

CONNECTING MANAGEMENT of MEASUREMENT to EXCELLENCE



**KELTON[®]
SERVICES**

KELTON[®]

THE BENEFITS



KELTON® is an Independent, UKAS Accredited Company, Specialising in Flow Measurement Consultancy and Software

KELTON® have an outstanding reputation in the provision of FEED Studies, Submissions to Government Agencies, Auditing of Flow Measurement Systems/Allocation Systems/Hydrocarbon Laboratories, Uncertainty Models and Analysis, Training, Operations and Maintenance Procedures, Project Support/Consultancy, Operational Support/System Management, Validation and Flow Measurement related Software.

KELTON® are a Microsoft Certified Partner and the software products include packages for Instrument Management (KIMS®.net), Audit Management (KAMS®.net), Turbine meter Monitoring & Control (K-TRAC®.net), Electronic Logbooks (K-LOG®.net), Real Time Signal Viewing (K-VIEW®.net), Computer Based Training (KITS®.net), Offline Calculations (FLOCALC®.net), Fiscal Metering Management Package (FM2P®.net) and bespoke Allocation Software.

ACCREDITATION



ENGINEERING SERVICES

Expert, efficient and effective engineering study work is fundamental to the success of any project, especially at the conceptual stage. The service provided by KELTON® meets all those criteria to produce practicable, operable and cost effective engineering solutions, which comply fully with all statutory requirements.

Our designs combine cost savings with low maintenance schedules to maximize benefits to the client. Since we don't build systems or hire out labour there is never any conflict of interest.

We understand the importance of establishing and agreeing a precise set of objectives before the study begins. That's why we liaise so closely with our clients right from the start to consider all aspects of their project, not only its engineering but also its commercial and legal requirements.

KELTON's Engineering Study Service covers projects from Conceptual and Front End Engineering Designs (FEED), Specifications, Basis of Design (BOD) and detailed engineering through to Installation, Commissioning and Operational Systems.

METERING MANAGEMENT

KELTON's Fiscal Metering Management Service is specifically tailored to the needs of the operators of fiscal metering systems. It is effective in all areas of metering activities from specialist engineering through to routine calibration.

Its success is built on the expertise of KELTON's engineers whose knowledge and experience of fiscal metering is genuinely comprehensive. We advise the operator on everything that is necessary to meet statutory requirements and conform to Third Party Agreements.

Our knowledge of the practices of other operators gives us a wider view of procedures and enables us to create with confidence, a single focal point for all measurement activities.

By conducting a thorough review of the client's metering system, equipment and procedures, we identify areas in which further analysis will prove beneficial.

> METERING MANAGEMENT

> ENGINEERING SERVICES

> AUDIT SERVICES

> ALLOCATION

> SOFTWARE SERVICES

SOFTWARE SERVICES

KELTON® bespoke or general software services have a dimension beyond normal expectations. The in-house expertise of multi-skilled programmers, which includes Microsoft-certified professionals, is complemented and supported by a highly experienced team of engineers and consultants to ensure that the engineering principles we use are correct and that all our solutions are practical and easy to use.

As a Microsoft Certified Partner, we have a direct line to provide solutions based on all Microsoft products and technologies. KELTON® has the full backing of Microsoft support services and technical resources as well as a wealth of examples, walk-throughs and other features in an extensive library of material for the deployment and implementation of technology.

Typical Applications include:

- Allocations systems
- Calculations
- Data analysis
- Data validation
- Uncertainty models
- Real time data capture
- Data handoff
- Production reporting

ALLOCATION

Hydrocarbon allocation and accounting is a complex area. Agreed procedures are used to allocate an operator's production on a periodic basis. On single production systems, where the field produces into a single discharge and point of sale, the allocation need only consider mis-measurement and transmission losses, but on shared systems, involving a number of production units, there are other considerations. All inputs into the transmission system and the refining and sales points must be treated on an equitable basis not only for the quantity but also the quality of their production. It requires a more sophisticated type of allocation.

