

Analyser & Sampling Systems

Training Analyser Houses & Shelters

The 7 module (online) training that focuses on engineering considerations for analyser houses and/or shelters

With our roots going back to 1974, 360°KAS has a long history in providing packaged analyser solutions for various industrial production processes worldwide. We share this 45 years of experience via a training that focusses on the various considerations encountered when engineering analyser houses and shelters.

The objective of this training is to guide the participant through the variety of decisions to be taken to come to a solid design of an analyser house or shelter. Each 1-hour module can be followed online or combined into a 1 day (in-company) course. This training is open for anyone interested or working in the field of engineering, oil & gas and/or system integration.



€ 119 *

* Price per person per online module, excluding VAT. Min. 4 / Max. 8 participants per online module. Complementary lecture material is supplied afterwards. Contact us for a (in-company) training combining all modules in 1 day.

Module 1.1

Introduction & Applicable Standards

Most companies have their own specifications for the design of analyser houses and systems (i.e. DEP). These specifications are in general based on or derived from the available International Standards and expanded with specific company requirements. This module focusses on the requirements laid down in the most common standards, IEC and ISO.

Module 1.2

Location in the plant

This module focusses on the engineering considerations relative to the foreseen location in the plant versus cost and process intervention, such as area classification, distance to sample take off/return points, distance to utility interface points, the available space and foundation quality.

Module 2

Construction and Dimensions

This module focusses on the engineering considerations relative to the type of construction and required dimensions versus cost and required analysis, such as the environment where the equipment will be placed, the type of construction and the foreseen dimensions.

Module 3.1 Utility Headers

This module focusses on design (inside vs. outside) of the required utility headers, such as flare, atmospheric vent, drain, instrument air, plant nitrogen, steam, nitrogen, sample lines and potable water.

Module 3.2 Power Distribution & Signals

This module encompasses the engineering of electrical materials in and outside the analyser house, i.e. lighting, wall sockets, earth bars, power distribution panels, junction boxes, cabling and safety switches.

Module 4 Safeguarding Systems

Analyser houses located in hazardous areas measuring toxic and explosive gases are usually provided with a Safeguarding System. This module focusses on the commonly used components of a Safeguarding System and the required warning and trip functions per client of project specific requirements.

Module 5 Heating, Ventilation & AC

The purpose of a Heating Ventilation & Air Conditioning system is to create a safe and acceptable working environment for personnel and equipment. This module focusses on the climatologic and technical aspects associated with the selection of a HVAC unit.

Module 6 Calibration & Validation Facilities

Validation is the verification of an analyser against a known standard, recording the deviation of the analyser result with the standard value. When the analyser result is outside the agreed deviation limits, the analyser needs to be adjusted to provide the proper result called Calibration. This module focusses on the methods used and the considerations when engineering the facilities required.

Module 7 Gas & Liquid Recovery Systems

The recovery of gas and liquids contributes to a zero pollution philosophy and saves costs on waste water treatment and the potential loss of product. This module focusses on the most common solutions used for gas and liquid recovery used throughout the industry.



360°KAS serves the global Oil & Gas, Petrochemical and LNG market with high-end analyzing, sampling and pilot testing solutions. We take care of the whole process from basic and detailed design, through procurement and assembly to final system integration on site.

We believe trust is the most valuable asset in any relationship. You should be able to rely on our systems; 360°KAS is driven to be the quality leader in our field of expertise. Our solutions are more than accurate. They are durable, reliable and keep going. That's what we call Engineering Trust. Our portfolio encompasses:

- **Analyser & Sampling Systems**
From sample take-off, sample preparation, sample storage up to actual analyser measurement we are able to provide you with a fit for purpose and trustworthy solution.
- **Pilot Plants**
R&D Test Units for continuous, semi-continuous and batch, dedicated and multi-purpose, fixed/fluidized bed, liquid, gas and multi-phase reactor applications.
- **LNG Sampling Systems**
Serving the Liquid Natural Gas (LNG) value chain with a variety of smart solutions to sample LNG from the main transfer line.
- **Spares, Service & Maintenance**
All services necessary to maintain and operate your systems safely and accurate from initial start-up till controlled end of life cycle.
- **Instrument Sales**
Our portfolio of distributed products.



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