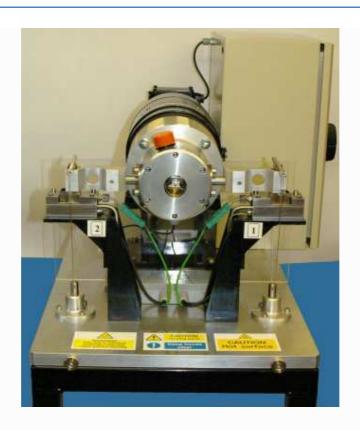
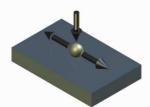
TE 80 TWO STATION FUEL LUBRICITY WEAR TEST MACHINE





Description

The TE 80 Two Station Fuel Lubricity Wear Test Machine is a simplified version of the earlier TE 70SLIM Micro Friction Machine and the TE 77 High Frequency Friction Machine. It incorporates two test stations with heater pads and mounting arrangements for ISO 12156 and ASTM D6079 fuel lubricity test specimens. Load is applied manually by means of dead weights applied directly to the fixed ball specimen carrier by means of a loading yoke.

Machine controls are limited to speed control of the drive motor to give the required frequency, temperature control of the specimen bath and test duration. Test data is limited to post test wear scar measurement only and no facilities are provided for friction force measurement.



The TE 80 Fuel Lubricity Tester will run tests in accordance with the test parameters specified in ISO 12156-1 and ASTM D6079 fuel lubricity test standards and will rank fluids in the same order, but will consistently produce larger wear scars than the PCS HFRR instrument and a wider discrimination between low and high reference fuels.

The effect is particularly marked for the low lubricity reference fluid. The bias in the results arises for two reasons, firstly from differences in the method of loading between the two instruments and secondly from the method of actuation. A full analysis of these differences is given in Guidance on Diesel Fuel Lubricity Test.

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Technical Specifications

Contact Geometry: Ball on Plate Ball Specimen: 6 mm diameter

Load: 2 N Stroke: 1 mm

Frequency: 2.5 Hz to 50 Hz Temperature: ambient to 100°C

Controlled Parameters Frequency

Temperature Test Duration

Load

Measured Parameters Specimen Wear Scar (post test)

Services

Electricity: 220/240V, single phase, 50 Hz, 1.2 kW

110/120 V, single phase, 60 Hz, 1.2 kW