

TruPower, Inc.

*Increase your knowledge, and gain the power to be better!*

# Hands-on Facility Maintenance Training

*Learn How to Increase  
Efficiency and Cut Costs*



## What we can do for you:

- **Train employees in various topics** at varying skill levels including beginners to enhancing the skill levels of more advanced personnel
- **We can design training programs specifically for your needs**, with top-notch instructors who are construed as experts in their respective fields
- **We provide True Hands-on Training** at our facility, and on-site when appropriate equipment is available

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992    Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Phone: (717) 741-9992    Visit: [TruPowertraining.com](http://TruPowertraining.com)  
Fax: (717) 741-9993

# About TruPower, Inc.:

TruPower, Inc. provides hands-on open enrollment courses at our facility and various on-site facility maintenance training courses at our clients' locations, and we seek to provide training of the utmost quality to the organizations we service.

At our facility we complete hands-on demonstrations during our introductory courses and students gain valuable, direct hands-on experience utilizing a boiler at our location during our more advanced boiler courses. Most of our on-site training can be tailored to meet your specific requirements, and a needs analysis may be conducted to help identify very specific topics to be covered during a course at your facility. Additionally, if appropriate equipment is available, we prefer to incorporate hands-on training during our on-site courses as well. We also specialize in developing training programs and courses for clients who have training needs in various, unique subject matters.



TruPower is committed to maintaining constant communication with its clients and instructors, to always ensure that the highest standards are not only followed, but that the best training possible is always achieved and performed. We pledge that our clients' and students' satisfaction is the number one priority, and that any and all instructors will be not only extremely knowledgeable, but are also experts in the field of study taught.

## Catalog Contents:

## Page

### Open Enrollment Courses

Open Enrollment Course Schedule & Registration Form . . . . .	3
Open Enrollment Course Descriptions . . . . .	4-9

### On-Site Training

Air Conditioning/Refrigeration . . . . .	10-13
Boilers . . . . .	14-15
Building Inspection . . . . .	15
Carpentry . . . . .	16-17
Customized Training . . . . .	17
Energy Insulation Appraiser . . . . .	18
Facility Management & Maintenance . . . . .	18-20
Pipefitting . . . . .	20-21
Plumbing . . . . .	22-25
Sheet Metal . . . . .	25-26
Sprinkler Systems/Fire Protection . . . . .	26-27
Welding . . . . .	27-28
Woodworking . . . . .	29-30

About our Instructors . . . . .	31-35
---------------------------------	-------

Cost of On-Site Training . . . . .	35
------------------------------------	----

New Courses Under Development . . . . .	35
---	----

TruPower, Inc.	Toll Free: (866) 741-9992	Email: <a href="mailto:TruPowertraining@yahoo.com">TruPowertraining@yahoo.com</a>
PO Box 3952, York, PA 17402	Phone: (717) 741-9992	Visit: <a href="http://TruPowertraining.com">TruPowertraining.com</a>
	Fax: (717) 741-9993	

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992 Email: TruPowertraining@yahoo.com  
Phone: (717) 741-9992 Visit: TruPowertraining.com  
Fax: (717) 741-9993

Call (866) 741-9992 with questions and to register

## Course Schedule

Courses held at:

4810 Seton Drive, Baltimore, MD

**Class size is limited and Satisfaction is Guaranteed. Look for additional open enrollment courses in the future.**

Course	Dates	Cost
<b>Advanced Boiler</b>	<b>September 23-25, 2003</b>	<b>\$995</b>
<b>Boiler NOx &amp; Certification</b>	<b>September 26, 2003</b>	<b>\$165</b>
<b>ASME QFO Boiler Certification &amp; NOx Training with Certification</b>	<b>October 27-31, 2003</b>	<b>\$1,195</b>
<b>Advanced Boiler</b>	<b>November 17-19, 2003</b>	<b>\$995</b>
<b>Boiler NOx &amp; Certification</b>	<b>November 20, 2003</b>	<b>\$165</b>
<b>Introduction to Boilers</b>	<b>February 4, 2004</b>	<b>\$330</b>
<b>Basic Boiler</b>	<b>February 5-6, 2004</b>	<b>\$665</b>
<b>Advanced Boiler</b>	<b>March 22-24, 2004</b>	<b>\$995</b>
<b>Boiler NOx &amp; Certification</b>	<b>March 25, 2004</b>	<b>\$165</b>

Receive 10% off per student if three or more attend. Registration begins at 8 AM, course ends at 4:30 PM, Lunch is provided. For questions and to enroll, please contact us at (866) 741-9992, or fax this form to (717) 741-9993, or mail with payment to TruPower, Inc., PO Box 3952, York, PA 17402.

Name of Student/Students: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone No.: \_\_\_\_\_

Course Attending: \_\_\_\_\_ Date: \_\_\_\_\_

Payments due prior to course, please check method of payment  Check  Visa  MasterCard

Please send me information about your other courses: \_\_\_\_\_

# Open Enrollment Course Descriptions

## Introduction to Boilers—Hands-on Demonstration (1-day, February 4, 2004)

For Owners, Engineers, Operators and Maintenance Technicians

- Basic introduction to the boiler types and basic uses. Students become familiar with the terms and general principles of the basic boiler.

- **Final Objective:** To be able to communicate effectively with boiler professionals and make better decisions affecting the boiler and facility.

- Gain knowledge about safe boiler practices
- Discover facts about different types of boilers and how they are utilized
- Increase your communication capabilities by learning more boiler terminology
- Acquire more information about boiler construction and components such as valves, instrumentation, fans, dampers, regulators, tubes, refractory, turning box, oil pumps, and air compressors
- Learn the theories behind combustion, water flow, heat transfer, and oxygen, water, and fuel reactions
- Enhance your understanding of boiler principles for an educated focus regarding “the big picture” within plant operations



### Why You Should Attend Our Boiler Training:



#### Put Safety First

Reinforce and Review  
Imperative Safety Practices

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992  
Phone: (717) 741-9992  
Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Visit: [TruPowertraining.com](http://TruPowertraining.com)

## Basic Boiler—Hands-on Demonstration (2-day, February 5-6, 2004)

### For Owners, Engineers, Operators and Maintenance Technicians

- Review of the basics followed by specific topics that will enhance operations and help attendees prevent equipment damage by recognizing the symptoms prior to a problem. Program includes an introduction to the basic boiler operating and safety controls with emphasis on the importance of proper operation and maintenance practices. Students receive a review of the basic flame principles required to safely operate a boiler/burner combination.
- **Final Objective:** To be able to operate a boiler more efficiently with less corrective maintenance and reduced down time.
  - Increase your knowledge about safety controls
  - Learn how to establish an appropriate boiler maintenance plan which minimizes down time



