

Training Schedule 2020

**Measurement Solutions -
Systems and Products
Training Courses**

USA

1602 Wagner Avenue
Erie, Pennsylvania USA 16510
24/7 Support
T +1 844 798 3819

Germany

Regentstrasse 1
25474 Ellerbek, Germany
P.O. Box 1164,
25470 Ellerbek, Germany
T +49 4101 3040

Norway

Kirkegardsveien 45
Box 1012
3601 Kongsberg, Norway
T +47 32 70 67 00

TechnipFMC.com

© TechnipFMC plc 2020

FMSM025 Issue/Rev. 0.4 (1/20)



> Welcome

Whether your employees are industry veterans or new to the field, we believe in supporting our clients and ensuring their ongoing business success. Our training courses reflect the experience and knowledge gained working nearly 100 years in the oil and gas industry.

The courses are taught by the same measurement specialists that design, engineer, and service our equipment. We offer you and your employees a superior training environment that will assist you with safe, reliable, and efficient system operation. The training courses use our demonstration equipment and simulators to provide an in-depth, hands-on experience. Our training courses offer students valuable knowledge and practical expertise that allow students to autonomously install, parameterize, maintain, and repair your system.

TechnipFMC also offers customized courses either at your place of business, a TechnipFMC training location, or a location of your choice. We look forward to sharing our knowledge and experience with you at our training seminars. If you require other training services, please do not hesitate to contact us.

- TechnipFMC Training Department

At a glance

Contents

Smith Meter® AccuLoad® Schools	Page 4
January 20- 24 Ellerbeck, Germany	
March 09- 13 Ellerbeck, Germany	
August 11- 14 Erie, Pennsylvania, USA	
September 15 - 18 Erie, Pennsylvania, USA	
AccuLoad® Load Rack	Page 5
February 11-14 Erie, Pennsylvania, USA	
April 14-17 Erie, Pennsylvania, USA	
Intro to Custody Transfer Metering	Page 6
October 20-23 Corpus Christi, Texas, USA	
Liquid Metering Technologies	Page 7
March 10-13 Erie, Pennsylvania, USA	
Intro to Load Rack Operation and Maintenance	Page 8
June 2-3 Erie, Pennsylvania, USA	
LACT Units	Page 9
August 18-21 Corpus Christi, Texas, USA	
November 17-20 Bakersfield, California, USA	
Terminal Preset Controllers Advanced	Page 10
September 14-18 Ellerbek, Germany (EN)	
October 05-09 Ellerbeck, Germany (DE)	
Terminal and Loading Rack System Basic	Page 11
May 11-15 Ellerbek, Germany (English Language)	

> Smith Meter® AccuLoad®

Dates and locations

AccuLoad III Ellerbek, Germany – January 20-24, 2020

AccuLoad IV Ellerbek, Germany – March 9-13, 2020

AccuLoad III Erie, Pennsylvania, USA – August 11-14, 2020

AccuLoad IV Erie, Pennsylvania, USA – September 15-18, 2020

Prerequisites

Basic metering knowledge and familiarity with load rack/batching operations.

Overview

These courses combine theory, hands-on training and live demonstrations which will provide an understanding of how AccuLoad electronic load controllers interface into the load rack metering system.

Topics covered include

- ▶ General operation
- ▶ Programming function
- ▶ Installation guidelines
- ▶ Service and diagnostics
- ▶ Communication functions
- ▶ Security features
- ▶ Additive injector interface
- ▶ Auto proving for provers
- ▶ Blending methods and programming (SEQ, ratio and hybrid)
- ▶ Pulse transmitters
- ▶ AccuMate software application

Schedule

Erie, Pennsylvania, USA schedule

Tuesday	0800 - 1600
Wednesday	0800 - 1600
Thursday	0800 - 1600
Friday	0800 - 1100

Ellerbek, Germany schedule

Monday	0830 - 1630
Tuesday	0830 - 1630
Wednesday	0830 - 1630

> Smith Meter® AccuLoad® Load Rack

Dates and locations

AccuLoad III Load Rack Erie, Pennsylvania, USA - February 11-14, 2020

AccuLoad IV Load Rack Erie, Pennsylvania, USA - April 14-17, 2020

Overview

This course combines theory, hands-on training and flow demonstrations that students can readily use in the field to install, operate, calibrate, maintain and troubleshoot TechnipFMC's load rack products.

Topics covered include

- ▶ General operation
- ▶ Programming function
- ▶ Installation guidelines
- ▶ Smith Meter PD and Prime4 meters
- ▶ Meter service
- ▶ Pulse transmitters
- ▶ Load rack accessories
- ▶ Smith Meter 210 digital control valves
- ▶ Turbine meters for load rack service

Schedule

Erie, Pennsylvania, USA schedule

Tuesday	0800 - 1600
Wednesday	0800 - 1600
Thursday	0800 - 1600
Friday	0800 - 1100

> Intro to Custody Transfer Metering

Dates and locations

Corpus Christi, Texas, USA - October 20-23, 2020

Overview

This course covers the basic knowledge for engineers and technicians just entering the oil and gas industry.

