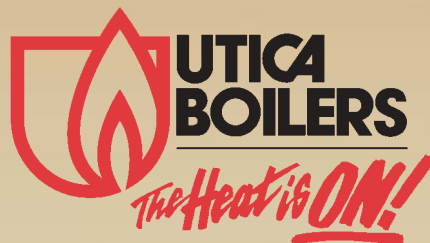
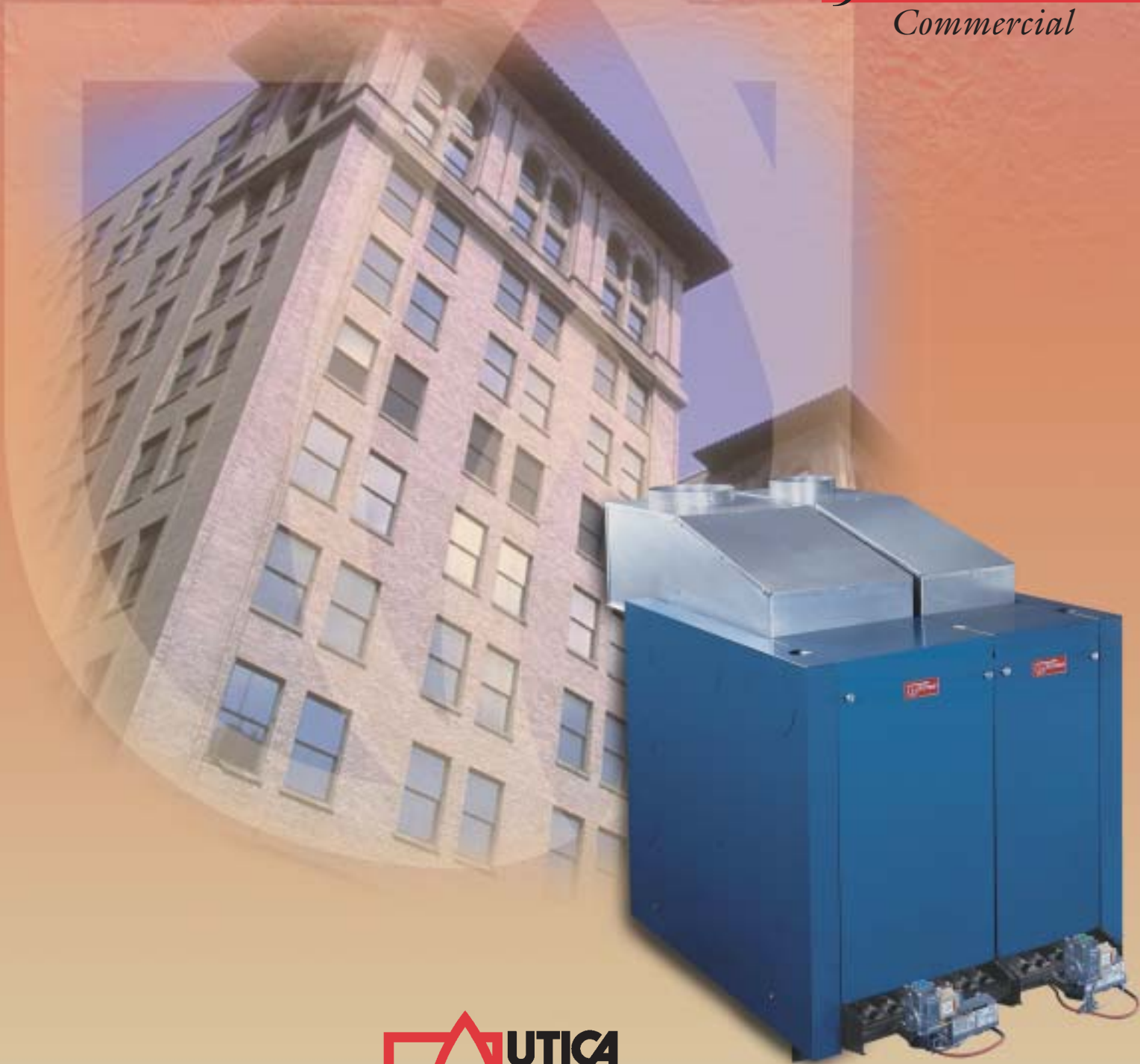


Gas-Fired/Water or Steam Boiler

Quality Engineered for Efficiency and Dependability

JC Series
Commercial



JC Series

Commercial Gas-Fired/Water or Steam Boiler

Warm up to the Energy Efficiency & Flexibility of the JC Series Boiler

The JC Series boiler is the ideal replacement or new construction choice for today's commercial buildings. Manufactured in 28 sizes from 300,000 to 3,000,000 BTU/h, this modular combustion-base designed boiler has the flexibility to adapt to water or steam applications while delivering optimum fuel efficiency.