- Explore how even a very small oil leak can translate into thousands of dollars lost
- Gain knowledge about water chemistry that will help save money
- Acquire additional information about start-up, shut-down, and lay-up procedures
- Enhance your skill level and confidence by achieving a greater understanding of boiler/burner management
- Achieve greater efficiency through appropriate flame monitoring practices

*Boiler Instructor, “Ken Donithan is extremely informative and presents excellent content. I highly recommend him.”*

*Dan Greene, AK Steel Corporation*

# Advanced Boiler — Hands-on

(3-day, November 17-19, 2003, March 22-24, 2004)

For Owners, Engineers, Operators and Maintenance Technicians

- Intense course designed to allow the trainees to learn the science of boilers and their applications. Provides an in depth look into the boiler designs and the effects that these characteristics have on day-to-day operations. Introduction to some of the factors that affect sizing and efficiency of boiler applications. Allows the trainee to gain proficiency in flame controls and combustion tuning techniques including understanding what Combustion Analyzer Readings mean. Explores the boiler symptoms that are the most common lead into troubleshooting methods and failure causes. Guide boiler contract personnel in the care and feeding of your boiler and support equipment ensuring that, “THE VALUE OF THE SERVICE MATCHES THE COST.” The class is conducted with actual hands on sessions following classroom exercises. The intention is to “**PUT THEORY INTO PRACTICE.**”
- **Final Objective:** Trainees will have the necessary skills to successfully maintain the boiler and its support equipment during all phases of operation from the engineering selection to the final maintenance evolutions. The primary emphasis is to allow the trainee to avoid the most common pitfalls in the boiler plant.
  - Probe into boiler design and how it affects daily operations
  - Find out which factors determine sizing and efficiency
  - Gain experience with flame controls
  - Acquire new techniques for combustion tuning
  - Really understand what the Combustion Analyzer readings mean
  - Explore boiler symptoms that lead to failures
  - Obtain troubleshooting tips to help eliminate forced outages
  - Increase proficiency to better guide boiler contract personnel
  - Enhance your skill level to successfully maintain boiler & support equipment from engineering to appropriate maintenance practices
  - Enable yourself with more knowledge so you can avoid boiler pitfalls
  - Arm yourself with new abilities to be proactive in the boiler plant

TruPower, Inc.

PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992

Phone: (717) 741-9992

Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)

Visit: [TruPowertraining.com](http://TruPowertraining.com)

## Boiler NOx & Certification—Hands-on Included (1-day, September 26, 2003, November 20, 2003, and March 25, 2004)

For Owners, Engineers, Operators, and Maintenance Technicians

- This course covers NOx emissions and regulations in detail and it will help prepare students when they sit for local licensing exams. We utilize classroom instruction using sound stationary engineering fundamentals, mathematical formulation and extensive testing procedures, as well as hands-on training to enhance the abilities of our students. This course meets the Maryland Department of the Environment's NOx Regulation Title 26 requiring owners and operators of boilers to attend boiler training programs on NOx reductions at least once every three years. A certificate is awarded to all participants.



- **Final Objective:** Students will meet Maryland's training requirement for boiler operators and will come away with an enhanced level of knowledge regarding NOx emissions and reductions, receiving the most updated information on applicable engineering principles, testing procedures, and regulatory compliance.
  - Become educated about Boilers accidents, and their cause and effect
  - Learn the requirements of the Federal Clean Air Act of 1990
  - Increase your understanding about ASME CSD-1 (Controls & Safety Devices for Automatically Fired Boilers)
  - Obtain more knowledge about National, State, and Local Boiler and Pressure Vessel Rules Regulations, and Codes
  - Understand NOx emission requirements for boiler operators
  - Enhance your knowledge about fireside & waterside maintenance
  - Acquire a better understanding of what to do for proper boiler inspection preparation

# ASME QFO Boiler Certification

## (NOx Training with Certification and Hands-on Training Included)

(5-day, October 27-31, 2003)

### For Owners, Engineers, Operators and Maintenance Technicians

- Course educates students in boiler safety, emissions, operational procedures, controls, water treatment, operation and maintenance, instrumentation, pollutants and pollutant controls. The course also covers engineering formulas, basic electricity, boiler inspections, safety, and national, state, and local code requirements, while preparing students to take QFO certification exam. Although not a license, the QFO certification program was developed by a national committee of high level industry and government professionals, whose goal it is to achieve safer, more efficient and cleaner boiler operating conditions.
- **Final Objective:** Operators get the opportunity through classroom and hands-on instruction to gain a thorough working knowledge of equipment operation, safety, and emission guidelines. Students also receive assistance from a highly qualified Instructor that is an ASME QFO board and committee member, who will prepare them to take the QFO certification examination.
  - Learn the Clean Air Act Amendments of 1990 and a regulatory overview
  - Gain knowledge about high pressure boilers systems including steam, feedwater, fuel and draft of the firetube and watertube boilers
  - Enhance your level of knowledge about design with a concentration on ASME codes
  - Obtain information about heat transfer, thermal efficiency and boiler operating and safety control systems
  - Explore water treatment and boiler operation and maintenance procedures
  - Increase your understanding about fuel oil, gas, combination fuel and gas, and coal fired burners
  - Probe into combustion controls, and instrumentation used for measurement
  - Acquire knowledge about six criteria air pollutants and pollution controls
  - Formulate engineering calculations and learn more about basic electricity
  - Understand more about typical boiler inspections
  - Enable yourself with an enhanced awareness of safety issues and National, State, and Local Code Requirements

TruPower, Inc.

PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992

Phone: (717) 741-9992

Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)

Visit: [TruPowertraining.com](http://TruPowertraining.com)

## Knowledge Gained By Attending Our Courses:

- **“Hows and whys” of safely operating a boiler**, and different types of boilers and their designs are discussed as well as components. Boiler water pathways and the principles of combustion and thermodynamics and their relationship to optimal boiler performance are covered. Boiler applicatory procedures, safety, and water chemistry are also presented.
- **Students learn about operational and maintenance issues.** Burner management systems, including flame control, and how to properly maintain boiler water chemistry to avoid scaling, pitting, and other potential problems is also discussed.

Students learn about electrical systems, and how to adjust linkage for appropriate and optimal boiler performance. Start-up and shut-down sequences are covered in detail, and the instructor teaches students proper operational techniques including daily, weekly, monthly, and yearly optimal boiler maintenance practices. Combustion testing, inspection procedures, and appropriate boiler record keeping are also taught by the instructor.



- **Case studies and typical boiler operational problems are covered** during training along with applications for improvement. Students learn how to conquer boiler problems that have occurred and how to prevent new ones from arising. They learn many valuable boiler operational techniques including the best ways to achieve the highest possible efficiency rate while achieving low NOx emissions, how to reduce fuel costs, and some of the best ways to maintain the long life of a boiler.

