

Turn your pumps off.

ERIKS assisted a client to identify potential energy savings on their systems using pumps. One of the client's systems was gas cooling after a treatment process. The system was controlled via an inverter and was designed to slow the pumps down once the air temperature in the pipe reached a predetermined temperature. ERIKS tested the pumps and established that the pumps were oversized for the application, were in poor repair and were operating against a partially closed gate valve.

As part of the investigation the ERIKS investigated whether the pumps did slow down with the change in gas temperature or not. To achieve this the only way to this was to observe the temperature graph.

The observation was done for 45 mins after the treatment had finished and it was noted initially after the treatment had finished there was a quick drop in the measured temperature within a few minutes of the treatment process finishing but after that there was no significant drop off in temperature. It was established that temperature sensor was picking up the heat from the metal pipe and not from the gas.

The client decided to alter the PLC programme to start the pumps prior to the end of a treatment and stop the pumps 10 minutes after the treatment had finished. By switching the pumps off and replacing them there was a potential energy saving of £50,000 per annum.

**CERTIFIED PUMP
SYSTEM AUDITOR**