





# **WELCOME TO OUR SEMINARS**

Welcome to our seminars	3
Industrial gas metering	4
Basics of volume conversion and EVC EK280/EK205	5
USM 1	6
USM 2 (experienced users)	7
Measurement-IQ for gas	8
Industrial gas flow computer enCore FC1	9
Gas quality analyzer EnCal 3000	0
Gas quality analyzer EnCal proChain	1
Gaslab Q2 seminar	
On-site seminars	
How to find us	4
Registration & organization	5



#### **Editorial**

# **WELCOME TO OUR SEMINARS**

Dear Customers,

We are all worried about the climate and every day we read new headlines on the subject. What will our mobility be like in the future?

How will we heat our homes and houses?

Will we still be able to book flights without having to feel guilty?

It is responsible and only right to talk about these things and to debate them, as we all have a serious responsibility for our future.

We also have this responsibility for our natural gas supply and all the meters and regulators we use for it.

Our new seminar brochure for 2024 contains all our specialist courses to keep your personnel who use our Elster products every day up to date with all the latest developments. Whether they attend the seminar here in Mainz-Kastel or at your premises, we will definitely be able to find the perfect solution for your training requirements. Just get in touch.

Yours sincerely, Paul Schamari

Seminar Manager Mainz-Kastel

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### Which meter for which system?

# INDUSTRIAL GAS METERING

#### **AIM**

In this 2-day seminar participants learn the basics of device functions and the calibration requirements for gas meter, volume converter and process gas chromatograph applications. This is important knowledge for the selection, installation and use of the devices

#### **CONTENTS**

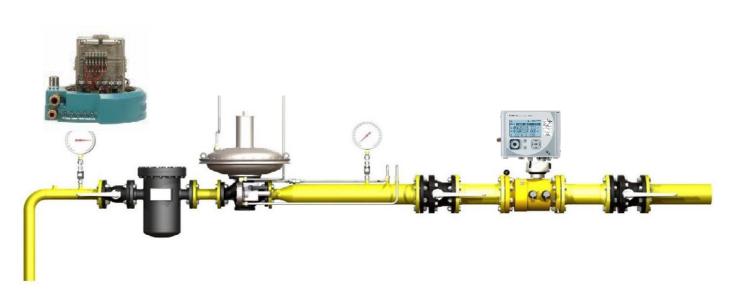
- Fundamentals of gas metering and the metering chain
- Aspects of the testing agency
- Design of meters, volume conversion devices, rotary and turbine gas meters
- Gas meter/volume converter system
- Expert discussion about rotary and turbine gas meters and volume conversion devices
- Remote data transfer from volume conversion devices

## **TARGET GROUP**

Grid Planers, engineers, officers, field service personnel , in general all people interested gas metering.









**Basics of Volume Conversion and compact Volume Converter applications** 

# **BASICS OF VOLUME CONVERSION AND EVC EK280/EK205**

#### **AIM**

In this 2-day seminar, participants learn the basics of volume conversion and the basic handling of the main functions of compact Volume Conversion Devices EK280 and/or EK205. Parameterizations are carried out using the enSuite software.

#### **CONTENTS**

- Fundamentals of volume conversion
- Metrological use of volume converters
- Short introduction of volume converter EK280/EK220/EK205
- Connecting components for remote data transfer
- User interface of the devices
- Interpreting and acknowledging error messages
- Battery change
- enSuite parameterization software
- Reading and visualization of process and archive data

#### **NOTES**

Optional, further content on request

#### **TARGET GROUP**

Fitters from grid or meter operators. Personnel from the field of remote meter reading and billing who wish to obtain an overview of the electronic metering technology used.











#### Ultrasonic flow metering

# USM 1

#### **AIM**

In this 3-days seminar, participants get to know the functions and possible applications of Q.Sonic Gas Flowmeters and learn how to perform commissioning, function checks, maintenance, hardware and firmware upgrade and troubleshooting of series 6 Q.Sonic flow meter.

