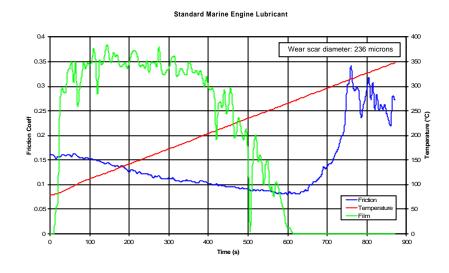
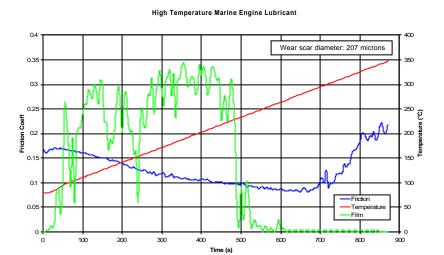
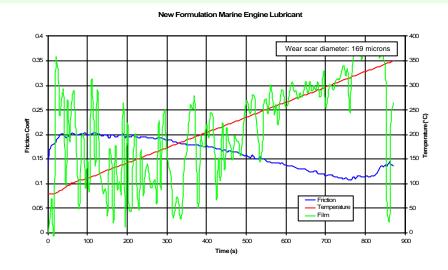
## **HFRR High Temperature Option**





In diesel fuel test configuration the HFRR is fitted with low power heaters for maximum safety which can perform tests at up to 150°C. For testing specialised lubricants we offer a very high power heater option which allows tests at temperatures up to 400°C.

These three charts show the results for high temperature tests on three formulations of a marine diesel lubricant. The test profile used was an initial 1 minute stabilisation period at 80°C followed by an 18°C/minute temperature ramp to 350°C. During the ramp period the HFRR was running at 20Hz, 1mm stroke length with 400g load, logging data at 5 second intervals. As can be seen there are clear differences in the friction and film behaviour of the three lubricants. At the end of the tests we also measured the wear scar diameter on the upper specimen.



**PCS Instruments** 

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