



# FENIX ES-HFRR



## HFRR Specimens now available through Lazar Scientific, Inc.

The High Frequency Reciprocating Rig (HFRR) test measures the lubricity of diesel fuel.

FenixES HFRR specimens meet the diesel fuel testing standards for ASTM D6079, ASTM D7688, ISO 12156-1, and IP450. Custom manufacturing is available upon request. Contact us for more information.

Specimens are sent with a certificate of conformity document which shows that the products meet the standards.

### TECHNICAL SPECIFICATIONS

#### Upper specimen — Test Ball

Diameter	6mm
Material	G28 per ISO 3290 – SAE AMS 6440 Steel AISI52100
Roughness	<0.05 $\mu$ m Ra
Hardness	58 –66 Rockwell “C” Scale

#### Lower Specimen — Test Plate

Diameter	10mm
Material	SAE AMS 6440 Steel AISI52100
Toughness	<0.02 $\mu$ m Ra
Hardness	190 –210 Hv30