#### **CONTENTS**

- Fundamental and principal of an ultrasonic metering
- Design and Structure of NGQ & Legacy ultrasonic flow meter
- Ultrasonic configuration software
- Commissioning & best practices
- Data analysis
- Troubleshooting and fault analysis
- Optimization of USM setting and tolls to use
- Firmware and hardware upgrade
- Series 6 electronic retrofit kit upgrade on legacy meter
- Configuration of an old meter

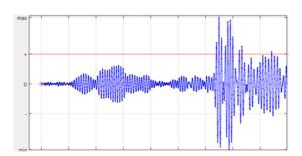
#### **NOTES**

- Satety footwear is required
- A laptop with administrations rights is required (installation of the current Sonic explorer & enSuite softwares)

## **TARGET GROUP**

- Service technicians
- Measurement engineer
- Technical specialist







#### Ultrasonic flow metering

# **USM 2 (EXPERIENCED USERS)**

#### **AIM**

This 2-days seminar is intended for experience service technicians and auditors who carry out or assist tests, function checks, perform maintenance, hardware and firmware upgrade and troubleshoot of the ultrasonic flow meter.

Enable experience field personnel to perform service electronic Series VI retrofit upgrade kit, be able to analyze data and troubleshoot fault analysis on the device during commissioning.

#### CONTENT

- Fundamental and principal of an ultrasonic metering
- Design and Structure of & Legacy ultrasonic flow meter
- Series –VI Configuration (Uniform data conversion Sonic Explorer or enSuite)
- Electronic hardware upgrade from Series-III or IV to Series-VI
- Commissioning & best practices
- Data analysis, Optimization of USM setting and tools to be used
- Troubleshooting and fault analysis
- Firmware and hardware upgrade

### **NOTES**

- Satety footwear is required
- A laptop with administrations rights is required (installation of the current Sonic explorer & enSuite softwares)

#### **TARGET GROUP**

- Service technicians
- Measurement engineer
- Technical specialist

#### **PRECONDITION**

Participation in USM I seminar and experiance in Q.Sonic trouble shooting







### **Condition Based Monitoring (CBM)**

# **MEASUREMENT-IQ FOR GAS**

#### **AIM**

In this 1-day seminar, participants get to know the functions and applications of MIQ and learn how to configure and perform data evaluation. You will be able to leverage the Power of Connected, to use MIQ's real-time, round-the-clock CBM to cut the costs of lost and unaccounted for gas, anticipate problems before they occur while keeping the measurement uncertainty to a minimum.

#### **CONTENTS**

- Introduction: Architecture and functions
- Design and interface of MIQ
- Setting of parameters
- Communication setup
- Reference setup
- Maintenance and Diagnostic

### **TARGET GROUP**

- Service technicians
- Metering engineers

## **TRAINING ON-SITE AND REMOTE TRAINING ON REQUEST**







#### **Industrial Gas Stations**

# **INDUSTRIAL GAS FLOW COMPUTER ENCORE FC1**

#### **AIM**

In this 2-day seminar, participants learn the application and configuration options of enCore FC1 Flowcomputers with integrated registration.

Parameterizations are carried out using the enSuite software in the so-called "normal mode".

Comprehensive practical exercises are intended to facilitate use of the encore FC1 with different I/O process connections and various components and simulations.

New developments and regulations are currently being communicated.

#### **CONTENTS**

- Introduction, overview and features of network connection
- Functioning of the FC1
- Online/Offline parameterization
- Application and parameterization of FC1
- Installation and use of the enSuite software

#### **NOTES**

It is a good idea to bring a notebook laptop with administrator rights to install the most recent parameterization software (enSuite)

On request, we can cover the applications in "expert mode" in specially designed seminars.

#### **TARGET GROUP**

Users who are already familiar with volume conversion devices and who wish to use the enCore FC1 in the future.







#### Natural Gas, What is the composition and calorific value?

# **GAS QUALITY ANALYZER ENCAL 3000**

#### **AIM**

In this 2-day seminar, participants get to know the functions and possible applications of EnCal3000 Gas Analyzers and learn how to independently evaluate chromatograms and a how to perform a basic calibration and an error analysis. So you are prepared to support official calibration measures and to independently optimize your processes and analyze errors.

#### **CONTENTS**

- Design and type of action of PGC EnCal 3000 natural gas and biogas
- Design and structure of the RGC3000 application software
- Operating the gas-net EnCal 3000 evaluation unit
- Setting of parameters
- Carrying out a calibration
- Connecting and measuring test gases
- Connecting the evaluation unit
- Questions and ideas

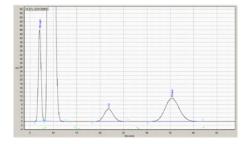
#### **NOTES**

Safety footwear and a laptop with administrator rights are required (installation of the parameterization software).

### **TARGET GROUP**

Service technicians and auditors who carry out tests and function checks of the EnCal 3000.