KELTON's experience in measurement, analysis, allocation and accounting is well-known. Combined with our independence, it puts us in a unique position to deliver an all-encompassing allocation service. We can audit your existing systems, prepare agreements or build and run a full allocation and accounting system to suit your particular needs.

AUDIT SERVICES

Full, reliable auditing is essential at all stages of the development, design, installation, commissioning and operation of Fiscal Metering Systems. Problems, whether potential or actual, must be identified, not least because their detection can result in significant savings.

Before we begin any audit a precise set of criteria covering all the relevant areas is established through discussions with our client.

Whether required to deal with pre-design, design, pre-commissioning, post commissioning, compliance, management, allocation or the whole package, we have the personnel to deliver.

Our people are highly qualified with practical skills and a breadth of experience that has earned KELTON® an enviable reputation in the oil industry. The documentation we produce is design.

> PROJECT SUPPORT

> METERING DOCUMENTATION

> UNCERTAINTY PLUS

> METERING TRAINING SERVICE

KELTON[®]

KELTON[®] is an independent company specialising in flow measurement consultancy and the provision of specialist software applications.

METERING DOCUMENTATION

Fiscal Metering Systems must be supported by comprehensive documentation including: functional design specification, equipment specific operating instructions, vendor data and certification of material and equipment calibration and maintenance procedures.

The documentation service of KELTON[®] begins where the project ends.

There is a statutory requirement on all operators to produce at least part of their documentation covering system uncertainty analyses, commissioning, operation and routine calibration of their Fiscal Metering System for submission to the DTI and, in some cases, to a pipeline operator.

Our documentation package is designed to make that submission much easier, drawing as it does, on the expertise and experience of staff who between them have covered all areas from conceptual design through to operation and maintenance.

PROJECT SUPPORT

Equally important, through the entire life of any project, is the provision of independent specialist support. Once again, KELTON[®]'s Project Support Service meets that need by providing practical, cost effective solutions, complying fully with statutory requirements.

From the conceptual design stage through to commissioning and handover, our specialist service can be tailored to suit our clients' exact requirements, whether they involve simple consultancy services or full project management. We work with clients to create mutually beneficial agreements before the project even gets under way, discussing every aspect which may contribute to its overall success. To all these discussions we bring a clarity of focus, based on our wealth of experience, that identifies areas of concern and expedites their resolution.

METERING TRAINING SERVICE

Our comprehensive knowledge and experience of metering systems from initial design through to commissioning means that we are ideally placed to provide our clients with specialized, general or system-specific fiscal metering training packages.

Before each course starts, we meet and discuss its design with our clients to make sure that it fits their exact needs. As part of the process, we define and agree both theoretical and practical training objectives.

Our presenters are metering consultants or engineers in their own right and thus combine the skills, knowledge and experience essential to enable them to answer questions and discuss fully any problems the delegates may encounter.

KELTON[®]'s training packages include hands on sessions which offer an immediate opportunity for delegates to put theory into practice. We also give each course member their own copy of a comprehensive training manual or system handbook which covers the course in considerable detail. It can be used as a reference manual long after the training is over.

UNCERTAINTY PLUS

As reservoir fluids from marginal fields are processed through existing production facilities, complications can arise because the facilities are often owned by third parties, different taxation regimes may be involved and complex allocation routines are needed to ensure that hydrocarbons are attributed to the correct reservoir. The allocation has to be agreed and the uncertainty of the allocated product for different production scenarios must be calculated.

It's a complex, potentially fraught process and, at its centre, lies the uncertainty of allocation routines.

KELTON's Uncertainty Plus service has been designed to solve this problem by providing dynamic uncertainty models for any measurement or allocation system. It uses a combination of traditional techniques and Monte Carlo Simulation. Our reputation as leaders in uncertainty analysis has been earned by securing large cost savings for our clients in both Capex and Opex. As a company, we are involved in developing the relevant standards and we're providing the industry with an affordable way to establish metering requirements and commercial exposure.