



**FLOWCHECK**

**SPECIALISTS IN FLOW MEASUREMENT, HYDRAULIC SURVEYS  
AND PUMPING STATION OPTIMISATION**



## FLOWCHECK

FLOWCHECK SPECIALISE IN PROVIDING FLOW MEASUREMENT AND HYDRAULIC SURVEYING SERVICES SPECIFICALLY TAILORED TOWARDS THE WATER AND WASTE WATER INDUSTRY.

Our experience embraces projects of all sizes at sites throughout the UK, ranging from full site surveys of water utility treatment works down to individual MCERTS flow meter surveys and flow meter calibrations for clients in the private sector.

**The services we offer fall into four categories:**

- Pumping station optimisation
- Site surveys
- Flowmeter & MCERTS surveys
- Hot Tapping (Under pressure drilling)

We perform surveys throughout the life of an asset from project optioneering and design through to contract acceptance, problem solving and energy optimisation.

Our reports provide clients with the peace of mind and assurance that the decisions they make are based on accurate and reliable data.





## PUMPING STATION OPTIMISATION

PUMPING SYSTEMS ARE A MAJOR SOURCE OF ENERGY CONSUMPTION WITHIN INDUSTRY. THIS IS PARTICULARLY RELEVANT WITHIN THE WATER INDUSTRY WHERE IT HAS BEEN ESTIMATED THAT PUMPS CAN ACCOUNT FOR OVER 50% OF THE TOTAL ENERGY CONSUMED.

Flowcheck are experts in pumping station optimisation. We enable pumps to operate reliably using the minimum amount of power. Our surveys encompass the complete pumping system, comprising of the wet well controls, the pumps, the pipe arrangements and the rising main.

Our experience has identified that the majority of pumping installations are highly inefficient and often unreliable prior to our involvement.

**The main problem areas fall into three categories:**

- Incorrect pump specification
- Inadequate pump control
- Errors in system design

Our Engineers will identify where energy is being wasted and how improvements can be made within a pumping system. We can make adjustments to control systems and advise of any modifications that can be made to improve the overall efficiency of the installation.

Often a minor alteration to a pumping system can result in a major reduction in energy consumption. Our surveys also address pump reliability and in many instances we can reduce or eliminate out of hours call outs to pumping stations.

Flowcheck is an authorised installer for Multitrode 'MultiSmart' controllers. The MultiSmart controller is a complete 'pumping station manager' that has a range of functions specifically designed to save energy and improve the performance of a pumping system.

Our expertise in pumping stations, combined with the control facilities available in the MultiSmart controller, enables us to configure each pump installation to deliver the maximum volume of liquid using the minimum amount of energy.

All MultiSmart controllers installed by Flowcheck come with a five year warranty.



## SITE SURVEYS

FLOWCHECK SPECIALISE IN PERFORMING HYDRAULIC SURVEYS OF PUMPING STATIONS AND TREATMENT WORKS WITHIN THE WATER INDUSTRY. WE INSTALL TEMPORARY SURVEY INSTRUMENTATION E.G. PRESSURE, FLOW AND LEVEL, TO DETERMINE EXACTLY WHAT IS HAPPENING WITHIN A HYDRAULIC SYSTEM.

Many of our surveys incorporate the use of data loggers. These are simple yet versatile devices that enable a range of plant variables to be recorded at any instant in time.

All the data captured on the loggers can be presented in Microsoft Excel format. If there is a requirement to measure pressure surges in pipelines, these can be captured using our high speed loggers.

Before a works or process is modified it is important to know exactly how it functions. We take accurate measurements of all the relevant process variables so that new designs can be based on the known hydraulic performance of the existing plant.

**By monitoring process variables at key locations within a treatment process we can:**

- Identify problems within process control systems
- Verify the accuracy of site flowmeters
- Balance treatment processes
- Diagnose and locate problems in pumped and gravity fed systems
- Capture specific events e.g. storm conditions
- Determine head losses within gravity fed systems
- Monitor the effects of individual pumping stations to the performance of a treatment works
- Locate blockages in rising mains

“Our surveys provide the foundations upon which designs are based.”



## FLOWMETER & MCERTS SURVEYS

OUR ENGINEERS PERFORM DETAILED SURVEYS OF FLOW MEASUREMENT DEVICES TO DETERMINE WHETHER THEY ARE FUNCTIONING CORRECTLY AND TO THEIR BEST ACCURACY.

We carry out adjustments and recalibrations, as necessary, to optimise the performance of flowmeters. We also offer service contracts on flowmeter installations and we can install temporary flow measurement equipment where required.

Flowcheck is one of only a few companies in the country that is accredited by the Environment Agency to perform MCERTS surveys on both open channel and closed pipe flowmeter installations.

**Note:** It is now a statutory requirement to have your flowmeters surveyed by a certified MCERTS inspector if flow is a condition on your Environment Agency emissions permit.

### Flowcheck services:

- Detailed surveys of flowmeter installations
- MCERTS certification of both open channel and closed pipe flowmeters
- Open channel flowmeter calibration calculations to BS3680
- Calibration and commissioning of flowmeters
- In situ verification of flowmeters by comparison to our own metering equipment
- Installation and hire of temporary flow metering equipment
- Flowmeter service contracts





## HOT TAPPING

HOT TAPPING (UNDER PRESSURE DRILLING) ENABLES TAPPING POINTS TO BE INSTALLED INTO PRESSURISED PIPES WITHOUT THE NEED FOR ISOLATION AND WITHOUT ANY DISRUPTION TO THE OPERATION OF THE PLANT OR THE PROCESS.

Flowcheck is equipped to install tapping points up to 2" BSP into virtually any size of pipe. We hold a wide stock of spares and this enables our engineers to respond quickly to requests for hot tapping services.

### Typical applications for hot tapping:

- Sample points
- Chemical dosing injection lances
- Pressure and temperature measurement points
- Drain valves
- Air release valves
- Flushing points



## PROVEN PERFORMANCE

FLOWCHECK IS AN INDEPENDENT COMPANY THAT SPECIALISES IN FLOW MEASUREMENT, HYDRAULIC SURVEYS AND PUMPING STATION OPTIMISATION. ALL OUR SURVEYS ARE PERFORMED PROFESSIONALLY AND WITH THE MINIMUM OF DISRUPTION TO SITE OPERATIONS. THE RESULTING REPORTS ARE TOTALLY IMPARTIAL AND PROVIDE ACCURATE RELIABLE DATA FROM WHICH OUR CLIENTS CAN MAKE INFORMED DECISIONS.

Our company strategy is to build long term relationships with clients by providing a high quality, flexible and professional service.

Flowcheck has an established regular client base and growth is built largely on personal recommendation and referral.

**Our client list contains companies from throughout the industrial sector, including:**

- Water utilities
- Power generation
- Food manufacturing and processing
- Dairy
- Paper
- Petro-chemical
- Waste disposal
- Glass
- Pharmaceutical
- Civil construction
- Design consultants