### A Few of the Benefits of Attending Our Boiler Training:

- **Students receive** valuable boiler problem solving tips
- **Students learn** specific ways to lessen boiler operating costs so chemical and fuel savings may be realized
- **Specific knowledge** is gained on how to minimize boiler cycles and increase the operational efficiency of the boiler
- **Hands-on Boiler Training** gives students the opportunity to put theoretical, practical, and boiler problem solving capabilities learned during training into action while under the supervision of a very experienced instructor. The hands-on experience that students receive helps put various difficult concepts into safe working practices. Because students get the opportunity to directly apply their newly obtained knowledge to equipment at our facility, it provides them with a higher level of confidence, comfort, and control.

# On-Site Training Offered:

## Air Conditioning & Refrigeration Training

Training is offered in beginner through advanced levels of training. Classroom and Hands-on sessions are incorporated at our facility, and if appropriate equipment is available, will be incorporated in our on-site sessions also. Listed below are some of the Air Conditioning & Refrigeration courses we teach and the topics covered during each course: (Please contact us for more detailed training outlines)

### Basic Air Conditioning (1-day)

- Reasons for environmental conditioning
- History of cooling circuit
- Cooling circuit components
- Cooling Cycle
- Methods of heat transfer and examples
- Characteristics of Refrigerants
- Discussion about Controls and licensing of technicians
- Environmental effects of refrigerants
- Overview of components and their functions in a cooling circuit



### Advanced Air Conditioning (3-day)

- Basic cooling system review including the application of refrigerant types
- System capacity and factors affecting it including field adjustments to the cooling circuit and its effect on capacity
- Discussions on how to setup, test, and operate the cooling circuit under a variety of load conditions
- Equipment controls and options
- Function and necessity of the controls with respect to the operation of the cooling circuit
- Load shedding technologies and feasibility of use in different applications
- Control items such as “hot gas bypass” and “variable speed drives”
- Troubleshooting methods are taught and case studies are explored

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992  
Phone: (717) 741-9992  
Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Visit: [TruPowertraining.com](http://TruPowertraining.com)

## Basic Chiller (3-day)

- Introduction to chillers and discussion of various types of chiller systems in use
- Major chiller components are covered
- Short review of the refrigerant characteristics
- Discussion of refrigerant applications in use, including strengths and weaknesses
- Course examines the characteristics of the types of chillers including high and low pressure refrigeration systems
- The controls required for the continuous safe operation of a chiller system are discussed including the necessary safety equipment
- Basic troubleshooting techniques will be covered and examples of their use will be illustrated using case studies
- General chiller maintenance will be taught including frequency of maintenance evolutions

## Advanced Chiller (2-day)

- This is a specialty class that deals with a single application and type of chiller. The course will discuss in detail the controls and interlocks on the specified equipment. Preventative maintenance and scheduled maintenance tasks will be explored to illustrate their need and the impact the evolutions have on the equipment life. The common failures of the specific equipment and the root causes are examined to reduce the chances of the same failure occurring in the future.

## EPA Certification Federal Clean Air Act Section 608 Exam Preparatory Training (2 days)

- During the course the instructor helps prepare students to take the EPA refrigerant certification exam. Exam preparatory manuals are provided to students and are utilized during the training. Attendees learn about topics that are presented on the exam, and a practice test is given to students so they may prepare for actual EPA test questions. Helpful hints are also given to students about test taking in general to help ease their apprehension about the exam. Although we encourage students to study for their EPA refrigerant certifications, the review is extremely beneficial, and greatly assists students achieve their goals of obtaining EPA refrigerant certification.

***“Keep up the good work, TruPower, you have been great.”***  
*Ken Crawford, Interfaith Medical Center, Brooklyn, NY*

## EPA Certification Federal Clean Air Act Section 608 Exam

We proctor the EPA section 608 refrigerant certification exam, and although review preparatory training is extremely beneficial and is highly recommended, the exam may also be given by us without formal preparatory training. The exam is broken down into the following categories:

- Core section—General Knowledge
- Type I certification—Required for individuals who maintain, service or repair small appliances
- Type II certification-Required for individuals who maintain, service, repair or dispose of high or very high-pressure appliances/air conditioning systems, except small appliances and motor vehicle air conditioning systems
- Type III certification-Required for individuals who maintain, service, repair, or dispose of low-pressure equipment
- Universal Certification-Required for individuals who maintain, service or repair both low and high-pressure equipment, as well as small appliances.



TruPower EPA Certification Review Course students with instructor, John Pokrivka, Interfaith Medical Center, Brooklyn, NY

## New York City Refrigerating System Operating Engineer Licensing Preparatory Training

We are an accredited training provider—training is specific to New York City Requirements. Course includes refrigeration basics through advanced principles and maintenance practices. Hands-on training and various field trips are incorporated into the course. Please contact us for additional information regarding this course.

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992  
Phone: (717) 741-9992  
Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Visit: [TruPowertraining.com](http://TruPowertraining.com)

## A Few of the Benefits of Our Heating, Ventilating & Refrigeration Training:

- **Students receive** valuable HVAC&R problem solving tips which help save time and money
- **Students learn** specific ways to achieve the highest rates of system efficiency while lowering operating costs
- **Students who take our EPA certification training will receive EPA study guides prior to the day the course begins** so they may study ahead of time to help prepare themselves in advance for the EPA exam
- **The passing rate is very high for students who take our EPA preparatory training.** However, we will retest students free of charge who take our EPA preparatory training if necessary.
- **Students gain valuable information about EPA requirements** and are taught appropriate record keeping techniques to meet those requirements.
- **During our training the instructor helps students examine case studies, and problems they have encountered, as a means of troubleshooting.** The instructor provides students with many helpful ideas on how to prevent system problems, what to look for when problems do arise, and how to resolve them.
- **We provide hands-on training at our facility and when possible, on-site, utilizing your equipment,** so students gain valuable insight and experience on equipment they actually use and service.



### What our students have said about our HVAC/Refrigeration Instructor, Sam Schell:

..... Instructor was very helpful .....

..... He is a very good instructor and person, one of the best .....

..... I enjoyed my instructor, he was fun, very technical and patient with us.  
He went far and beyond to make it easier for us to understand .....

## Boilers—Additional Courses Offered:

In addition to open enrollment boiler courses listed on pages 3-8, we offer several other on-site Boiler courses and training programs:

### Codes and Standards for Non-engineers (1-day)

- The class is designed to familiarize the attendees with the mechanical codes and standards that are required to be complied with when maintaining and repairing the Boiler, Associated Piping, and Tanks. Included in the course is an overview of the supporting documentation necessary to Support Code Compliance Record Keeping.