Topics covered include

- ▶ Flow theory
- ▶ Units of measure
- ▶ Field transmitters
- ▶ Typical control systems
- ▶ Basics of product sampling
- ▶ Measurement uncertainties

Schedule

Corpus Christi, Texas, USA schedule

Tuesday	0800 - 1600
Wednesday	0800 - 1600
Thursday	0800 - 1600
Friday	0800 - 1100

> Liquid Metering Technologies

Dates and locations

Erie, Pennsylvania, USA - March 10-13, 2020

Overview

This course combines theory and hands-on training to teach skills that students can immediately use in the field to install, operate, calibrate, maintain and troubleshoot TechnipFMC Measurement Solutions Metering Products.

Topics covered include

- ▶ Smith Meter PD meters
- ▶ Conventional turbine meters
- ▶ Multiple viscosity turbine meters
- ▶ Pipeline accessories
- ▶ PD stack accessories
- ▶ AccuLoad
- ▶ microFlow.net
- ▶ Coriolis meters
- ▶ Ultrasonic meters
- ▶ Proving and proving methods

Schedule

Erie, Pennsylvania, USA schedule

Tuesday	0800 - 1600
Wednesday	0800 - 1600
Thursday	0800 - 1600
Friday	0800 - 1100

> Intro to Load Rack Operation & Maintenance

Dates and locations

Erie, Pennsylvania, USA - June 2-3, 2020

Overview

This course combines overview of the electronics and mechanical equipment typically found in load racks that students can immediately use to identify the components and their role in the field.

Topics covered include

- ▶ microLoad, AccuLoad III and IV operation overview
- ▶ MicroMate/AccuMate overview
- ▶ Load rack measurement equipment

Schedule

Erie, Pennsylvania, USA schedule

Tuesday	0800 - 1600
Wednesday	0800 - 1600

> LACT Units

Dates and locations

Corpus Christi, Texas, USA - August 18-21, 2020
Bakersfield, California, USA - November 17-20, 2020

Overview

This course covers design, operation and standards governing Lease Automated Custody Transfer metering units.

Topics covered include

- ▶ LACT vs tank gauging
- ▶ LACT unit design
- ▶ Meter technologies
- ▶ Smith Meter 210 digital control valves
- ▶ API standards
- ▶ Proving
- ▶ Control and data logging

Schedule

Corpus Christi, Texas, USA schedule Bakersfield, California, USA Schedule

Tuesday	0800 - 1600
Wednesday	0800 - 1600
Thursday	0800 - 1600
Friday	0800 - 1100

> Terminal Preset Controllers – Advanced

Dates and locations

Ellerbek, Germany - September 14-18, 2020 (EN)

Ellerbek, Germany - October 5-9, 2020 (DE)

Overview

This course covers programming, operation and troubleshooting for experienced personnel and engineers from service and maintenance companies

Topics covered include

- ▶ Temperature compensation
- ▶ Flow control
- ▶ Advanced programming in AccuLoad III
- ▶ microLoad features and configuration
- ▶ Metering
- ▶ Proving
- ▶ microFlow.net overview

Schedule

Ellerbek, Germany schedule

Monday	0830 - 1630
Tuesday	0830 - 1630
Wednesday	0830 - 1630
Thursday	0830 - 1630
Friday	0830 - 1100

> Terminal and Loading Rack System – Basic

Dates and locations

Ellerbek, Germany - May 11-15, 2020 (English Language)

Overview

This course covers the basic programming requirements, operation and maintenance for trainees/apprentice personnel and engineers from service and maintenance companies

Topics covered include

- ▶ Temperature compensation
- ▶ Flow control
- ▶ Basic programming blending, unloading, auto proving
- ▶ Metering basics
- ▶ Proving basics
- ▶ microFlow.net

Schedule

Ellerbek, Germany schedule

Monday	0830 - 1630
Tuesday	0830 - 1630
Wednesday	0830 - 1630
Thursday	0830 - 1630
Friday	0830 - 1100



TechnipFMC's policy of practical training is an excellent learning opportunity. Our Aftermarket Group has found that Best Measurement Practices experience builds a solid working knowledge of measurement systems and products for the client, producing on-site personnel who are knowledgeable and comfortable with the operation and maintenance. The courses detailed here can also be customized to meet a client's particular need by combining courses and focusing on their installed equipment. These unique and individualized courses can be quoted upon request to companies looking for a session held at their site, a centrally located facility to help reduce travel costs, or at one of our facilities located in Germany, Norway, and the US.

This training is aimed at clients with an existing installed base and an on-staff team of operations and maintenance personnel. Development of these training programs will result from close interaction with our team to assess the current skills and competencies of a client's staff against "industry norms" for the particular level of the technician.

1. Sender:

Company and Dept.

Street or P.O.B.

Zip - City - Country

Telephone

E-Mail

2. Course: *Please use a separate form for each course.*

Date from - to

Course Title

Location

Fee: \$1,500 / EUR 1050 per person, per course.

3. Participants: *We herewith register firmly as follows:*

Mr./Ms. First Name

Last Name

Function

Food Requested**

Mr./Ms. First Name

Last Name

Function

Food Requested**

Mr./Ms. First Name

Last Name

Function

Food Requested**

*** Special food requested, e.g. vegetarian, kosher*

4. Send: *Send Germany orders to Nicole.Wegener@technipfmc.com. Send USA orders to MS.ResponseCenter@technipfmc.com.*

Yes, I/we are interested in a factory tour.