



Armstrong®

ARMSTRONG UNIVERSITY

LEARNING CENTER EUROPE / MIDDLE EAST / AFRICA



KNOWLEDGE NOT SHARED IS ENERGY WASTED[®]

One of Armstrong International's greatest strengths is our wealth of knowledge, experience and insight, derived from more than 100 years of providing thermal utility solutions for customers all over the world. Since 1958, we've been sharing that knowledge with tens of thousands of students, ranging from pipefitters and utility engineers to energy czars. Armstrong is a true, sage brand and we're fully committed to giving you access to all that we've learned to help you make the smartest possible decisions for your company.



ARMSTRONG GLOBAL LEARNING CENTERS

ARMSTRONG HAS LEARNING CENTERS ACROSS THE GLOBE.

Our Learning Centers are located in: Three Rivers, Michigan (USA); Liege, Belgium; Beijing, China; Nagoya, Japan; and Guadalajara, Mexico. Armstrong locations in India, Korea and other parts of the world have portable demonstration capabilities that allow us to bring the seminar to you.



SEMINARS AND OTHER LEARNING OPPORTUNITIES GIVE YOU ACCESS TO OUR UNIQUE LEGACY OF KNOWLEDGE.

Our seminars are hands-on sessions, conducted at our Learning Centers, worldwide. Armstrong Global Learning Centers are equipped with the latest functional and cutaway equipment, making it possible for you to actually see how utility systems operate. Our learning center offer moderns and interactives tools such as touch screen board, videoconferencing system and live quiz capabilities.

Seminars begin with the basics, move on to best methods for installation and application, and conclude by exploring ways to maximize return on your energy investment. They are taught by trained Armstrong experts who have the technical background and field experience necessary to ensure that you receive relevant, understandable information.



WE OFFER INDUSTRY-SPECIFIC TRAINING AND SEMINARS TO ADDRESS YOUR MOST COMMON, DAILY ISSUES.

More than a century of sage knowledge and in-depth expertise allows us to provide unique learning opportunities designed for your industry. If you're in **hospitality or another institutional industry**, we can show you how to operate more efficiently while increasing satisfaction and safety for guests and staff. For **hydrocarbon and chemical refineries**, we can help you reduce energy use and achieve more uptime by eliminating process interruptions. For **food, beverage or pharmaceutical** companies, we can show you ways to increase both product and labor safety, and production and yield.



WE OFFER CUSTOM SEMINARS AND ON-DEMAND WEBINARS.

For those who are remotely located and need an Internet-based option, Armstrong provides on-demand webinars that cover specific subjects. If you have a particular need or area of interest, consider having a specific seminar customized for your personnel.

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INDUSTRY SPECIFIC TRAINING

FOOD, PHARMA & GENERAL INDUSTRY FOCUS

2-Days Seminar

1. Introduction
2. Steam basics: fundamentals of steam theory
3. Steam generation
 - Typical boiler house layout
 - Efficiency calculations
 - Steam costs
 - Impact of cogeneration on design efficiency and costs
4. Steam distribution
 - Best practices design
 - Steam quality
 - Insulation
 - Steam trap technologies
 - Pressure reducing stations
 - Culinary steam
 - Water hammering
 - Flow measurement
5. Steam usage
 - Direct steam injection
 - High-temperature heat exchangers
 - Low-temperature heat exchangers
 - Process hot water
 - Wash-down hot water
 - Sanitary hot water
 - Heating hot water
6. Condensate return
 - Flash steam
 - Stalling of heat exchangers
 - Mechanical versus electric pumps
7. Steam traps management and thermal system optimizations

REFINING, GAS PROCESSING & PETROCHEMICAL INDUSTRIES

2-Days Seminar

1. Introduction
2. Steam basics: fundamentals of steam theory
3. Steam generation
 - Typical boiler house layout
 - Efficiency calculations
 - Steam costs
4. Steam distribution
 - Best practices design for different steam systems
 - Steam quality
 - Desuperheating
 - Insulation
 - Steam trap technologies
 - Pressure reducing stations
 - Water hammering
 - Flow measurement
 - Case studies on steam distribution
5. Steam usage
 - Steam tracing
 - Direct steam injection
 - Air heaters
 - Hot water
 - Tank farms
6. Condensate return
 - Flash steam
 - Stalling of heat exchangers
 - Mechanical versus electric pumps
 - Case studies on condensate return
7. Steam trap management





ARMSTRONG UNIVERSITY ONLINE

WHATEVER INDUSTRY YOU'RE IN, WE HAVE ONLINE COURSES TO HELP YOU HANDLE THOSE TOUGH, EVERYDAY ISSUES.

At Armstrong, we understand that in any industry, utility management is as challenging as it is crucial. Every day you're faced with new demands and rising expectations to achieve more with less. Your job may be growing more difficult, but Armstrong University is here to make it easier.



Armstrong University Online gives you easy access to in-depth information and expertise that encompasses the processes, systems, products and requirements that are vital to serving your industry. We offer comprehensive online training, education and learning opportunities, available from the convenience of your computer, tablet or smartphone.

READY TO LEARN MORE?

For information about our extensive curriculum of online courses, training, seminars and other learning opportunities, visit Armstrong University at armstronginternational.com. To schedule a seminar, contact us by sending an email to: seminars@armstronginternational.eu or register for a class with our subscription form.



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Global Learning Center EMEA - Herstal (Liège), Belgium



Contact Armstrong International

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2022 Schedule

FOCUS: Refineries, Gas Processing and Petrochemical Industries

- 22nd – 23rd March, 2022
- 4th – 5th October, 2022

FOCUS: Food, Pharmaceutical and General Industry

- 26th – 27st April, 2022
- 6th – 7th September, 2022

Classroom Details

Tuition Fee: 500 € per attendee - **Tuition Includes:** course material, lunches, dinner and beverages on both days – **Class Length:** seminars start at 8:30 and finish at 17:00 - **Travel and accommodation expenses:** our hotel partner is Globales Post Hotel in Herstal. The single room rate for one night including breakfast is 75 €; Armstrong will book hotel for the attendees as soon as confirmation of participation will be received. Attendees will have to cover their travelling and accommodation expenses.

Register for a class

Company Name:		
VAT nr.:		
Address:		
City:	Postal Code:	
Country:	Phone nr.:	
Student Name:		
Function:		
E-mail:		
Date of the seminar:		
FOCUS: Refineries, Gas Processing and Petrochemical	<input type="checkbox"/> 22 nd – 23 rd March	<input type="checkbox"/> 4 th – 5 th October
FOCUS: Food, Pharmaceutical and General Industry	<input type="checkbox"/> 26 th – 27 th April	<input type="checkbox"/> 6 th – 7 th September

Armstrong International understands the importance of the privacy of its customers and the protection of their personal data. To fix you attendance to our seminars and for organization purposes we use your personal data (company, name, surname, email, phone). We will always treat your information with respect! Armstrong International will use the information you provide on this form to be in touch with you and to provide updates to our learning proposal, products, services and activities. You can change your mind at any time by clicking the unsubscribe link in the footer of any email you receive from us, or by contacting us by sending us a request via our Privacy Policy web page or by email at gdpr@armstronginternational.eu

Armstrong International EMEA

INTELLIGENT SOLUTIONS IN STEAM, AIR AND HOT WATER

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