

Course Details

Registration Fee

The registration fee for each course includes all program materials, continental breakfast, lunch and all break refreshments. Checks, credit cards or purchase orders are accepted.

Change in Plans & Cancellation Policy

If you cannot attend the course, you may send a substitute. If you cancel your registration 5 working days prior to the start date of the course, your registration fee will be refunded without incurring a fee or cancellation charge. Call Bob Allbee at (563) 288-6162.

We reserve the right to cancel this program due to insufficient registration or inclement weather. Our policy of limited enrollments makes it necessary to charge the full fee for cancellations received during the final five days prior to the program or failure to attend without canceling.

Continuing Education Units

Each attendee will receive a Certificate of Attendance. Additionally, the Fundamentals course qualifies for 7 Professional Development Hours (PDH) and the Advanced course qualifies for 14 PDH. You will be awarded .7 CEU's for the Fundamentals course and 1.4 CEU's for the Advanced course.

Directions and Parking

Detailed maps and parking information will be mailed to you with registration acknowledgment when we receive your registration.

Further Information

For questions about program content, contact Bill Haman, Industrial Project Manager for the Iowa Energy Center at whaman@energy.iastate.edu or (515) 294-4710. For registration questions, contact Bob Allbee at ballbee@eicc.edu or (563) 288-6162.

Special Needs If you need accommodations for a disability or a dietary restriction, contact Bob Allbee at ballbee@eiccedu or (563) 288-6162.

Emergency Messages During course hours, messages may be left at (563) 288-6162 or faxed to (563) 288-6104.

Tax Deduction The expense of continuing education, when taken to maintain and improve professional skills, is tax deductible. Contact your accountant for details.

The Eastern Iowa Community College District endorses the principle of equal educational opportunities for all people regardless of race, color, creed, marital status, national origin, sex, sexual orientation, religion, ancestry, age, or non-job related handicap or disability in the education programs or activities it operates. Persons having inquiries concerning the district's accommodation for or compliance with Title IX, Section 504, the Americans with Disabilities Act and the Age Discrimination Act may contact: Affirmative Action Officer, 306 W. River Drive, Davenport, Iowa 52801, (563) 336-3300.

The Compressed Air Challenge® Training Program

is a cutting-edge, national training program designed to help you find cost-effective solutions to pressing, everyday operational problems. This two-part program is held back-to-back over three days. The first course, Fundamentals of Compressed Air Systems, is a one-day workshop. The second course, Advanced Management of Compressed Air Systems, is two-days long.

The training program will teach facility plant engineers, plant operators and maintenance staff:

- How their plant's compressed air system operates;
- How much compressed air costs and;
- How to achieve 15% to 25% savings through proper operation and controls, system maintenance and appropriate use of compressed air.

Who Should Attend

This program is designed for facility engineers and maintenance supervisors at small to medium plants, though individuals from larger plants, equipment distributors and engineering consultants will also benefit from the program.

After completing the program, you will have the knowledge and confidence to make positive changes in your company's compressed air systems that will help control costs, improve productivity and increase efficiency.

Iowa Energy Center

The Iowa Energy Center is a nonprofit organization dedicated to increasing Iowa's energy efficiency and use of renewable fuels. It is working to meet its goals through the sponsorship of events like the Compressed Air Challenge®. To learn more about the Iowa Energy Center, visit www.energy.iastate.edu.

Compressed Air Challenge®

The Compressed Air Challenge® is a voluntary collaborative with one main goal: helping improve the performance of compressed air systems. It is a voluntary collaboration made up of users of compressed air, system consultants, equipment manufacturers and distributors, state and federal government, an association of plant engineers, energy efficiency organizations and utilities. To learn more about the Compressed Air Challenge® program, visit www.compressedairchallenge.org.



Iowa Energy Center
2521 Elwood Drive, Suite 124
Ames, IA 50010-8229
P300-1574

The most up to date and in-depth technical information available on industrial compressed air systems.



