

High-Frequency Reciprocating Rig

SIGNIFICANCE AND USE

This test method measures the lubricity, or ability of a fluid to affect friction between, and wear to, surfaces in relative motion under load.

Mack Trucks Inc. EON Premium Plus Engine Oil Specification

APPARATUS/TEST FIXTURES

The system uses an electromagnetic vibrator to oscillate a moving steel ball specimen over a small amplitude while pressing it against a stationary steel disk.

TEST METHOD/SUMMARY

The lower, fixed specimen is held beneath the test lubricant in a small bath which can be heated electrically. The friction force transmitted between the specimens and the electrical contact potential (ECP) between them may be measured.

The lubricity of a fluid is evaluated by the wear scar on the steel ball in millimeters and the contact resistance (film) value averaged over the entire run. Each sample is well mixed prior to testing and analyzed in no more than 2 minutes from completion of the mixing. A reference oil is run before and after the daily test samples for comparison purposes.

PASS/FAIL CRITERIA

Acceptability of data and specification usually determined by oil formulator.



DSC-0175



DSC-0183

