

# 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](mailto:training@troyboilerworks.com).

Dates	Location	Click For More Info
January 10 & 11	Fishkill	<a href="#">Fishkill Class Registration</a>
January 24 & 25	Troy	<a href="#">Troy Class Registration (January)</a>
March 7 & 8	Utica	<a href="#">Utica Class Registration</a>
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



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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

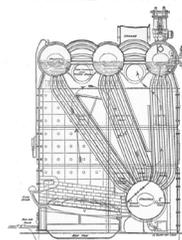
- Fundamentals of Steam
- Fundamentals of Combustion
- Boiler Types & Construction
- Burner Types & Construction
- High Temp Hot Water Generators
- Boiler Operating Procedures
- Boiler Safety Systems
- Deaerator & Feedwater Systems
- Water Treatment Principles
- Burner Systems & Controls
- ASME & NFPA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



Controls



Operations



Boiler Design & Construction



Boiler Safety & Codes

Temp (°F)	Temp (°C)	Pressure (psia)	Pressure (bar)	Specific Volume (ft <sup>3</sup> /lb)	Specific Volume (m <sup>3</sup> /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	900	419	1.000	4.187
220	105	15.5	1.070	26.3	1.641	910	424	1.005	4.202
230	110	16.5	1.135	25.8	1.610	920	429	1.010	4.217
240	116	17.7	1.208	25.3	1.580	930	434	1.015	4.232
250	121	19.0	1.289	24.8	1.551	940	439	1.020	4.247
260	127	20.5	1.378	24.3	1.523	950	444	1.025	4.262
270	133	22.2	1.475	23.8	1.496	960	449	1.030	4.277
280	139	24.0	1.580	23.3	1.470	970	454	1.035	4.292
290	145	26.0	1.693	22.8	1.445	980	459	1.040	4.307
300	151	28.1	1.814	22.3	1.421	990	464	1.045	4.322
310	156	30.4	1.943	21.8	1.398	1000	469	1.050	4.337
320	162	32.9	2.080	21.3	1.376	1010	474	1.055	4.352
330	168	35.6	2.225	20.8	1.355	1020	479	1.060	4.367
340	174	38.5	2.378	20.3	1.335	1030	484	1.065	4.382
350	180	41.6	2.539	19.8	1.316	1040	489	1.070	4.397
360	186	44.9	2.708	19.3	1.298	1050	494	1.075	4.412
370	192	48.4	2.885	18.8	1.281	1060	499	1.080	4.427
380	198	52.1	3.070	18.3	1.265	1070	504	1.085	4.442
390	204	56.0	3.263	17.8	1.250	1080	509	1.090	4.457
400	210	60.1	3.464	17.3	1.236	1090	514	1.095	4.472
410	216	64.4	3.673	16.8	1.223	1100	519	1.100	4.487
420	222	68.9	3.890	16.3	1.211	1110	524	1.105	4.502
430	228	73.7	4.115	15.8	1.200	1120	529	1.110	4.517
440	234	78.7	4.348	15.3	1.190	1130	534	1.115	4.532
450	240	84.0	4.589	14.8	1.181	1140	539	1.120	4.547
460	246	89.6	4.838	14.3	1.173	1150	544	1.125	4.562
470	252	95.4	5.095	13.8	1.166	1160	549	1.130	4.577
480	258	101.5	5.360	13.3	1.160	1170	554	1.135	4.592
490	264	107.9	5.633	12.8	1.155	1180	559	1.140	4.607
500	270	114.7	5.914	12.3	1.151	1190	564	1.145	4.622
510	276	121.8	6.203	11.8	1.148	1200	569	1.150	4.637
