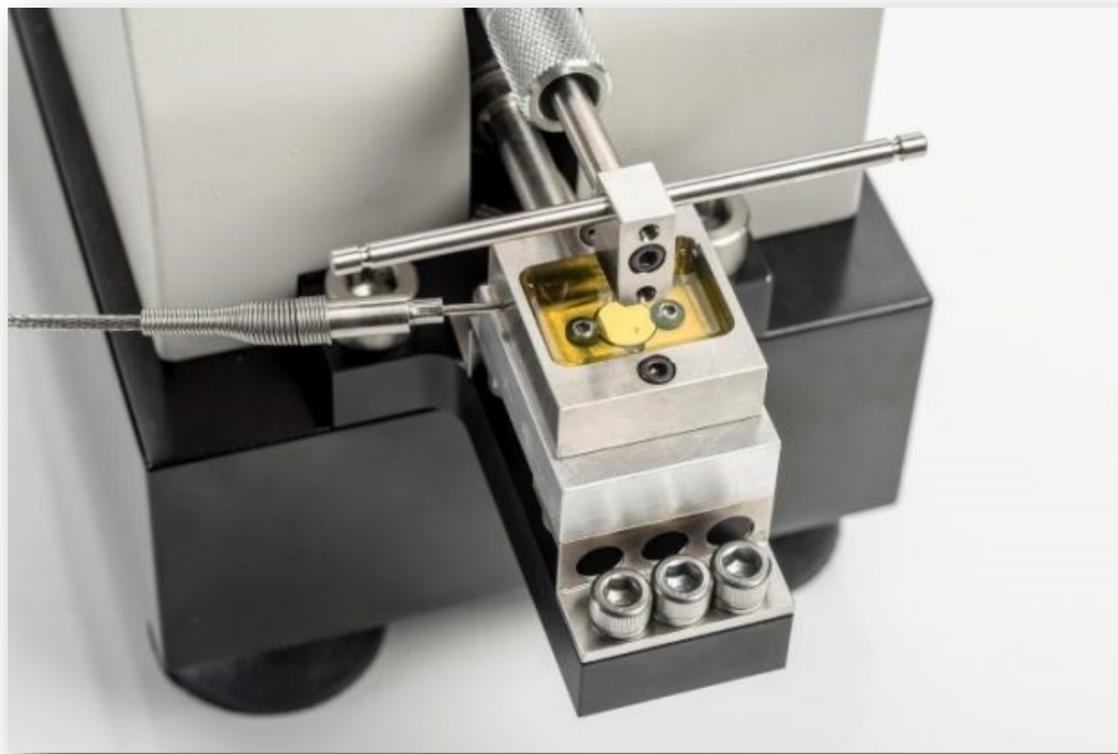


## HFRR (High Frequency Reciprocating Rig)

The HFRR is a reciprocating friction and wear test system which provides a fast, repeatable assessment of the performance of fuels and lubricants. It is particularly suitable for wear testing relatively poor lubricants such as diesel fuels and for boundary friction measurements of engine oils, greases and other compounds. It is the industry standard test for diesel fuel lubricity.



### Main Product Features

- Worldwide standard test for diesel fuel lubricity, ASTM D6079/7688, ISO 12156, CEC F-06-A-96, JPI-5S-50-98
- Wear scar assessment with standard specimens requires only one measurement
- Small volume of lubricant (2 ml) required per test — tests can be carried out on field collected or experimental fluids
- Film formation by boundary additives can be studied by observing the electrical contact resistance (ECR) change during a test
- Fast, repeatable friction and wear measurement
- Independently proven repeatability and reproducibility
- Fully automated, controlled test sequence
- Easy to calibrate
- Small, compact bench top system
- Preloaded with standard diesel fuel lubricity test procedures CEC/ASTM/ISO
- Optional automatic recording of humidity and air temperature at start and finish of test



HFRR Standard Accessories



Example Test Output File



HFRR Gasoline Accessories