### NIULPE, National Institute for the Uniform Licensing of Power Engineers Training & Exam (5-day)

- The National Institute is a third party licensing agency that acts on a national level for power engineers and those associated with the profession. Registration is purely voluntary on the part of licensing agencies, etc. It is, however, the only formal structure through which a person in power engineering may establish formally, a level of national competence and national professional recognition. NIULPE is affiliated with the National Association of Power Engineers. Our training provides students with well rounded information that will help them in various aspects of power plant operation.



### State and Local Jurisdictional Licensing Training

- Our Instructor has taught many licensing courses throughout the country to prepare students to sit for their licensing examinations. He has assisted maintenance and operating personnel in Arizona, Colorado, District of Columbia, Maryland, Minnesota, New Jersey, New York, New Mexico, Ohio, and Pennsylvania to prepare to take their respective exams.

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992    Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Phone: (717) 741-9992    Visit: [TruPowertraining.com](http://TruPowertraining.com)  
Fax: (717) 741-9993

## Additional Boiler courses offered (Continued):

### Boiler Mini Sessions (2 hour sessions)

- These sessions are designed for use in the video conferencing type of training and are presented in a pointed manner led by the instructor. Each session is designed to support the other so that at the end of the sessions the attendees are on a level complimentary to the attendance of a 2-3 day course. The idea is to schedule the sessions in segments to allow the participants to take the knowledge right to work, without the expenses of travel and lost time from the job site. The sessions can also be scheduled to support the shift worker's environment.
- Courses currently available:
  1. Basic Boiler (Two, 2-hour sessions)
  2. Basic Combustion
  3. Basic Burner
  4. Burner/Boiler Efficiency
  5. Basic Water Chemistry
  6. Steam Traps
  7. Boiler Flame Safeguard and Safety Controls



### Building Inspection Training

- Training may be offered in beginner through advanced levels of training, and may include classroom and demonstrative training. Please note that our courses may be tailored to meet your needs. Listed below is an example some of the topics that may be taught during a 5-10 day session (Please contact us for a more detailed training outline):
  - Inspection Practices
  - Masonry, Carpentry, Structural and Surface Items – Exterior & Interior
  - Fire Protection
  - Environmental Hazards
  - Heating/Cooling Systems
  - Elevators
  - Electrical
  - Plumbing
  - Codes Training

# Carpentry Training

- We offer carpentry courses on-site that incorporate hands-on training, providing appropriate space, materials, and equipment are available. Following are some of the topics that may be presented at one of our Carpentry courses: (Additional topics may be added or deleted so we may customize the training to meet your needs and the experience level of the students)

**Students Learn valuable techniques during training to help minimize dust and debris that is normally generated during the construction process.**

- **Fundamentals**

Safety

Structural Terminology

Tools

Building Materials Terminology

Tool Identification and Proper Use and Care

Discussion about load-bearing walls and interior non load-bearing walls/partitions

Blueprint reading

- **Construction Techniques**

Steel Wall Framing

Wood Wall Framing

Drywall Installation and Finishing

Door Frame and Trim Installation

Preparation of a new wall surface for application of paint or wallpaper

Floor Preparation

Tiling

Window Installation and Framing

Window sill and apron

Ceiling preparation, construction, and finishing

Acoustical ceiling

Corner molding, Cove molding, Crown molding

Base board molding



## Hands-on Training:

- Students gain valuable hands-on experience while under the supervision of a very experienced instructor
- We can tailor our training to meet your actual job requirements, and your work orders may be incorporated into our training for additional “on-the job” coursework. Otherwise, students will construct a training station during a class and go through all steps of proper construction and disassembly.

TruPower, Inc.

PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992

Phone: (717) 741-9992

Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)

Visit: [TruPowertraining.com](http://TruPowertraining.com)

## What Our Carpentry Students Said They Learned From Us:

..... Instructor made some good points on putting up walls. ....

..... Learned more about materials and counting material in preparation for the job .....

..... Learned the safety of it: wearing goggles, how to cut and secure tracks, measurements, and how to work as a team .....

..... The instructor was great, he worked with us with extreme patience. Jim also provided more insight during our hands-on project .....

..... Rule of thumb—plan your job before you start it .....

..... I enjoyed the instructor's wisdom in carpentry, very knowledgeable .....

..... Learned the basics and the steps to be a great wall-builder .....

## Customized Training

- We also offer customized training in various and unique subject matters in the engineering/maintenance field, in addition to licensing preparatory courses. If you have specific needs that require highly specialized training, please let us know so we may develop an appropriate course for you.

**TruPower, Inc. has customized and presented over 23 courses for the US Pentagon in various subjects. Actual work orders have been incorporated into hands-on training segments which maximized and enhanced the learning experiences of the students, as well as contributing to productivity in a very positive manner.**

## Energy Insulation Appraiser

- Course designed to showcase the energy savings available in a facility through the proper use, care, and application of insulation technologies. The program is based upon the nationally accepted 3E Plus program for use in surveying and quantifying the energy losses in an insulation system. The software program is available on the internet in a download from the DOE website. The class is designed for all facility personnel charged with reducing operating costs of a facility.

**Attendees are guided in the principals of proper insulation systems and the effective use of insulation to save energy and reduce operating costs. Students learn survey techniques to present the savings and gain the ability to use the 3D Plus software.**

## Facility Management and Maintenance Training

- The class is designed to provide training to the budding Facility Maintenance Manager. This person is typically the individual who has moved through the facility and arrived at the position of manager. The course is very comprehensive in covering the various aspects necessary to perform as the manager. Topics include:

- Inspections
- Contractor Selection
- Budgeting
- Quality Assurance
- Quality Control
- Preventative Maintenance
- Personnel Communication

- Exercises and facility tours are conducted to reinforce the concepts presented in the classroom. Additionally, the trainee will receive an introduction to the systems that make up the facility. This includes the basic function of the systems, component descriptions, control schemes, and some vital maintenance tasks to keep the systems and components in working order.



TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992  
Phone: (717) 741-9992  
Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Visit: [TruPowertraining.com](http://TruPowertraining.com)

## Facility Management and Maintenance Training (Cont.)

Students learn valuable management techniques including the following:

- Gain information on proper operation of equipment so all of the facility systems function in a cohesive, efficient manner
- Quality Assurance and Quality Control
- How to communicate more effectively with employees and upper management
- Employee resource allocation, even when resources are very limited
- Methods to keep employees motivated
- Specific techniques on how to become proactive rather than reactive

Students learn the “Hows” , “Whys” , “Whats” , and “Whens” of Properly Managing a Facility Maintenance Department:

- As the importance of being proactive is addressed, students learn how to prevent maintenance problems from happening, so system down time can be reduced
- How to develop a specific preventative maintenance plan that really works for your facility
- When to call a contractor and how to select one when necessary
- What to do in preparation of inspections
- The value of record keeping, what to record, and how long to keep it

## System Operations

**Our students learn valuable information about the following types of equipment, systems and their function, and how to reduce costs and operate at the highest possible efficiency rates:**

- Boiler tips
- HVAC & Refrigeration Systems
- Chillers
- Cooling Towers
- Condenser Units
- Waste water/water treatment
- Security
- Fire protection
- Lighting
- Compressed Air Systems

## Facility Management and Maintenance Training (Cont.)

- The final objective of the facility management and maintenance course is to provide students with tools both managerial and conceptual to accept the role as a Facility Manager without being exposed to the classic situations resulting in premature failure of equipment or personnel. The final goal is to establish a PROACTIVE environment allowing the facility and personnel to excel.

Students learn cost saving techniques and specific ways of operating and maintaining equipment so pitfalls and costly errors can be avoided:

Examples:

- Learn how what appears to be a minor oil leak can translate into thousands and thousands of dollars lost, and learn how to correct and prevent these types of problems from occurring
- Know the value of properly setting boiler controls, it could save you many thousands in fuel costs per month
- Learn how preventative maintenance can potentially save your organization thousands of dollars per month
- Students learn a lot about contractor use; making the right choices can produce huge cost savings

## Pipefitting Training

Following are some of the topics that may be presented at one of our pipefitting courses: (Additional topics may be added or deleted so we may customize the training to meet your needs and the experience level of the students)

- Basic Pipefitting Terminologies
- Pipefitting diagrams and symbols
- Identifying pipefittings, schedules, and diameters
- Reading a pipe identification stencil
- Students will learn how to square up pipe ends in preparation for welding
- Alignment of slip-on flanges or weld neck fittings is taught to students
- Leveling and squaring pipe to drawing dimensions (providing hands-on equipment is available)
- Types of pipe hangers and loads
- Gasket types and bolt types

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992  
Phone: (717) 741-9992  
Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Visit: [TruPowertraining.com](http://TruPowertraining.com)

## Pipefitting Training (Continued)

### Hands-on Training:

- Students gain valuable hands-on experience while under the supervision of a very experienced instructor
- We can tailor your operating systems to meet your actual operation requirements



### What our Pipefitting students said about us:

- ..... Learned how to use the equipment right .....
- ..... The course helped me a lot and the instructor made the class a lot of fun. ....
- ..... One of the most important things I learned was seeing the piping being installed on the job site. .... and seeing different applications of how it is erected in the field. ....
- ..... Instructor made the class enjoyable. ....
- ..... Seeing the piping on an actual job site gave me a good perspective on what we learned .....
- ..... Had an enjoyable time learning the pipefitting trade. ....
- ..... Instructor was a great teacher, I learned a lot in the course. ....

### Pipefitting/Welding Instructor, Cameron Drew, has also taught at, or performed welding services for the following organizations, among others:

- Cape Canaveral Space Center  
  Apollo 13 Separator Ring Repair
- US Navy
- US Coast Guard
- World Trade Center 1993 Repair
- Port Authority of NY
- JFK Airport
- New York City Manhattan Street Bridge
- New York City George Washington Bridge
- New York City North River Waste Treatment
- New York City Housing Authority
- JP Morgan/60 Wall Street
- General Foods
- New York Veterans Hospital
- Exxon
- Gulf Oil
- Florida Power
- Crystal River Nuclear Power
- Haagen-Dazs
- Breyers
- Stony Brook University
- Sanofi Bio Industries
- Hormel Meats
- COGEN Construction
- Fine Arts Center, Newark, NJ
- Bordentown Water Towers
- Wheaties
- Pepsi
- TastyKake
- Volkswagen
- Abbott's
- Jacquin
- Seagram
- Budweiser

# Plumbing Training

Listed below are some of the topics that can be taught during one of our Plumbing courses: (Additional topics may be added or deleted so we may customize the training to meet your needs and the experience level of the students)



## Tools of the Trade

- This session covers basic tools used to repair faucets, toilets, water heaters, and tools used to work with various piping systems, including copper piping. Hands-on use of tools may also be incorporated, such as copper flaring tools, cast iron cutters, and the use of an electrical meter to test water heaters and pumps.

## Plumbing Trade Math

- Can be taught as a refresher to aid students in their day-to-day plumbing activities or to advance them in cylindrical and pipe offset formulas.

## Plumbing Materials

- This segment can be structured to the types of systems that students would be exposed to during a repair occurrence. Topics covered can include copper water piping, cast iron drainage systems, and threaded steel for compressed air piping systems. Material ordering tips, use of certain types of material and code related uses of the fittings can be covered. Types of valves, and types of piping and fittings can also be included. Again, this may be tailored to meet your specific needs.

## Blueprint Reading and Drafting

- This section of the course relates to reading drawings to locate valves, devices, and certain aspects of a piping system. Our instructor feels that to fully be capable of reading isometric drawings, an individual must be capable of drawing an isometric sketch. Students could learn this skill utilizing the actual blueprints from your facility, if desired, during this hands-on session.

*When possible, we utilize blueprints from your facility during training so students learn the ins and outs of your plumbing system so preventative maintenance techniques and troubleshooting tips may be learned specific to your system!*

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992    Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Phone: (717) 741-9992    Visit: [TruPowertraining.com](http://TruPowertraining.com)  
Fax: (717) 741-9993

## Plumbing Training (Continued):

### Water Heaters

- The instructor begins by giving students a basic understanding of heating water and BTU knowledge for sizing, and then discussion progresses toward each component and its function. Gas and electric units can be covered and training can be customized to include water heaters installed at your facility. Circulating pumps and specialized devices can also be included in your lesson plan. (Gas burners utilized on boilers would not be taught in a plumbing course, but would instead be included in boiler training).



### Fixtures

- Students learn basic fixture selections, installations, and repairs. Flush valves used to operate toilets and urinals are included in the training, and troubleshooting techniques are provided.

### Working With Copper

- This section of the course provides textbook and hands-on training and allows attendees to learn proper soldering techniques and to learn to silver solder (braze) copper fittings. This can be tailored to include various sizes and specific piping arrangements.

### Soldering and Inspection

- Students learn soldering procedures and how to inspect their joints. This requires an established work area, tools, and safety equipment at your facility. Solder joints will be cut and checked for internal joint inspection.

### Sprinkler Systems

- We provide fire protection training on sprinkler systems. We can incorporate hands-on training on your system in a course we could provide to you. For more in-depth and engineering related training we suggest our sprinkler/fire protection training.

### Plumbing Code

- Our instructor teaches students the ins and outs and important aspects of the International Plumbing Code. We can also provide training on other codes as well; please contact us to discuss your needs.