520	282	129.2	6.500	11.3	1.146	1210	574	1.155	4.652
530	288	136.9	6.805	10.8	1.145	1220	579	1.160	4.667
540	294	144.9	7.118	10.3	1.145	1230	584	1.165	4.682
550	300	153.2	7.439	9.8	1.146	1240	589	1.170	4.697
560	306	161.8	7.768	9.3	1.148	1250	594	1.175	4.712
570	312	170.7	8.105	8.8	1.151	1260	599	1.180	4.727
580	318	180.0	8.450	8.3	1.155	1270	604	1.185	4.742
590	324	189.6	8.803	7.8	1.160	1280	609	1.190	4.757
600	330	199.6	9.164	7.3	1.166	1290	614	1.195	4.772
610	336	210.0	9.533	6.8	1.173	1300	619	1.200	4.787
620	342	220.8	9.910	6.3	1.181	1310	624	1.205	4.802
630	348	232.0	10.295	5.8	1.190	1320	629	1.210	4.817
640	354	243.6	10.688	5.3	1.200	1330	634	1.215	4.832
650	360	255.6	11.089	4.8	1.211	1340	639	1.220	4.847
660	366	268.0	11.498	4.3	1.223	1350	644	1.225	4.862
670	372	280.8	11.915	3.8	1.236	1360	649	1.230	4.877
680	378	294.0	12.340	3.3	1.250	1370	654	1.235	4.892
690	384	307.6	12.773	2.8	1.265	1380	659	1.240	4.907
700	390	321.6	13.214	2.3	1.281	1390	664	1.245	4.922
710	396	336.0	13.663	1.8	1.300	1400	669	1.250	4.937
720	402	350.8	14.120	1.3	1.320	1410	674	1.255	4.952
730	408	366.0	14.585	0.8	1.341	1420	679	1.260	4.967
740	414	381.6	15.058	0.3	1.364	1430	684	1.265	4.982
750	420	397.6	15.539	0.0	1.389	1440	689	1.270	4.997
760	426	414.0	16.028	0.0	1.416	1450	694	1.275	5.012
770	432	430.8	16.525	0.0	1.445	1460	699	1.280	5.027
780	438	448.0	17.030	0.0	1.476	1470	704	1.285	5.042
790	444	465.6	17.543	0.0	1.509	1480	709	1.290	5.057
800	450	483.6	18.064	0.0	1.544	1490	714	1.295	5.072
810	456	502.0	18.593	0.0	1.581	1500	719	1.300	5.087
820	462	520.8	19.130	0.0	1.620	1510	724	1.305	5.102
830	468	540.0	19.675	0.0	1.661	1520	729	1.310	5.117
840	474	559.6	20.228	0.0	1.704	1530	734	1.315	5.132
850	480	579.6	20.789	0.0	1.749	1540	739	1.320	5.147
860	486	599.9	21.358	0.0	1.796	1550	744	1.325	5.162
870	492	620.5	21.935	0.0	1.845	1560	749	1.330	5.177
880	498	641.4	22.520	0.0	1.896	1570	754	1.335	5.192
890	504	662.6	23.113	0.0	1.949	1580	759	1.340	5.207
900	510	684.0	23.714	0.0	2.004	1590	764	1.345	5.222
910	516	705.6	24.323	0.0	2.061	1600	769	1.350	5.237
920	522	727.4	24.940	0.0	2.120	1610	774	1.355	5.252
930	528	749.4	25.565	0.0	2.181	1620	779	1.360	5.267
940	534	771.6	26.198	0.0	2.244	1630	784	1.365	5.282
950	540	794.0	26.839	0.0	2.309	1640	789	1.370	5.297
960	546	816.6	27.488	0.0	2.376	1650	794	1.375	5.312
970	552	839.4	28.145	0.0	2.445	1660	799	1.380	5.327
980	558	862.4	28.810	0.0	2.516	1670	804	1.385	5.342
990	564	885.6	29.483	0.0	2.589	1680	809	1.390	5.357
1000	570	909.0	30.164	0.0	2.664	1690	814	1.395	5.372

Fundamentals of Steam

To learn more about Troy Boiler Works and our capabilities, visit our website at [www.troyboilerworks.com](http://www.troyboilerworks.com)