



Course Information Letter ---- B302

BOILER OPERATOR TRAINING AND CERTIFICATION
B302

It takes a combination of operating experience and education to qualify for and pass many of the boiler operator certification programs. The education part of this equation may be dispersed over a large time period. The exam is not. The exam examines current knowledge. It is HPC's goal to provide refresher training in preparation for the scheduled examination. HPC's Boiler Operator Training and Certification Course targets qualified Operators for instruction and preparation of any State, City, or Third Party, or our own certification examination.

It can be very important for the employers to have the satisfaction that their boiler operators are knowledgeable in the operation and maintenance of their boilers and associated equipment. This course gives the employers the piece of mind that the employees are prepared for the examination. The examination itself is intended to determine, if indeed, the individual is qualified to operate the boilers and the equipment associated with the boilers. As part of HPC's course schedule, an examination is scheduled on the afternoon of the 5th day. The exam is administered and proctored by a licensed representative of the National Institute for Uniform Licensing of Professional Engineers. An application for the certification must be filled out and signed by a supervisor at your plant and faxed to HPC Corporate Office prior to the course presentation

A third party licensing agency is any organization that certifies operators in the areas of operation, maintenance, safety, and theory of boilers, turbines, refrigeration, and electrical fundamentals. Below is a list of objectives of a third party licensing agency.

1. Establishes and maintains uniform standards as to qualifications for power engineers.
2. Promotes safety as per preamble.
3. Assists certifying agencies to determine the competence of power engineers through investigations and examinations, which test the qualifications of voluntary candidates for certifications to be issued under the rules of the Services.
4. Grants and issue commissions to certifying agencies applying and qualifying.
5. Maintains a registry of all certifying agencies meeting the requirements.
6. Serves as a clearinghouse to facilitate reciprocity between all certifying agencies.
7. Maintains a registry of all examiners who meet the requirements and are commissioned by the certifying agency.
8. Develops and keeps current uniform terms and definitions, updating terminology and eliminating obsolete terms.
9. Encourages the enforcement and compliance to all codes, laws, and acts assuring the protection of health, life and property, (i.e. Occupational Safety and Health Act of 1970, Public Law 91-596, and the accepted engineering practice standards in appendices B and C in the Boca Basic Mechanical Code/1971, Air Pollution Control, Article II of the Boca Mechanical Code 1971).
10. Publishes a standard curriculum for the study, education, requirements, power equipment rating, and automation, etc.
11. Acts as advisor to educational entities engaged in teaching of power engineering and technology.

There are five levels (classifications) of licenses:

1. Chief Engineer
2. First Class Engineer
3. Second Class Engineer
4. Third Class Engineer
5. Fourth Class Engineer

Boiler Operations & Certification Testing – B302

www.hpcnet.com

An applicant for examination for such licenses shall be required to fulfill the following general requirements for all classifications:

1. Complete the required form, stating accurately and in detail all the mechanical and electrical training and experience the examinee has acquired relative to the examination for which he/she is a candidate.
2. Satisfy the Examining Board as to character and ability.
3. Prove that the examinee has attained the age required for certification.
4. Take an affidavit as printed on application, attesting that all statements are true.
5. Answer examination questions presented and obtain a minimum percentage of correct responses as required.
6. Pay the required fee as prescribed by the Certifying Agency.

Examinations are prepared with every attempt to insure fairness to the candidate. Accepted methods and theory of tests and measurement will be employed. Examinations are kept valid by revision and updating.

How Can HPC Help?

1. HPC provides a one-week course to prepare the candidate for the exam (item 5 above). This course is instructed by a certified instructor.
2. HPC contracts the third party agency to assist the examinee in the preparation of all forms and to administer the exam.
3. The third party licensing agency, under agreements with HPC, will then process the examination and provide the appropriate certifications.

What Do You Receive For Your Tuition?

1. Attendance in the examination preparation course (see outline below).
2. Application and Examination fees are included as part of your tuition.

COURSE OUTLINE

- I. **Introduction** and Pre-Test
- II. **Boilers:** Theory and Operation, Boiler Mathematics, Construction and Design, Steam Systems and Controls, Combustion and Pollution, Feedwater, Corrosion, Water Treatment, Boiler Controls, Water Treatment, Pumps and Injectors, Plant Auxiliaries to include Feedwater Heaters, Steam Non-Return Valves, Expansion Joints, Heaters, Steam Separator, Sight Feed Lubricator, Steam Trap Reducing Valve, Feed Water Regulator, Steam Engines, Steam Turbines, Steam Condensers, Steam Plant Accessories
- III. **Fuel Systems and Controls:** Boiler Grates, Burners
- IV. **Draft and Flue Gas Systems:** Combustion and Pollution, Boiler Operation & Maintenance, Safety
- V. **Electricity**
- VI. **Air Conditioning:** Refrigeration, Air Compressors
- VII. **Logs:** Log Review, Inspection, Regulations
- VIII. **Examination**

COURSE DATES/LOCATION/FEE

For current dates / locations / prices, please see HPC's website, www.hpcnet.com.