## Plumbing Training (Continued):

### Plumbing Inspection

- Plumbing system inspection practices are taught, and materials, hanger types, spacing, fitting types, and applications are covered. The instructor also discusses drainage and venting codes and sizing. Handicap codes and on-site inspections of work in progress are also taught. This course can be related to our client's system and facility during training, and hands-on inspections can be incorporated into a course.

### Customized Plumbing Training

- We also offer customized Plumbing training, including licensing preparatory courses. If you have specific needs that require highly specialized training, please let us know so we may develop an appropriate course for you

### Benefits of our Plumbing Courses:

- **Students increase their knowledge and skill level**, which helps eliminate the need for outside contractors
- **The instructor utilizes written exams to adequately assess student knowledge** and identifies areas that need to be strengthened
- **Hands-on training is incorporated into our plumbing courses** so students gain practical knowledge and experience, while under the supervision of a very experienced instructor
- **Students learn theories behind innovative techniques** in the changing environment of the plumbing profession, such as freezing applications and PVC pipe welding
- **Facility managers and students gain a higher level of confidence, comfort, and control** because the hands-on experience that students receive helps put various concepts into safe working practices. Students get the opportunity to directly apply their newly obtained knowledge directly to the plumbing system in their own facility environment.

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992    Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Phone: (717) 741-9992    Visit: [TruPowertraining.com](http://TruPowertraining.com)  
Fax: (717) 741-9993

## Plumbing Training (Continued):

What our students have said about our Plumbing Instructor:

*“Very informative, the instructor was very thorough in his lesson plan; I would highly recommend it to other non-experienced plumbers.”*

*Cecil Washington, US Pentagon*

*“Instructor was easy going and was easy to understand, the class was small enough for us to get a good hands-on experience”*

*Eugene Barton, US Pentagon*

*“Class work was very informative as far as the theory of plumbing. The apprentice manual will be very helpful in my field. The Maintenance Manual will help with basic repairs of the plumbing system in the Pentagon .”*

*Jan D. Greene, US Pentagon*

*“Mike did a very good job”*

*James Ash, US Pentagon*

*...Please send back to teach again, thanks...*

## Sheet Metal Training

Following are some of the topics that may be presented at one of our sheet metal courses:

(Additional topics may be added or deleted so we may customize the training to meet your needs and the experience level of the students)

- Sheet Metal Layout Terminologies
- Discussion of Sheet Metal Fabrication and Layout
- Different Types of Seaming
- Tolerances of Seams and Dimensions
- Utilizing a 4' x 8' sheet
- Round Ductwork
- Square Ductwork
- Discussion of Pittsburgh Lock, etc.
- Basic Layout
- Seams
- Soldered Joints
- Pop Rivet Joints
- Crimping a joint

### What we can do for you:

- **Help you avoid costly errors and save you time and money by teaching students the best sheet metal techniques**
- **We'll help increase your productivity while helping to reduce material waste**

## Sheet Metal Training (Continued):

### Hands-on Training:

- We can provide hands-on instruction utilizing each piece of sheet metal equipment in your shop
- Fabrication of a sample box or, depending on the skill level of the students, a more advanced project

## Sprinkler System/Fire Protection Training

Sprinkler/fire protection training includes introductory through advanced levels which include engineering hydraulic calculations, sprinkler system types, and NFPA codes. Our courses may be customized to fit your needs and some of the topics we teach include the following:

- Hydraulic calculation procedure
- Water supplies
- Fire sprinkler system components
- Classification of fire protection system types
- Inspection & maintenance
- Water flow testing
- Occupancy & Hazard Classification
- Water Supply Types
- Preparation for NICET Exam
- Automatic fire sprinkler design & layout
- Standpipe requirements
- High-piled storage requirements
- Fire pump size determination and header layout
- Conduction a plan review

### Sprinkler System Types:

During our training, the instructor defines the operation of the following Sprinkler System types as well as design advantages and equipment required:

- Wet-Pipe Systems
- Dry-Pipe Systems
- Preaction Systems
- Deluge Systems
- Water Mist Systems

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992    Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Phone: (717) 741-9992    Visit: [TruPowertraining.com](http://TruPowertraining.com)  
Fax: (717) 741-9993

## Sprinkler/Fire Protection Training (Continued)

We have also diversified some of our Sprinkler/Fire Protection training and have made it specific to certain groups to meet their specific needs. Please call for more detailed information; examples include the following:

- Municipalities—Fire protection problems they face
- Role of Firefighters
- Public Assemblies (includes auditoriums, nightclubs, restaurants, exhibit halls, etc.)
- Enclosed Shopping Malls
- Hospitals and Health Care Facilities
- High Piled Storage Warehouses

## Welding Training

Our Welding training is offered in introductory through advanced levels. In addition to classroom and hands-on training, welding engineering can also be provided in conjunction with Certified Welding Technologies, Inc., including completion of written welding procedures, company certification, and welder qualification. Please note that the following courses may be tailored to meet your needs:

- Basic Arc Welding
- Welding Processes, Fundamentals, and Quality Control
- Advanced Welder course done in conjunction with Certified Welding Technologies Inc. which includes certification and Welder Qualification
- Welder Skill enhancement course done in conjunction with Certified Welding Technologies Inc. that includes welder re-certification
- Welding Codes
- Welding Inspection Training
- Non-Destructive Examination Training



## Welding Training (Continued)

What You and/or Your Employees Will Learn:

### Welding Fundamentals:

- Learn which procedure meets your needs best
- Costs of each procedure and benefits and drawbacks of each
- Welding Terminologies
- Equipment utilized in welding
- Arc Welding Setups
- Power Supplies
- Oxygen and Gases used during welding and their reactions
- Arc Welding electrode identification
- Explanation of Metallurgy
- Weld Symbols and Blue Print Reading
- Brazing
- Safety
- Nondestructive Testing

### Welding Processes:

Each process is discussed in detail, and the fundamentals, safety, equipment, setups, applications, variables, and potential weld defects for each process are presented.

