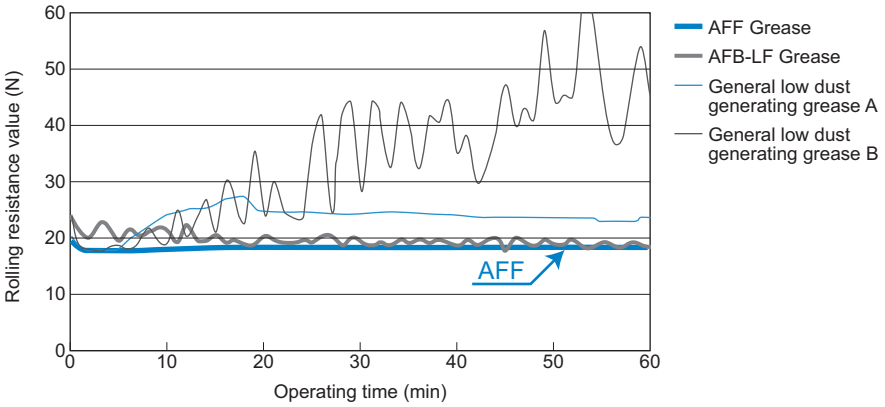
Item	Description
Tested model	SSR20XW1+280L
Grease quantity	1.2 cm^3 (initial lubrication only)
Amount of air supplied	0.3 L/min
Feeding speed	500 mm/s
Stroke	200 mm



Testing device



[Rolling Resistance Characteristics at Low Speed]

Test conditions

Item	Description
Tested model	HSR35RC0+440LP
Grease quantity	4 cm^3 (initial lubrication only)
Feeding speed	1 mm/s
Stroke	3 mm