



Lubrication

OBJECT OF LUBRICATION

The lubrication method and the lubricant have a direct effect on the bearing life; the most suitable lubrication must therefore be selected for each application. Effects of lubrication are described as follows:

(1) DECREASE OF FRICTION AND ABRASION

It decreases rolling friction between the raceway and the rolling elements, sliding friction between rolling element and cage and sliding friction of guide surface between the cage and the bearing ring.

(2) REDUCTION OF HEAT GENERATION

It dissipates heat generated inside the bearing as well as heat conducted from the outside thus preventing overheating of the bearing and deterioration of the lubricant.

(3) PROTECTION FROM CORROSION AND CONTAMINANTS

It prevents corrosion of rolling elements, bearing rings and cages and also prevents the ingress of contaminants and moisture into the bearing.

REQUIRED CHARACTERISTICS OF THE LUBRICANT

- (1) LOW FRICTION AND ABRASION
- (2) HIGH STABILITY AGAINST HEAT, GOOD THERMAL CONDUCTIVITY
- (3) STRONG OIL FILM
- (4) NON-CORROSIVE
- (5) PROVIDE A GOOD BARRIER AGAINST DUST AND MOISTURE
- (6) MAINTAIN A STABLE VISCOSITY

STANDARD LUBRICANT

Lubricant	Brand	EZO CODE	Manufacturer	MIL STANDARD	Operating Temperature(C)	specific gravity
STD.GREASE	MULTEMP SRL	SRL	Kyodo Yushi		-40~+150	0.93
	ALVANIA 2S	AV2	Shell OIL Co.		-25~+120	0.92
STD. OIL	AERO SHELL FLUID 12	AF2	Shell OIL Co.	MIL-PRF-6085D	-50~+205	0.93