Modular Efficiency

The JC Series is composed of one or six combustion base modules, allowing the option to step-fire individual modules with an outdoor reset control. By utilizing this type control, only the modules necessary to meet the heating demand of the day need to burn fuel. Most competitor's commercial boilers are all on or all off, wasting energy and fuel dollars on mild degree days. The modular design of the JC Series delivers maximum operating efficiency. Available in three combustion module bases (300,400,500 MBH) that can be matched in any combination to meet specific job heating requirements.

Easy Installation and Access

Sections are field assembled into a single heat exchanger and pre-assembled bases and draft hoods make the JC Series boiler easy to install. Unlike massive one-piece commercial boiler heat exchangers, the JC Series can fit through small doorways eliminating any building modification for replacements. Should you add on to your building the JC Series can grow with your needs by simply adding combustion bases and intermediate sections to the original boiler.

JC-Series Standard Equipment

ELECTRONIC IGNITION BASE STANDARD EQUIPMENT

- Base
- Fire Door
- Burner Orifice
- Manifold
- Main and Pilot Burner
- Electronic Pilot Gas Valve
- Intermittent Pilot Module
- High Gas Pressure Switch

WATER TRIM PACKAGE:

- Limit Control (two required on units 2,500,000 BTU and larger)
- Pressure Temperature Gauge
- Relief Valve
- Drain Valve
- Complete Jacket Assembly

STEAM TRIM PACKAGE:

- Low Water Cut-Off
- Glass Gauge Set
- Pop Safety Valve
- Steam Gauge
- Pressure Limit
- Drain Valve
- Complete Jacket Assembly

