

## THK Original Grease

# AFC Grease

- Base oil: high-grade synthetic oil
- Consistency enhancer: urea-based



AFC Grease has high fretting-corrosion resistance due to a special additive and a urea-based consistency enhancer using a high-grade synthetic oil as the base oil.

### [Features]

- (1) High fretting-corrosion resistance  
AFC Grease is designed to be highly effective in preventing fretting corrosion.
- (2) Long service life  
Unlike ordinary soap based grease for metal lubrication, AFC Grease excels in antioxidant stability and therefore can be used for a long period of time. As a result, maintenance work is reduced.
- (3) Wide temperature range  
Since a high-grade synthetic oil is used as the base oil, the lubricating performance remains high over a wide range of temperatures from  $-54^{\circ}\text{C}$  to  $+177^{\circ}\text{C}$ .

### [Representative Physical Properties]

Item	Representative value	Test method
Consistency enhancer	Urea-based	
Base oil	high-grade synthetic oil	
Base oil kinematic viscosity: $\text{mm}^2/\text{s}$ ( $40^{\circ}\text{C}$ )	25	JIS K 2220 23
Worked penetration ( $25^{\circ}\text{C}$ , 60W)	288	JIS K 2220 7
Mixing stability (100,000 W)	341	JIS K 2220 15
Dropping point $^{\circ}\text{C}$	269	JIS K 2220 8
Evaporation amount: mass% ( $99^{\circ}\text{C}$ , 22h)	0.2	JIS K 2220 10
Oil separation rate: mass% ( $100^{\circ}\text{C}$ , 24h)	0.6	JIS K 2220 11
Copper plate corrosion (B method, $100^{\circ}\text{C}$ , 24h)	Accepted	JIS K 2220 9
Low temperature torque: N·m ( $-20^{\circ}\text{C}$ )	Start	JIS K 2220 18
	(revolutions)	
4-ball testing (burn-in load): N	3089	ASTM D2596
Service Temperature Range $^{\circ}\text{C}$	$-54$ to $177$	
Color	Brown	

### [Test Data on Fretting-corrosion Resistance]

#### ● Test Data on AFC Grease (Comparison of Raceway Conditions)

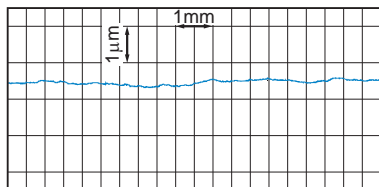
The test data in the figure shows the results of comparing this product with an ordinary bearing grease.

<Test conditions>

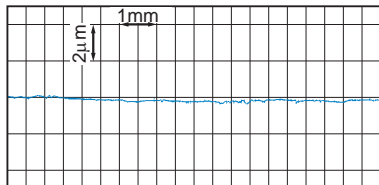
Item	Description
Stroke	3mm
Number of strokes per minute	200min <sup>-1</sup>
Total number of strokes	2.88 × 10 <sup>5</sup> (24 hours)
Surface pressure	1118MPa
Grease quantity	12g/1LM block (replenished every 8 hours)

#### AFC Grease

Before travel

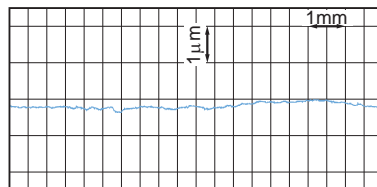


After travel



#### General-purpose bearing grease

Before travel



After travel