#### Natural Gas, What is the composition and calorific value?

# **GAS QUALITY ANALYZER ENCAL PROCHAIN**

#### **AIM**

In this 2-day seminar, participants get to know the functions and possible applications of EnCal3000 prochain Gas Analyzers and learn how to evaluate chromatograms and a how to perform a basic calibration and an error analysis. So you are prepared to support official calibration measures and to independently optimize your processes and analyze errors.

#### **CONTENTS**

- Design and type of action of PGC EnCal proChain for natural gas C6
- Design and structure of the enSuite parameterization software
- Setting of parameters
- Carrying out a calibration
- Connecting and measuring test gases
- Connecting the evaluation unit
- Questions and ideas

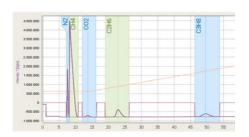
### **NOTES**

Safety footwear and a laptop with administrator rights are required (installation of the enSuite software).

## **TARGET GROUP**

Service technicians and auditors who carry out tests and function checks of the EnCal 3000 proChain.







### Natural Gas, What is the calorific value? Fast Analysis

# **GASLAB Q2 SEMINAR**

This one-day seminar is intended for service technicians and auditors who carry out or assist tests and function checks of the Gas-Lab Q2.

#### **AIM**

Evaluation of process values, carrying out service calibration, test gas analyses runs, fault analysis on the device.

#### **CONTENTS**

- Design and type of action of Gas-Lab Q2
- Design and structure of the Q2 application software enSuite
- Evaluation of source values
- Operating the Q2 display unit
- Setting of parameters
- Carrying out a calibration
- Connecting and measuring test gases
- Connecting the evaluation unit
- Troubleshooting

#### **NOTES**

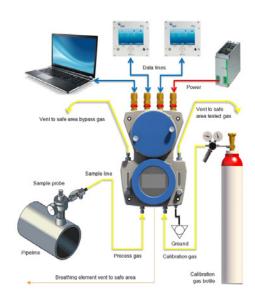
Safety footwear is required

A laptop with administrations rights is required (installation of the current enSuite software)

## **TARGET GROUP**

Service technician.







#### No Time to Come to Us?

# **ON-SITE SEMINARS**

We can also organize a seminar specifically for your needs. We offer a wide range of topics in the following fields:

### **GAS METERS**

Diaphragm meters, rotary meters, turbine meters, indexes, interfaces, commissioning, operation of meters, fundamentals and practical exercises on section models.

## COMPACT ELECTRONIC VOLUME CONVERTERS, FLOW **COMPUTERS, GAS ANALYZERS, USM METERS**

Functions and applications of the devices (operation, setting values, error determination, archive readout), system connection (working with the enSuite parameterization software) and exercises directly on the devices

#### YOU CAN ALSO INDIVIDUALLY COMBINE THE SEMINAR TOPICS

#### **PRICE**

On Request

#### **Contact:**

Paul Schamari

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# **HOW TO FIND US**



### **MAINZ-KASTEL**

The following seminars will be held at the seminar center in Mainz-Kastel:

- Industrial Gas Metering
- Basics of Volume Conversion Devices EK2x0
- Ultrasonic Flow meters
- Measurement IQ

#### **Elster GmbH**

Steinern Straße 19-21 55252 Mainz-Kastel Germany

#### **Information for Navigation Systems**

Mainz-Kastel is a suburb of Wiesbaden in the Federal state of Hessen.



#### **DORTMUND**

The following seminars will be held at the seminar center in Dortmund:

- Industrial Gas Flow Computer enCore FC1
- Gas Quality Analyzer EnCal 3000, EnCal3000 proChain
- Gaslab Q2

#### **Elster GmbH**

Schloßstraße 95a 44357 Dortmund Germany



# **REGISTRATION & ORGANIZATION**

#### **REGISTRATION**

You can register by contacting your local representative or send an e-mail to **elster.customer.trainings@honeywell.com** 

After aligning the details, you will receive a training agenda and all the information you need to book the training.

After booking we finally confirm the schedule and the order.

#### **OUR SERVICES**

- Experienced trainers
- Training material
- Lunch on all training days
- Refreshments during the seminar
- Dinner with trainers on the first day for trainings booked for 2 and more training days

## **SEMINAR VENUES**

## Mainz-Kastel

- Industrial gas measurement,
- Compact volume converters,
- Ultrasonic Flow meters,
- MIQ

#### **Dortmund**

- enCore FC1
- Gas Analyzers

# YOUR CONTACT IN MAINZ-KASTEL



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