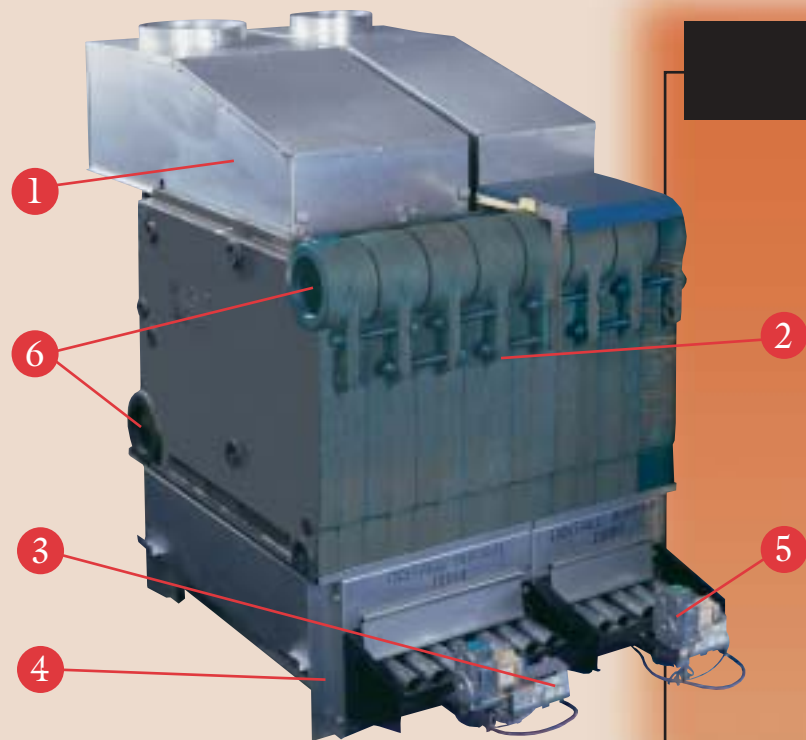
Cast Iron Sections & Push Nipples

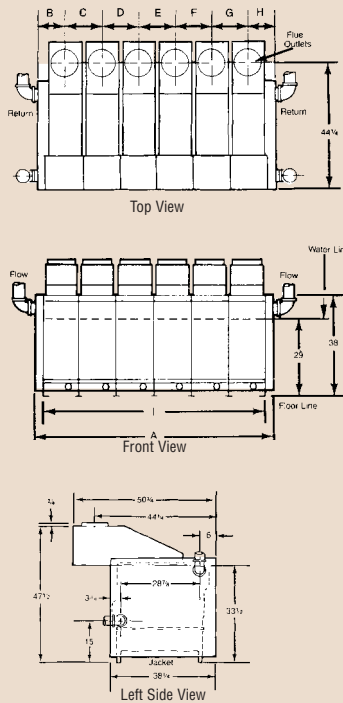
The JC Series utilizes cast-iron construction because of its durability and efficient heat transfer capabilities. Cast-iron sections and push nipples are utilized to construct the heat exchanger. Each end section weighs 185 pounds (intermediate sections are 165 lbs.) and designed with 4" supply and return tappings to ensure proper sizing for commercial use. Using only the highest quality cast iron and heat transfer designs, the JC Series will provide many years of efficient and trouble-free operation.



CSD1

JC Series boilers can comply to CSD1 standards by utilizing the CSD1 option. The increased number of controls and safety devices allow the boiler to meet required, public building codes.





JC SERIES DIMENSIONS IN INCHES

Boiler Model Number	Assembled Boiler Unit Section Sizes			Sections			Width of Boiler	Left Side of Cover to Center of Flue Outlet	Distance Between Flue Centers					Right Side of Cover to Center of Flue Outlet	Base & Battery Length
	300	400	500	L	Inner	R			A	B	C	D	E		
JC-300 JC-400 JC-500	1	1	1	1	2 3 4	1	18 3/4 23 27 1/4	9 3/8 11 1/2 13 3/8	Omit	Omit ↓	Omit ↓	Omit ↓	Omit ↓	9 3/8 11 1/2 13 3/8	16 1/4 21 25 1/4
JC-600 JC-700 JC-800 JC-900 JC-1000	2 1	1 2 1	1 1 2	1 1 1	5 6 7 8 9	1	31 1/2 35 3/4 40 44 1/4 48 1/2	9 3/8 9 3/8 11 1/2 11 1/2 13 3/8	12 3/4 14 7/8 17 19 1/8 21 1/4	↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓	9 3/8 11 1/2 11 1/2 13 3/8 13 3/8	29 1/2 34 3/4 38 42 1/4 46 1/2	
JC-1100 JC-1200 JC-1300 JC-1400 JC-1500	1 1	2 3 2 1	1 2 2 3	1 1 1 1	10 11 12 13 14	1	52 3/4 57 61 1/4 65 1/2 69 3/4	9 3/8 11 1/2 9 3/8 11 1/2 13 3/8	14 7/8 17 17 19 1/8 21 1/4	17 17 21 1/4 21 1/4 21 1/4	↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓	11 1/2 11 1/2 13 3/8 13 3/8 13 3/8	50 3/4 55 59 1/4 63 3/2 67 3/4	
JC-1600 JC-1700 JC-1800 JC-1900 JC-2000	1	4 1 2 1	1 2 3 4	1 1 1 1	15 16 17 18 19	1	74 78 3/4 82 1/2 86 3/4 91	11 1/2 9 3/8 11 1/2 11 1/2 13 3/8	17 14 7/8 17 19 1/8 21 1/4	17 19 3/8 21 1/4 21 1/4 21 1/4	↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓	11 1/2 13 3/8 13 3/8 13 3/8 13 3/8	72 76 1/4 80 1/2 84 3/4 89	
JC-2100 JC-2200 JC-2300 JC-2400 JC-2500	2	3 2 1	3 2 4 5	1 1 1 1	20 21 22 23 24	1	95 1/4 99 1/2 103 3/4 108 112 1/4	9 3/8 11 1/2 11 1/2 11 1/2 13 3/8	12 3/4 17 17 19 1/8 21 1/4	17 17 19 3/8 21 1/4 21 1/4	21 1/4 19 3/8 21 1/4 21 1/4 21 1/4	↓ ↓ ↓ ↓ ↓	13 3/8 13 3/8 13 3/8 13 3/8 13 3/8	93 1/4 97 1/2 101 3/4 106 110 1/4	
JC-2600 JC-2700 JC-2800 JC-2900 JC-3000	2 1	1 2 1	4 4 5 6	1 1 1 1	25 26 27 28 29	1	116 1/2 120 3/4 125 129 1/4 133 1/2	9 3/8 9 3/8 11 1/2 11 1/2 13 3/8	12 3/4 14 7/8 17 19 3/8 21 1/4	17 19 3/8 21 1/4 21 1/4 21 1/4	21 1/4 21 1/4 21 1/4 21 1/4 21 1/4	21 1/4 21 1/4 21 1/4 21 1/4 21 1/4	13 3/8 13 3/8 13 3/8 13 3/8 13 3/8	114 1/2 118 3/4 123 127 1/4 131 1/2	

JC Boiler Details.

