Spring 2015

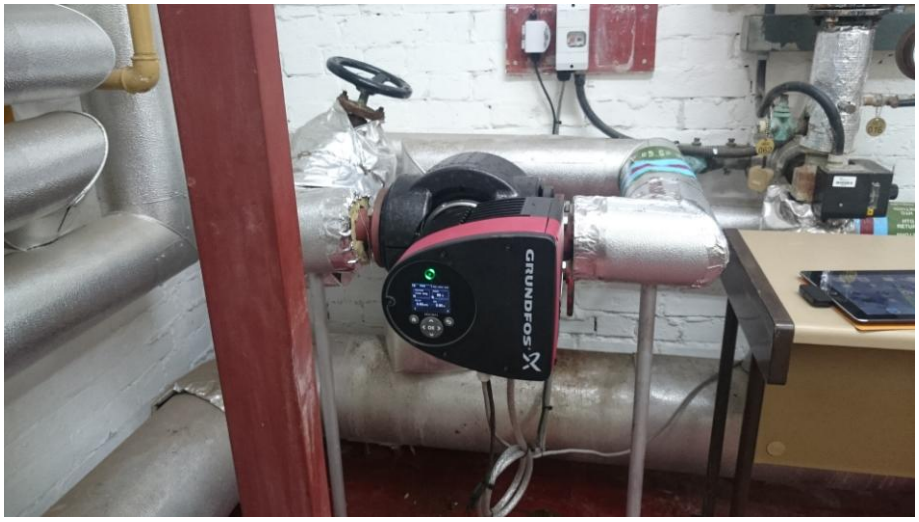
PRECISION PIPEWORK LTD

ENGINEERING SERVICES

Precision Pipework Ltd, Horn Hill, Lowestoft, Suffolk NR33 0PX
Tel: 01502 500646 **Fax**: 01502 566957 **email**:sales@pumps4all.com

FOCUS ON ENERGY SAVING

During a recent desktop exercise, we were able to prove to a client that it was possible to install a new pump to operate more efficiently with-in their system. With a projected **payback** of less than 18 months, it was not difficult for the client to decide to proceed with the new pump. Precision Pipework were able to modify the existing pipework, power supply and signal cables to achieve a rapid change over whilst limiting the down-time to a minimum.



A recent installation with a Grundfos heating pump . This pump has been fitted with two temperature sensors to enable it to have a 10° differential set-point

Feed-back sensors were used to create the most efficient system whilst maintaining the capability of the system to perform this heating duty.

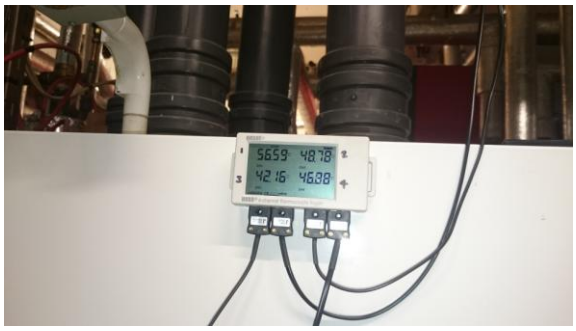
In addition to regular installations, Precision Pipework are able to fault find heating system pump faults using a combination of flow meters, signal monitoring and temperature logging. A picture can then be built-up to identify system problems and the provision of a suitable remedy. Often as a result of this, a new more efficient pump can be selected in the knowledge that quick **'Return On Investments'** can be achieved.

Our experience has shown that most saving can be achieved where a pumps runs 24/7 regardless of demand thus a fixed running cost can be established. Fitting a variable speed pump with a feed back loop sensor will reduce the pump speed according to the programmed set-point. The only difference for the end user is a lower electric bill along with a reducing in water noise and un-necessary system heat loss.

PRECISION PIPEWORK LTD

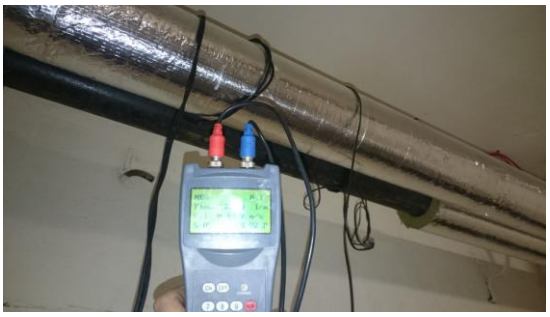
ENGINEERING SERVICES

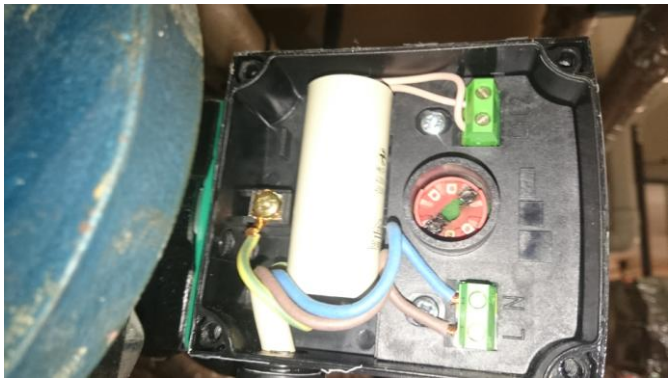
Precision Pipework Ltd, Horn Hill, Lowestoft, Suffolk NR33 0PX
Tel: 01502 500646 **Fax**: 01502 566957 **email**:sales@pumps4all.com



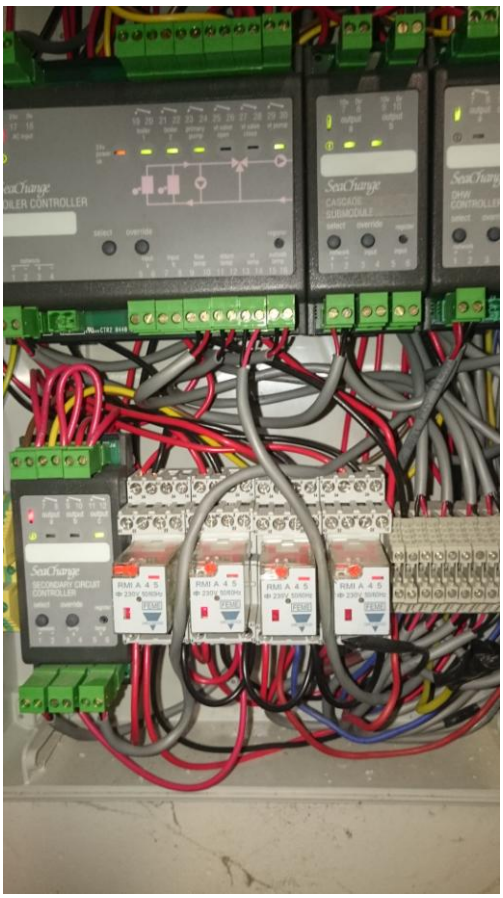
Using a four channel data logger enables us to track and analyse the performance of each circuit and make comparisons with the boiler set-points

Non-invasive flow monitoring enables us to identify slow performing circuits thus enabling the system to be rebalanced





Flow monitoring was able to identify this pump fault on speed three thus enabling a temporary fix to get heat back in the building. The pump was later exchanged for a new self-regulating circulation pump



This control system was found to its zone thermal sensors and pumps muddled thus causing circuits that were to hot and areas that were freezing

In addition to the above, we also use our thermal imaging camera to trace pipework that is often hidden in wall or behind panelling. We also use both signal simulators and monitors to set-up analogue control circuits - typically (0-10v or 4-20mA)