

Graphene Lubricant Test

The background features a large, faint, light gray watermark of a stylized 'G' and the word 'Graphene' in a serif font. In the bottom right corner, there are decorative, swirling patterns in red and green, resembling stylized leaves or floral motifs.

Enerage Inc.

Test Condition

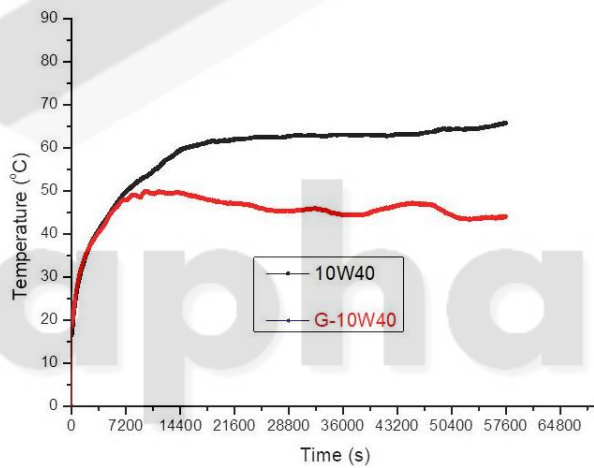
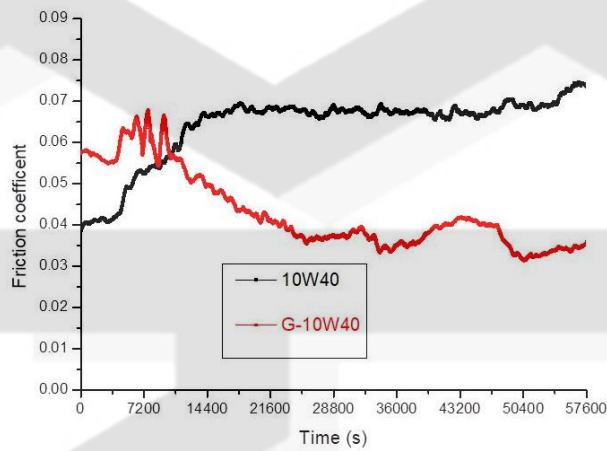
Test Title: Four-Ball Wear Scar Test

Test Object:

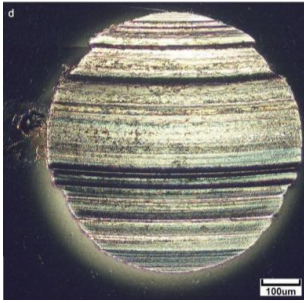
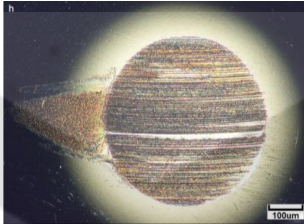
10W40 Commercial Lubricant &

0.5wt% Graphene in 10W40 Commercial Lubricant (denoted as G-10W40)

Test Result



Sample	Avg. Coefficient of Friction	Avg. Working Temperature
10W40	0.064	58.9°C
G-10W40	0.043	45.4°C
Improvement	33%	23%

	Microscopic Image	Diameter of Wearing Scar
10W40		655.2 µm
G-10W40		484.6 µm
Improvement		26%

Summary

Compared to the commercial lubricant 10W40, few amounts of graphene introduced lubricant effectively reduces the coefficient of friction, working temperature and wearing scar up to 30%, 23% and 26%, respectively. It prevents the working piece damaged quickly and allows it durable.

Graphage