- 1 Low Profile Draft Hood – Allows for installations with limited ceiling height and easy inspection of flue ways
- 2 Cast-Iron Heat Exchanger
- 3 Electronic Ignition
- 4 Modular Combination Bases
- 5 Gas Valve
- 6 4" Supply and Return Tappings

Key JC-Series Features

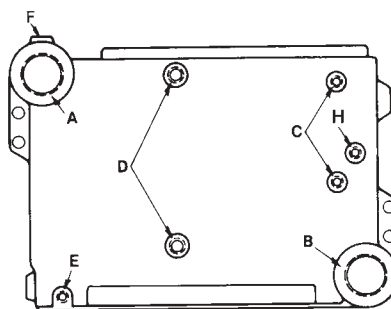
- Pre-Assembled burner and base units
- Modular Efficiency
- 4" Supply and Return Tappings
- Cast Iron Sections and Push Nipples
- 300,000-3,000,000 BTU/h input
- Tested for 100 lbs. ASME working pressure water, 15 PSI steam
- 80% combustion efficiency
- Boiler can be added to in order to satisfy additions or building expansions
- Natural draft chimney vented

JC Series

Commercial Gas-Fired/Water or Steam Boiler

JC Series Right- And Left-End Tappings Data

OPENING	SIZE	STEAM	WATER
A	4"	Supply	Supply
B	4"	Return	Return
C	1/2"	Low-Water Cutoff and/or Gauge Glass	Plugged
D	1"	Low-Water Cutoff & Feeder Combination	Plugged or Low-Water Cutoff
E	1-1/2"	Drain Left Side	Drain Left Side
E	3/4"	Drain Right Side	Drain Right Side
F	1/2"	Plugged or Pressure Control	Limit Control on Control End of Boiler. Pressure/Temp. Gauge on Opposite End of Boiler
H	3/4"	Probe Low Water Cut-Off	Probe Low Water Cut-Off



