

## Damage to testing equipment caused by insufficient cooling.

ERIKS were asked to investigate a cooling system that supplied cooling water to dynamometers which are used for testing engines. The customer was suffering from regular and catastrophic failures of a certain size of dynamometer and these failures were due to ineffective cooling.

The client over the years had increased the size of some of their test dynamometers to enable them to test larger engines and it was the larger dynamometers that were falling. ERIKS installed a non-intrusive ultrasonic flowmeter to the discharge pipework and a pressure gauge to record the flow and pressure over a two-week period.

As part of the investigation the client supplied a copy of the cooling flows and pressures that were required by each size of dynamometer as per the manufacturer's instructions.

ERIKS established that the existing installed pumps were sized correctly for the installation, however site needed to ensure that the larger dynamometers received the correct flow and pressure by altering the control valve position as all the control valves were set to supply the correct flows and pressures for the smaller dynamometers.

**CERTIFIED PUMP  
SYSTEM AUDITOR**