- Shielded Metal Arc
- Flux Core & Gas Metal Arc
- Gas Tungsten Arc
- Oxy-acetylene welding and flame cutting
- Air Carbon-arc and Oxy-acetylene gouging
- Plasma arc cutting and gouging
- Techniques for welding plate and pipe in all positions

### What we can do for you:

- **Get you in code compliance so legal requirements are met.** All organizations that perform any type of safety related or code welding must have written welding procedures in place, and welders must be qualified to those procedures and the pertinent codes. **We can design and write your procedures and qualify your welders.**
- **Help you avoid costly errors and save you time and money by teaching you the best welding techniques.**

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992    Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Phone: (717) 741-9992    Visit: [TruPowertraining.com](http://TruPowertraining.com)  
Fax: (717) 741-9993

## Woodworking Training

Training may be tailored to meet your needs, and may be customized to fit the experience level of the students. Courses are offered in introductory through advanced levels, and will include classroom and hands-on training on-site, if appropriate tools, equipment, and materials are available. Some topics that may be covered during a course include:



- **Fundamentals**

- Terminologies and Safety
- Math for the Woodworking Trade
- Project Layout and Design
- Measurements
- Transfer of dimensions without measuring
- Material selection
- Cutting lists
- Material yield
- Joinery

- **Tools and Equipment**

Course covers use and safe operation of hand tools. Other equipment currently used in the woodworking trade such as dado heads, table saw, jointer, router, band saw, router table, shaper, and lathe are also discussed. Tool assembly and setup of tools utilized during training are covered and proper tool and equipment maintenance is also included.

- **Project Finishing**

Course covers selection of an appropriate stain or paint, techniques for their application, furniture oil, lacquer, polyurethane, and water based finishes.

### **Hands-on Training:**

- Students gain valuable hands-on experience while under the supervision of a very experienced instructor
- We can tailor your training to meet your actual job requirements

## Woodworking Training (Continued):

### Benefits of our Woodworking Training:

- Help you avoid material waste, saving you time and money by teaching you the best woodworking practices
- Increase your level of credibility to help eliminate the use of outside contractors



Woodworking students and instructor George Vondriska with cabinets they made during TruPower course at US Pentagon

### What our Woodworking Students say about us:

*“Keep up the good work”, Donald Ball, US Pentagon*

*“I truly enjoyed George’s insight. He’s a terrific instructor and has increased my confidence in the Wood crafting field. Thanks a lot for this opportunity and keep up the good work”, Ed Whitley, US Pentagon*

*“This course gave valuable insight into numerous safety practices that we will use in the future. This course also gave insight into techniques of woodworking that was very informative. This course was timely in that we can actually apply the information we obtained in this class”, Jeffery Hines, US Pentagon*

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992    Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Phone: (717) 741-9992    Visit: [TruPowertraining.com](http://TruPowertraining.com)  
Fax: (717) 741-9993

## Our Instructors:

All TruPower instructors have a great deal of hands-on experience in their respective fields. Because they are highly qualified, they are able to draw from their own personal experiences and to provide students with various troubleshooting and problem solving techniques.

Many of the instructors possess degrees, and also indicative of their vast experience levels, many of the instructors have written articles that have been published in trade magazines, and a few of them have authored books which are utilized in our training.

In addition to possessing hands-on experience themselves, all instructors have taught for many years, and can be recognized as experts in the specific fields of subject matter taught. They teach students in a down-to-earth manner and are highly capable of presenting material in fundamental through advanced formats, including very specialized hands-on training.

## Facts About Some of Our Instructors:

### Ken Donithan, Boiler and HVAC&R Instructor:

Ken Donithan has over 20 years of stationary engineering hands-on boiler experience. His career started as a boiler technician in the United States Navy and has progressed from there. Ken's extensive hands-on experience includes electrical and mechanical systems inspection, operation, maintenance and design. His boiler operating experience varies from high-pressure superheated steam watertube boilers down to low-pressure steam heating boilers. He also possesses operating experience with chillers ranging in sizes from 750 ton up to 30,000-ton systems as well as thermal ice storage systems operating experience.

Ken has over 20 years of experience as a commissioned boiler inspector with the National Board of Boiler and Pressure Vessel Inspectors. He holds various national, state and local jurisdictional stationary engineer's licenses and is certified as an ASME Operator of High Capacity Fossil Fuel Fired Plant, Class B and Class C; Level II & III Infrared Thermographer and an EPA certified instructor.

Ken is recognized nationally as an expert in the field and has been instrumental in molding safety rules and regulations in the State of Maryland for boiler operation, inspection and maintenance while serving as a board member and chairing various committees on the State of Maryland's Boiler Board. He is a board member of the ASME QFO committee for the Qualification of High Capacity Fossil Fuel Fired Plant Operators, and is also a board member of the ASME CSDFAFB (Controls and Safety Devices for Automatically Fired Boilers).

Ken has devoted a lot of his time teaching, developing and implementing training programs for licensing stationary engineers throughout the United States including the State of Maryland and the District of Columbia. He has developed certified training programs that meet EPA requirements under the Clean Air Act Amendments of 1990 for HVAC technicians and boiler operators. Ken is also a graduate of the Johns Hopkins University and holds a bachelor's degree in electrical engineering.

## Cameron Drew, Pipefitting and Welding Instructor:

Cameron Drew has not only welded for many years of his life but is also a Welding Engineer, holding a BA degree from Trenton State College. Cameron has become a true welding expert, and he provided his technical expertise during arbitration between the US Navy and US Coast Guard. He has also served as an expert witness for many firms lending his technical welding expertise during litigation. Cameron has also been an AWS Certified Welding Inspector and Welding Instructor for over 26 years; he has taught in various places throughout the country and also internationally. Cameron is the welding expert who was called in after the 1993 World Trade Center bombing.

Projects that Cameron has worked on and managed include construction, asbestos abatement, boiler and pressure vessel repair, ammonia piping systems, steam and refinery pipe installations, and ship and bridge repairs.

Our instructor has also written and qualified welding procedures to ASME, ANSI, and AWS applications using SMAW, SAW, GTAW, and GMAW welding processes. Cameron also has qualified welders in the following crafts: Pipefitters, Boilermakers, Pipe Liners, Tankers, Shipfitters, Plumbers, Steam Fitters, Structural Fabricators, Utility, and Refinery "A" Mechanics.

Cameron also performed, supervised, and analyzed NDT testing of weldments using RT, UT, MT, and PT processes. He has also written many QA and QC manuals for many organizations obtaining certification and re-certification.

Cameron is the former Technical Chairman for the American Welding Society Delaware Valley Section, has served on the National Educational Committee for the American Welding Society, and is a member of the American Society of Mechanical Engineers and the New Jersey Education Association.

The teaching style utilized during our Welding training really involves our students and they always participate in very interactive class discussions. Cameron truly loves to teach, and our students always come away enriched with enhanced welding skills and, after much hands-on training, a valuable, highly worthwhile welding experience.

## Jim Knight, Carpentry Instructor:

Jim Knight is a down-to-earth instructor who very much enjoys teaching and interacting with his students. He has over 22 years of experience as a carpentry instructor and has taught vocational and skills training nationally, receiving awards on numerous occasions for assisting young Job Corp students find work within the carpentry field. In addition to possessing teaching certificates, Jim also obtained National Occupational Competency Testing Institute Instructor certification in 1990. Also indicative of his qualifications, Jim participated on a team at the National Association of Home Builders Research Foundation to develop a FEMA handbook on seismic damage mitigation. Jim has a great deal of experience in the carpentry field, literally growing up in the trade, and he also holds a bachelor's degree, and a M.S.Ed., in Trade and Industrial Education.