The Compressed Air Challenge® Training Program



Part I:
Fundamentals of Compressed Air Systems
October 28, 2003
Muscatine, Iowa

Part II:
Advanced Management of Compressed Air Systems
October 29 - 30, 2003
Muscatine, Iowa



The Compressed Air Challenge® Training Program

MUSCATINE, IOWA • OCTOBER 28 - 30, 2003

REGISTRATION— The Compressed Air Challenge® Training Program

Participant Information

First Name		Last Name	
Company/Affiliation			
Day Phone			
e-mail		Fax	
Evening Phone			
Street Address			
City		State	Zip Code

Registration Fees

- Part I: Fundamentals of Compressed Air Systems \$295 (#303773)
- Part II: Advanced Management of Compressed Air Systems \$595 (#303774)
- Parts I and II \$800 (#303777)

Method of Payment

- Check (Payable to Eastern Iowa Community College District)
- American Express Discover MasterCard Visa

Cardholder Name	
Signature	
Card Number	Expiration Date
<input type="checkbox"/> Purchase Order	P.O. Number _____

Special Needs

If you need accommodations for a disability or a dietary restriction, contact Bob Allbee at ballbee@eicc.edu or (563) 288-6162.

It's Easy To Register!

- Online— www.eicc.edu/ceschedule
- By Fax— (563) 288-6104
- By Mail— Send the completed registration form and check or money order to: Muscatine Community College, Attn: Bob Allbee, 152 Colorado Street, Muscatine, Iowa 52761 (When paying by check, please write the class number in the lower left corner of the check.)

I have read and understand the registration and refund procedures for Continuing Education (located on back).

Signature: _____ Date: _____

Part I: Fundamentals of Compressed Air Systems

Benefits

After attending this one-day course, you will be able to:

- Calculate the energy cost of compressed air in your facility;
- Improve compressed air system efficiency and reliability, and better control compressed air;
- Identify inappropriate uses of compressed air in your facility;
- Establish a baseline to measure improvements in compressed air performance and efficiency;
- Match your system supply to actual production requirements for pressure and flow;
- Find and fix leaks - and establish a leak prevention program.

Agenda

- Why Care About Air?
- Study Your Supply Side
- Understand Your Demands
- Are You on Base?
- Stay Under Control
- Maintain System Efficiency
- Get with the Plan
- Summary and Evaluation

Bring to Course

For both courses you will need to collect information about your compressed air system including a compressed air system block diagram, type size, and information on the operation of each compressed air system in your plant. More details will be mailed with your confirmation packets.

Part II: Advanced Management of Compressed Air Systems

(You must complete Fundamentals of Compressed Air Systems before enrolling in this course.)

Benefits

After attending this two-day course, you will be able to:

- Explain the data and tools necessary to measure and assess the efficiency and cost-effectiveness of a compressed air system;
- Develop a compressed air system profile;
- Address point-of-use issues including:
 - Determining actual air quality requirements and treat air appropriately;
 - Investigating and reducing highest point-of-use pressure requirements;
 - Investigating and addressing high-volume, intermittent applications;
 - Taking stock of what you have;
- Implement a compressed air system maintenance program;
- Analyze existing compressor(s) and system controls, and implement an effective control strategy;
- Align the supply-side with the demand-side operation;
- Implement strategies to maintain system alignment;
- Communicate to gain support of plant and production management.

Agenda

Day 1

- Introduction
- Taking Measurements
- What is Happening Here? - Part I
- Developing a System Profile
- What is Happening Here? - Part II
- Air Quality Requirements
- High Pressure Applications
- High Volume, Intermittent Applications
- Taking Stock of What You Have
- Compressed Air System Maintenance
- Day 1 Summary and Evaluation

Day 2

- Understanding Controls - How to apply controls to centrifugal compressors and multiple compressor systems
- Aligning Supply with Demand- Matching the system output to system requirements
- Heat Recovery - Using "waste heat"
- Putting it All Together - A comprehensive exercise
- Selling the Project to Management- Getting approval to implement projects

Instructors

Bill Scales, Scales Air Compressor Corporation, Carle Place, NY, is an internationally recognized expert in compressed air systems. He has visited more than 5,000 facilities and audited hundreds of compressed air systems throughout the world. He has hands-on knowledge in operating and maintaining compressors, which has developed from years of experience in servicing and overhauling air compressors during the early stages of his career. He is currently the chief executive officer at Scales Air Compressor Corporation and president of Air Compressor System Consultants. He has been selected by the Compressed Air Challenge®, to write the *Best Practices Manual* for compressed air systems.

David McCulloch, Mac Consulting Services, Shalimar, FL, has broad experience in compressor and related industries including engineering, quality, service, sales and marketing and litigation. He is currently involved in consulting projects with major companies for compressors, dryers, compressed air systems, energy audits and seminars, and is retained by The Compressed Air & Gas Institute as editor and writer for the latest edition of *The Compressed Air & Gas Handbook*. He is also their representative on the Project Development Committee and Technical Core Group, and is the chairman of the Certification Group.

Host/Sponsor

Iowa Energy Center

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