

LHL-140, LHL-300, & LHL X-100 Comparison Data & Typical Properties

Test Performed		LHL-140	LHL-300	LHL X-100
Color		Yellow	Yellow	Yellow
Worked Penetration		460	460	460
Dripping Point	°C	-	188	180
Copper Corrosion ※	(100 °C/24hr)	Pass	Pass	Pass
Evaporation Loss	(99 °C/22h) w.t.%	0.19	0.14	0.31
Oil Separation	(100 °C/24hr) w.t.%	N/A	N/A	N/A
Oxidation Stability	(100 °C/100hr) kPa	29	20	5
Four Ball Test newtons	LNL	1236	784	1236
	WL	3920	3922	1569
	LWI	649	470	480
Base Thickener		Lithium Soap	Lithium Complex	Special Urea
Base Oil Viscosity	(40°C) mm ² /s	138.8	331.2	114
	(100°C) mm ² /s	14.30	26.21	12.2
Viscosity Index		101	104	97

※No change in color into green or black on copper plate is observed.

Four Ball Test Terms:

LNL (Last Non-Seizure Load)

The maximum load under which the balls are lubricated well enough not to get any wear that is larger than 5% of the guaranteed wear in diameter under a given load. The maximum load under which the sample grease is lubricating properly.

WL (Weld Load)

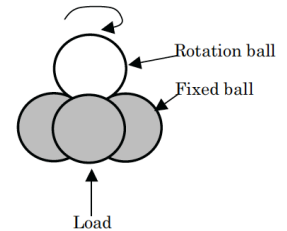
The minimum load under which the rotating ball is welded to the stationary balls.

LWI (Load Wear Index)

LWI is calculated by the formula based on the results of 10 times of WL test performed. LWI is an index indicating wear resistance of a sample grease in each range of the load applied for the test.

newton

The **newton** (symbol: **N**) is the International System of Units (SI) derived unit of force.



※The wear scar of a fixed ball is measured.
Figure 1 Shell four ball test (point contact)

