

Troy Boiler Works

invites you to join us for our current 2023 schedule



Boiler Training Course



This is a two-day boiler training course for anyone interested in learning about steam fundamentals, boilers, burners, combustion, boiler controls, steam system auxiliaries, and more.

Here is our current 2023 class schedule!

For more details and information on how to register for our courses, please click on the links below, call us at 518-274-2650, or email us at training@troyboilerworks.com.

| Dates | Location | Click For More Info |
|-----------------|-------------|---|
| January 10 & 11 | Fishkill | Fishkill Class Registration |
| January 24 & 25 | Troy | Troy Class Registration (January) |
| March 7 & 8 | Utica | Utica Class Registration |
| April 18 & 19 | Rochester | Registration Is Not Yet Open |
| June 6 & 7 | Auburn | Registration Is Not Yet Open |
| July 17 & 18 | Buffalo | Registration Is Not Yet Open |
| August 15 & 16 | Troy | Registration Is Not Yet Open |
| Sept 12 & 13 | Plattsburgh | Registration Is Not Yet Open |

If you have an interest in scheduling a class for training operators at your facility, please call or email us. In addition to the regular course locations listed above, we can also conduct on-site training at your facility.



Learning more about the principles of flash steam and boiler blowdown heat recovery at our first class in August of 2018.



Learning about steam hammer at our Walkkill class in July 2020



Wrapping up the summer schedule in Plattsburgh, September 2020



Our 2020 Troy Class takes a break



Troy Boiler Works, Inc.
2800 7th Avenue
Troy, NY 12180
518-274-2650

About Our Course

We started this program in 2018 with the goal of providing high-quality training for boiler operators, supervisors, and maintenance personnel. The participants in our program have included staff from SUNY campuses, NYS DOCCS facilities, school districts, hospitals, paper mills, and manufacturing facilities throughout New York State. We are now entering our fourth year of this highly successful program and have expanded to add new classes at multiple locations throughout New York State.

Why should you take this course? We looked at the 2020 training class evaluations from over 80 attendees participating this year. Based on the feedback received, 100% of those respondents either agreed or strongly agreed that this training will be beneficial to them in the performance of their jobs.

Some quotes from our students –

- ❖ "I highly recommend other boiler operators to take this course."
- ❖ "The instructors were able to keep the course interesting and convey useful information."
- ❖ "Broad range of interesting topics covered. Easily understandable for all."
- ❖ "Loved this course."
- ❖ "Balanced, good depth on all aspects."
- ❖ "Excellent instructors, venue, and course content."
- ❖ "Very organized and good overview of all aspects of the boiler system as a whole."
- ❖ "Course was very thorough. Concepts and systems were explained well."
- ❖ "Great Course!"
- ❖ "I really enjoyed the training. Thank You Troy Boiler!!"

Download our Training Brochure

Course Content Description

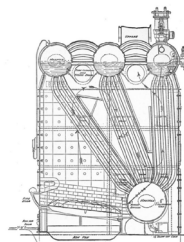
- Fundamentals of Steam
- Fundamentals of Combustion
- Boiler Types & Construction
- Burner Types & Construction
- High Temp Hot Water Generators
- Boiler Operating Procedures
- Boiler Safety Systems
- Deaerator & Feedwater Systems
- Water Treatment Principles
- Burner Systems & Controls
- ASME & NFPA Boiler Codes



