## Instrumentation Training Course

# Instrumentation Training at Knowsley

Knowsley Instrument Services, in partnership with Envogen and Roxby Training are planning to run a series of training courses to aid Electrical and Mechanical Technicians to fault find and improve their knowledge and experience of process plant instrumentation.

The courses will be predominantly practical, supported by relatively short class room sessions covering the theory behind process instrumentation systems and equipment.

Wherever possible the equipment used and issues to be resolved during the course will be representative of the actual instrumentation likely to be found on a customer's site.

### **Course Content**

Topics covered in the training courses will include:

- An overview of Control and Instrumentation systems (C & I systems), their components and purpose
- C & I systems communication protocols
- Best practice for maintenance of C & I systems
- Best practice for problem solving on plant C & I systems
- Exploring alternatives for obsolete instrumentation

The course will be split into 8 modules; each module will include both a theory and practical session.

Starting with a general overview of C & I systems, technicians will then look at communication types and protocols, before moving on to look at specific measurement

instrumentation in more detail. Temperature, Pressure, Level, Liquid Flow measurements



and other common instrumentation will each be covered in a separate module; looking at the theory of: typical instrumentation types and their application, matching types to application, practical limitations, setting up, and fault finding tips. Each session on theory will be followed by a practical session where technicians will be given the opportunity to complete practical exercises including setting parameters and fault resolution on a wide range of instrument applications.

### Course Set Up

The proposed delivery of the courses would be:

- Based at newly established training facilities installed at our Knowsley site
- Small groups of 3-5 trainees per
- Held 1 to 2 days per week over a 6-8 week period





# Who would benefit from the course?

Electrical and Mechanical technicians currently working on process plant instrumentation

Whilst the course can be configured to suit an individual's experience, a some experience in plant maintenance, mechanical or electrical, would be preferred.

### How would they benefit?

There are few opportunities for technicians to gain practical experience in a safe but representative environment. Our Control and Instrumentation simulation rigs utilise serviceable equipment in typical installations, enabling a realistic experience of fault finding and access to be gained.

Through classroom sessions and practical application they would learn to fault find and improve their knowledge and experience of process plant instrumentation.



#### Pre Work

Ideally details of the processes participants are regularly involved with should be identified to us in advance so that the trainers can emphasise specifics that relate to their equipment/process.

### Schedule

The first course will take place in the second half of 2014. Subsequent courses will be held once or twice a month thereafter, dependent on demand.

For further information, or to apply for a place on an upcoming course, please contact Steve or Ash at <a href="mailto:sales@kis-liverpool.co.uk">sales@kis-liverpool.co.uk</a> or 0151 548 8099.

### About us

Knowsley instrument Services Ltd have been manufacturing, repairing and calibrating process instrumentation since the company was formed in 1983. Envogen UK Ltd have been providing on-site calibration, maintenance and repair of process instrumentation since 2004. Roxby Training have been running instrumentation training and CompEx courses for some years at their Middlesborough and Humberside facilities.

Together, these companies have a wealth of experience and resources that can be utilised to deliver effective training courses in the field of process instrumentation. Clients include: INEOS, E-ON, United Utilities, Mondelez.



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