TruPower, Inc.	Toll Free: (866) 741-9992	Email: <a href="mailto:TruPowertraining@yahoo.com">TruPowertraining@yahoo.com</a>
PO Box 3952, York, PA 17402	Phone: (717) 741-9992	Visit: <a href="http://TruPowertraining.com">TruPowertraining.com</a>
	Fax: (717) 741-9993	

## Mike Joyce, Plumbing Instructor:

Michael Joyce is a highly qualified plumbing instructor and Master Plumber with 25 years of experience in the plumbing field. He started his career at a young age, working after school and on the weekends, becoming a licensed journeyman plumber at only 18 years of age, and has become licensed in three states. Michael progressed in his career, working at several contracting firms, and was also a Plumbing/Medical Gas Foreman at a Waveland, Mississippi Hospital project and a Project Superintendent at the University of North Carolina Hospital. He also took on additional management roles during various other multi-million dollar projects.

Michael has taught plumbing for many years, and he also provides his plumbing expertise to many large globally recognized companies. He functions as a plumbing consultant for them while also providing them with his sought after plumbing expertise and services.

In addition to his vast level of plumbing experience, Michael exhibits a true passion for plumbing and strives to continually contribute to the field in many positive ways for the benefit of all plumbers.

In 1998 he became certified as a plumbing instructor through the National Center for Construction Education and Research. He thoroughly believes in the education of plumbing and enjoys teaching to the highest degree. He has written many books on the subject, which have become very popular to others in the field. TruPower utilizes his books during our training so our students can benefit from his experience and the easy-to-read format and well diagramed illustrations that the books provide.

During courses that he teaches, Michael always assesses the knowledge level of the students by giving them written exams so he can build upon their strengths and help correct their weaknesses. Students come away with an increased level of knowledge, an enhanced sense of troubleshooting ability, and the newly created power to solve plumbing problems.

He shares his passion for plumbing with his students by involving them in enjoyable and interesting plumbing topics, and by providing them with applicable, enlightening case studies. He truly projects the image of being “proud to be a plumber”, which is evident in courses he teaches; an enrichment that transfers and passes along to our students.

## Sam Schell, Boiler, HVAC&R, Energy Insulation Appraiser, Facility Management & Maintenance Instructor:

Sam Schell has been a Boiler and Heating, Ventilating, Air Conditioning and Refrigeration Instructor for over 12 years, and has become a true expert in the field. He very much enjoys teaching and is very adept at working with students during a course that all have varying degrees of experience. Sam has taught classes throughout the United States and also internationally. In addition to learning a great deal, all of Sam’s students thoroughly enjoy his courses and will refer other students for training as well. His teaching style promotes a lot of class participation and his students very much look forward to attending classes that he teaches.

## Sam Schell, Boiler, HVAC&R, Energy Insulation Appraiser, Facility Management & Maintenance Instructor (Continued):

In addition to many years of classroom and hands-on teaching experience, Sam has also taught Dupont Virtual Workshops, and has developed a Boiler software program and accompanying workbook. He is also a contributing writer for Plant Services Magazine and has written scripts for and directed production of Boiler training videos. While holding various licenses and certifications such as EPA Asbestos Safety Instructor Certification and MD Hazardous Waste Incineration Certification, he holds NIULPE Power Engineer certification, and EPA Universal Refrigerant certification as well. Sam also attended Kennedy Western University and Howard Community College for Engineering.

Indicative that Sam is an expert in his field, he has performed startup services at gas turbine/combined cycle plants and startup services for many power plants that utilized various fuels including oil, gas, and coal. In addition to industrial firetube and watertube boiler startup and troubleshooting services, Sam has completed performance and acceptance testing on various other types of equipment, including deaerators, and HVAC&R systems, which included operational readiness testing and emergency response capabilities.

Sam has also done a great deal of technical writing, and has developed and written many plant manuals, maintenance programs, and operating procedures for numerous power and industrial clients including ISO 9000 compliance standards.

## George Vondriska, Woodworking Instructor:

TruPower's Woodworking courses have become a favorite among students. George Vondriska, our Woodworking instructor, teaches students in a very down to earth manner, and he has also been known to say "everyone is trainable".

George is more than an expert in the field of Woodworking; he is nationally recognized, and is the contributing editor and writer for American Woodworker Magazine. In addition to regularly appearing in the magazine, George also develops topics for show demonstrations and courses and oversees their implementation.

In addition to holding a Bachelor of Science degree in Industrial Education, George has over 16 years of experience teaching Woodworking to students at varying skill levels. Also adding to his credentials, he has done a lot of curriculum development for new courses and has also taught other instructors. Some of the many, many courses that George has taught include cabinetmaking, furniture making, chair making, and lathe turning.

TruPower, Inc.	Toll Free: (866) 741-9992	Email: <a href="mailto:TruPowertraining@yahoo.com">TruPowertraining@yahoo.com</a>
PO Box 3952, York, PA 17402	Phone: (717) 741-9992	Visit: <a href="http://TruPowertraining.com">TruPowertraining.com</a>
	Fax: (717) 741-9993	

## George Vondriska, Woodworking Instructor (Continued):

George's dedication and love of the Woodworking trade had shown through when he worked in the Peace Corp teaching rural high school students at a facility that had no electricity or running water. He also developed a curriculum for nationwide implementation and trained new volunteers for the Corp.

Although teaching has been a main focus for George, he also continues to build custom furniture and cabinets for various clients. As with all of our other instructors, we are very honored to have George as part of the TruPower team!

## Cost of On-Site Training:

Costs vary based on type of course and program selected, please contact us at (717) 741-9992 for pricing information.

## Courses Planned for Future Development:

If you have a need for any of the following types of training, please call for assistance, or if you require training in other subject areas not listed, please let us know—we may be able to develop something specifically for you)

- Asbestos Abatement Awareness and Safety
- Blue Print Reading
- Communications/Fiber Optics
- Electrical
- High Voltage Electrical
- Hydraulics
- Lead Based Paint Awareness and Safety
- Locksmith
- OSHA/Safety Requirements
- Painting/Paint Mixing
- Pneumatics



TruPower, Inc., Training Services  
*Increase your knowledge, and gain the power to be better!*

TruPower, Inc.  
PO Box 3952, York, PA 17402

Toll Free: (866) 741-9992  
Phone: (717) 741-9992  
Fax: (717) 741-9993

Email: [TruPowertraining@yahoo.com](mailto:TruPowertraining@yahoo.com)  
Visit: [TruPowertraining.com](http://TruPowertraining.com)