Controls



Operations



Boiler Design & Construction



Boiler Safety & Codes

| Temp (°F) | Temp (°C) | Pressure (psia) | Pressure (bar) | Specific Volume (ft ³ /lb) | Specific Volume (m ³ /kg) | Enthalpy (Btu/lb) | Enthalpy (kJ/kg) | Entropy (Btu/lb-R) | Entropy (kJ/kg-K) |
|-----------|-----------|-----------------|----------------|---------------------------------------|--------------------------------------|-------------------|------------------|--------------------|-------------------|
| 212 | 100 | 14.7 | 1.013 | 26.8 | 1.673 | 1077.4 | 419.1 | 1.7748 | 7.3549 |
| 220 | 104.4 | 15.5 | 1.069 | 25.8 | 1.608 | 1080.8 | 425.8 | 1.7813 | 7.4210 |
| 230 | 109.9 | 16.5 | 1.136 | 24.9 | 1.551 | 1084.4 | 432.8 | 1.7878 | 7.4871 |
| 240 | 115.6 | 17.7 | 1.215 | 24.1 | 1.501 | 1088.1 | 440.1 | 1.7943 | 7.5532 |
| 250 | 121.1 | 19.1 | 1.307 | 23.4 | 1.457 | 1091.9 | 447.7 | 1.8008 | 7.6193 |
| 260 | 126.7 | 20.7 | 1.413 | 22.8 | 1.419 | 1095.8 | 455.6 | 1.8073 | 7.6854 |
| 270 | 132.3 | 22.5 | 1.534 | 22.3 | 1.386 | 1099.8 | 463.8 | 1.8138 | 7.7515 |
| 280 | 138.0 | 24.5 | 1.671 | 21.9 | 1.357 | 1103.9 | 472.3 | 1.8203 | 7.8176 |
| 290 | 143.8 | 26.7 | 1.825 | 21.6 | 1.332 | 1108.1 | 481.1 | 1.8268 | 7.8837 |
| 300 | 149.6 | 29.1 | 1.997 | 21.4 | 1.310 | 1112.4 | 490.2 | 1.8333 | 7.9498 |
| 310 | 155.6 | 31.7 | 2.188 | 21.2 | 1.291 | 1116.8 | 499.6 | 1.8398 | 8.0159 |
| 320 | 161.7 | 34.5 | 2.399 | 21.1 | 1.275 | 1121.3 | 509.3 | 1.8463 | 8.0820 |
| 330 | 167.9 | 37.5 | 2.631 | 21.0 | 1.262 | 1125.9 | 519.3 | 1.8528 | 8.1481 |
| 340 | 174.3 | 40.7 | 2.885 | 20.9 | 1.251 | 1130.6 | 529.6 | 1.8593 | 8.2142 |
| 350 | 180.8 | 44.1 | 3.163 | 20.8 | 1.242 | 1135.4 | 540.2 | 1.8658 | 8.2803 |
| 360 | 187.5 | 47.8 | 3.466 | 20.8 | 1.234 | 1140.3 | 551.1 | 1.8723 | 8.3464 |
| 370 | 194.4 | 51.8 | 3.795 | 20.7 | 1.228 | 1145.3 | 562.3 | 1.8788 | 8.4125 |
| 380 | 201.5 | 56.1 | 4.151 | 20.7 | 1.223 | 1150.4 | 573.8 | 1.8853 | 8.4786 |
| 390 | 208.8 | 60.7 | 4.534 | 20.6 | 1.219 | 1155.6 | 585.6 | 1.8918 | 8.5447 |
| 400 | 216.3 | 65.6 | 4.946 | 20.6 | 1.216 | 1160.9 | 597.7 | 1.8983 | 8.6108 |
| 410 | 224.0 | 70.8 | 5.388 | 20.5 | 1.213 | 1166.3 | 610.1 | 1.9048 | 8.6769 |
| 420 | 231.9 | 76.3 | 5.861 | 20.5 | 1.211 | 1171.8 | 622.8 | 1.9113 | 8.7430 |
| 430 | 240.0 | 82.1 | 6.366 | 20.4 | 1.209 | 1177.4 | 635.8 | 1.9178 | 8.8091 |
| 440 | 248.3 | 88.2 | 6.904 | 20.4 | 1.207 | 1183.1 | 649.1 | 1.9243 | 8.8752 |
| 450 | 256.8 | 94.7 | 7.476 | 20.3 | 1.205 | 1188.9 | 662.7 | 1.9308 | 8.9413 |
| 460 | 265.5 | 101.6 | 8.083 | 20.3 | 1.203 | 1194.8 | 676.6 | 1.9373 | 9.0074 |
| 470 | 274.4 | 108.9 | 8.727 | 20.2 | 1.201 | 1200.8 | 690.8 | 1.9438 | 9.0735 |
| 480 | 283.5 | 116.6 | 9.409 | 20.2 | 1.200 | 1206.9 | 705.3 | 1.9503 | 9.1396 |
| 490 | 292.8 | 124.7 | 10.130 | 20.1 | 1.198 | 1213.1 | 720.1 | 1.9568 | 9.2057 |
| 500 | 302.3 | 133.2 | 10.892 | 20.1 | 1.196 | 1219.4 | 735.2 | 1.9633 | 9.2718 |
| 510 | 312.0 | 142.1 | 11.696 | 20.0 | 1.194 | 1225.8 | 750.6 | 1.9698 | 9.3379 |
| 520 | 321.9 | 151.4 | 12.544 | 20.0 | 1.192 | 1232.3 | 766.3 | 1.9763 | 9.4040 |
| 530 | 332.0 | 161.1 | 13.437 | 19.9 | 1.190 | 1238.9 | 782.3 | 1.9828 | 9.4701 |
| 540 | 342.3 | 171.3 | 14.377 | 19.9 | 1.188 | 1245.6 | 798.6 | 1.9893 | 9.5362 |
| 550 | 352.8 | 182.0 | 15.366 | 19.8 | 1.186 | 1252.4 | 815.2 | 1.9958 | 9.6023 |
| 560 | 363.5 | 193.2 | 16.406 | 19.8 | 1.184 | 1259.3 | 832.1 | 2.0023 | 9.6684 |
| 570 | 374.4 | 204.9 | 17.500 | 19.7 | 1.182 | 1266.3 | 849.3 | 2.0088 | 9.7345 |
| 580 | 385.5 | 217.1 | 18.650 | 19.7 | 1.180 | 1273.4 | 866.8 | 2.0153 | 9.8006 |
| 590 | 396.8 | 230.0 | 19.858 | 19.6 | 1.178 | 1280.6 | 884.6 | 2.0218 | 9.8667 |
| 600 | 408.3 | 243.5 | 21.127 | 19.6 | 1.176 | 1287.9 | 902.7 | 2.0283 | 9.9328 |
| 610 | 420.0 | 257.6 | 22.459 | 19.5 | 1.174 | 1295.3 | 921.1 | 2.0348 | 10.0000 |

Fundamentals of Steam

To learn more about Troy Boiler Works and our capabilities, visit our website at www.troyboilerworks.com