

HFRR 4.2

High Frequency Reciprocating Rig

ASTM D323 - IP 69 - ISO 3007

The High Frequency Reciprocating Rig (HFRR-4.2) is a state of the art fuel lubricity tester that is designed for full compliance with global test standards. Its compact and easy to use design makes tests simple to set up and the high precision automated humidity control system eliminates manual activities by the operator.

The HFRR 4.2 can be used to test diesel fuel, gasoline and lubricants. It can also be used for fretting wear tests with its low displacement, high frequency reciprocating testing mode.

Clean, Salt-Free Humidity Control

The integrated high precision humidity controller is salt-free and only needs distilled water to maintain precise humidity levels without influencing the temperature of the conditioned air. Automatic condensation and evaporation cycles are used to maintain accurate humidity levels. The system is computer controlled and completely automated. It fully complies with the laboratory air conditions of the ISO1256-1. Air temperature and humidity is measured and recorded for the entire test duration.

Powerful & Intuitive Software

Our clean user interface places all necessary controls in a single screen, you can quickly set up tests with minimal training. Preconfigured standard test protocols make testing even easier. Our Data Acquisition (DAQ) Software comes standard with every HFRR-4.2 completely eliminating the need for unfriendly interfaces that complicate test setup and make viewing live data impossible. You can view your test data, compare tests and print your test report straight from our software at the click of a button.



Fully Integrated Design

A compact tabletop, ergonomic design and a test area that is easily viewed and accessed make the HFRR-4.2 simple to use. It integrates the electronics controller, automatic humidity control system and the HFRR test unit in a single, sleek instrumented cabinet reducing footprint so it does not occupy unnecessary lab space.

Real Time STROKE LENGTH

Advanced technology for inline stroke length acquisition during the test. The ball holder is fixed to a push rod driven by an electrodynamic vibrator to generate a stroke of $1 + 0.02$ mm (in compliance with ASTM D6079 and ISO 12156-1 test standards). The inline stroke length acquisition enables electronic calibration.

Consumables

- HFRR Test Specimens (Pack of Balls and Disks)
- Reference Fluid A (500 ml)
- Reference Fluid A (0.5 Gallon)
- Reference Fluid B (500 ml)
- Reference Fluid B (0.5 Gallon)

Spares

- Fastener Set • Specimen Holder Set
- Heater Block • Heater • Temperature