WHAT YOU WILL RECEIVE:

1. One copy of HPC Technical Services' textbook, Boiler Operator Training and Certification. It is a valuable desktop reference in addition to being able to enhance the learning process.
2. A "Certificate of Completion" with 3.2 CEUs, authorized for issue by the International Associate of Continuing Education/Training.
3. An opportunity to complete a NIULPE boiler operator examination at the level you qualify.

FREQUENTLY ASKED QUESTIONS

- Will HPC Technical Services bring this course to our location for our personnel only? YES, call or email Stephen Parker, stparker@hpcnet.com for a price quotation.
- Will HPC Technical Services customize the presentation at our site to suit our particular needs? Yes.
- Is HPC Technical Services' textbook available for purchase as a reference document? Coming Soon
- What is the cost for HPC Technical Service to deliver this course at our location? Well, of course that can vary, but generally speaking, if you're planning on having 6+ attend, when considering your T&L, it is to your advantage to perform the course at your plant (office). You gain from the customization and price.
- Can HPC Technical Services provide "Technical Assistance" in conducting functional checkouts or troubleshooting problems? Yes we can. Call or contact Harold Parker, hparker@hpcnet.com for our rate sheets and any further information required.

INSTRUCTOR (S):



Dan Anderson is the primary instructor for this course. Dan started his career in the US Navy as a Boiler Technician. After his discharge Dan was a civilian instructor for the US Navy at Great Lakes Naval Training Center. While there Dan instructed Navy personnel in the four-phase steam cycle including balance of plant equipment. In 1990 Dan returned to Minnesota and received his Minnesota State Chief A Engineers license. After a few years in the position as Chief Boiler Engineer For Green Giant Co. and Maintenance Manager for Minnesota Energy, Dan went to work for Hutchinson Utilities Commission in Hutchinson, Minnesota. His position there was Operator 1. His operational responsibilities included GE LM 6000 Combined Cycle, GE Frame 5 Simple Cycle, and a GE Frame 3 Combined Cycle. He also had operations of 6 Diesel Engines for power production. Dan joined HPC Technical Services, June 2001. His main area of instruction is Gas Turbine/Combine Cycle Fundamental, Steam Turbine/Generator Fundamentals, Mechanical Maintenance Courses, and The Boiler Training. Dan currently holds a Chief A Engineers License for Minnesota, A Chief NIULPE Certificate, NIULPE Instructor and Examiners Certificate, Chief ASOPE Certificate, and is a Member of ASME.

RECENTLY SATISFIED CLIENTS:

ALCOA Power Generation, Alliant Energy, Allison Transmission, Anchorage Municipal Power & Light, Arr-Maz, Aurora Energy, Austin Electric Department, Brownsville (TX) Public Utilities Board, BWXT Technologies, Chignik (AK)- City of, Cinergy, Citrus World, Crawfordsville Electric, Light & Power, Dannon Yogurt, Destileria Seralles (Puerto Rico), Eielson AFB, Firestone Industrial Products, Florida Natural Growers, Ford Motor Company, Fort Campbell PWBC, Fort Wainwright, Fort Richardson, Galaxy Foods, Gerber Foods, Gold Kist Poultry, Health Central, Hovensa Refinery, Industrial Resources, Korea Midland Power, Korea Plant Services & Engineering, KSL Services, Lauhoff Grain, Master Foods, MidAmerican Energy, Ocean Spray Cranberries, Oyo State Plant Mechanic Association, Petroferm, Rayonier, Ripon Cogen, Seminole Electric Cooperative, Smurfit Stone Container Corporation, Southern California Edison, Southern Company, Springfield (MO) City Utilities, Steelcase, Inc., Swisher International, TES Filer, Texas Independent Energy, Texas Municipal Power Agency, Trigen-Syracuse Energy, Tropicana Products, US Air Force, US Army Public Works, US Coast Guard, US Gypsum, US Power, US Sugar, UtiliCorp, VA Hospital, Vero Beach Municipal Utility, West Plains Energy, Western Michigan University, Wisconsin Electric

HPC TECHNICAL SERVICES
500 Tallevast Road, Suite 101, Sarasota, FL 34243
Telephone: 941-747-7733 FAX: 941-746-5374
Website: www.hpcnet.com

REGISTRATION FORM

Company: _____

Plant: _____

Address: _____

City/State/Zip: _____

Telephone: _____ FAX: _____

Course Number/Title: _____

Course Dates: ____/____/____ Thru ____/____/____

Course Location: _____ Course Fee: _____

PLEASE ENROLL THE FOLLOWING INDIVIDUAL(S) LISTED BELOW:

Student #1: _____ Email: _____

Student #2: _____ Email: _____

Taking advantage of HPC's 3-4-2 Policy: Send 3, Pay for 2 when paying in advance.

Student #3: _____ Email: _____

ENROLLED BY: _____ **Email:** _____

Date: _____

METHOD OF PAYMENT

Check to Follow: _____

Check Enclosed #: _____

MC/Visa/AMEX #: _____

Expiration Date: _____ CV Code: _____

Purchase Order #: _____

Please advise how you found out about this course initially.

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|---|--|
| <input type="checkbox"/> Website search | <input type="checkbox"/> Familiar with HPC |
| <input type="checkbox"/> Fax advertisement | <input type="checkbox"/> HPC mailing |
| <input type="checkbox"/> Magazine advertisement | <input type="checkbox"/> Other: _____ |