JC Series Gas-Fired Boilers Engineering Specifications

INPUT	OUTPUT	I = B = R RATINGS†			CHIMNEY SIZE #	FLUE OUTLET NO. & SIZE				WATER CAPACITY (Gallons)		OPERATING WGT. LESS PIPING		HORSE- POWER Gross Output**	PRESSURE DROP THRU WATER BOILER††	
		STEAM Sq Ft	STEAM Btu Mbh	WATER Btu Mbh		I.D. x Ht.	8"	10"	12"	Water Entire Boiler	Steam to Water Line	Steam Lbs.	Water Lbs.		GPM	In. Water
JC300	240	750	180	209	8" X 20'	1				26	20	1022	1092	7.16	18.9	0.10
JC400	320	1000	240	278	10" X 20'		1			33	25	1238	1325	9.55	25.2	0.27
JC500	400	1250	300	348	12" X 20'			1		40	30	1455	1559	11.94	31.5	0.40
JC600	480	1500	360	417	12" X 20'	2				46	35	1711	1832	14.33	37.8	0.50
JC700	560	1750	420	487	12" X 20'	1	1			52	40	1933	2070	16.72	44.1	0.70
JC800	640	2000	480	557	14" X 20'			2		58	45	2155	2308	19.10	50.4	0.88
JC900	720	2250	540	626	14" X 20'		1	1		65	50	2526	2526	21.49	56.7	1.10
JC1000	800	2500	600	696	14" X 20'			2		71	55	2588	2775	23.88	63.0	1.30
JC1100	880	2750	660	765	16" X 20'	1	2			78	60	2845	3048	26.27	69.3	1.50
JC1200	960	3000	720	835	16" X 20'			3		84	65	3085	3305	28.66	75.6	1.80
JC1300	1040	3250	780	904	16" X 20'	1		2		91	70	3279	3515	31.04	81.9	2.00
JC1400	1120	3500	840	974	18" X 20'		1	2		97	75	3545	3815	33.43	88.2	2.40
JC1500	1200	3750	900	1043	18" X 20'			3		104	80	3813	4063	35.82	94.5	2.60
JC1600	1280	4008	962	1113	18" X 20'			4		110	85	4010	4312	38.21	100.8	2.80
JC1700	1360	4283	1028	1183	18" X 20'	1	1	2		117	90	4234	4554	40.60	107.1	3.15
JC1800	1440	4563	1095	1252	20" X 20'		2	2		123	95	4457	4795	42.99	113.4	3.50
JC1900	1520	4838	1161	1322	20" X 20'		1	3		130	100	4676	5028	45.37	119.7	4.00
JC2000	1600	5117	1228	1391	20" X 20'			4		136	105	4895	5261	47.76	126.0	4.50
JC2100	1680	5392	1294	1461	20" X 20'	2		3		143	110	5138	5523	50.15	132.3	4.95
JC2200	1760	5671	1361	1530	22" X 20'		3	2		149	115	5380	5784	52.54	138.6	5.40
JC2300	1840	5942	1426	1600	22" X 20'		2	3		156	120	5599	5967	54.93	144.9	5.70
JC2400	1920	6213	1491	1670	22" X 20'		1	4		162	125	5815	6149	57.31	151.2	6.00
JC2500	2000	6471	1553	1739	22" X 20'			5		169	130	6068	6507	59.70	157.5	8.00
JC2600	2080	6729	1615	1809	22" X 20'	2		4		175	135	6321	6865	62.09	163.8	7.00
JC2700	2160	6988	1677	1878	24" X 20'	1	1	4		182	140	6551	7075	64.48	170.1	7.50
JC2800	2240	7246	1739	1948	24" X 20'		2	4		188	145	6780	7285	66.87	176.4	8.00
JC2900	2320	7504	1801	2017	24" X 20'		1	5		195	150	7007	7511	69.25	182.75	8.5
JC3000	2400	7763	1863	2087	24" X 20'			6		201	155	7234	7737	71.64	189.1	9.00

*RATINGS ARE AT SEA LEVEL TO 2,000 FEET. FOR ALTITUDES ABOVE 2,000 FEET, REDUCE ALL RATINGS 4% FOR EACH 1,000 FEET ABOVE SEA LEVEL.

†RATINGS BASED ON SELECTION FACTORS RECOMMENDED BY HYDRONICS INSTITUTE FOR PIPING AND PICKUP. NET WATER BOILER RATINGS ARE BASED ON AN ALLOWANCE OF 1.15, AND NET STEAM BOILER RATINGS ARE BASED ON AN ALLOWANCE OF 1.33. FOR WATER APPLICATIONS WITH HIGH PIPING AND PICKUP REQUIREMENTS, USE STEAM RATING.

‡RATINGS IN SQUARE FEET ARE COMPUTED AT 240 Btu/h/ SQUARE FOOT FOR STEAM BOILERS.

**RATINGS BASED ON 33,500 BTUH PER HORSEPOWER.

††PRESSURE DROP BASED ON GIVEN FLOW FROM A SINGLE OUTLET AND RETURNING TO A SINGLE INLET AT THE OPPOSITE END OF THE BOILER.

CHIMNEY SIZES SHOWN ARE ONE OPTION BASED ON A TYPICAL VENTING SYSTEM, AND SIZED ACCORDING TO THE NATIONAL FUEL GAS CODE, ASSUMING TYPE B DOUBLE WALL VENT AND VENT CONNECTORS. OTHER VENTING SYSTEM DESIGNS ARE ACCEPTABLE. FOR FURTHER CHIMNEY DESIGN AND SIZING INFORMATION, CONSULT THE NATIONAL FUEL GAS CODE, ANSI Z223.1/NFPA 54-LATEST REVISION; OR ASHRAE-1996 HVAC SYSTEMS AND EQUIPMENT HANDBOOK, CHAPTER 30, CHIMNEY, GAS, VENT, AND FIREPLACE SYSTEMS; OR THE STANDARD FOR CHIMNEYS, FIREPLACES, VENTS, AND SOLID FUEL BURNING APPLIANCE NFPA 211-LATEST REVISION. FOLLOW STANDARD ENGINEERING PRACTICE.

(Specifications and dimensions are subject to change without notice)

For more information on Utica Boilers heating products contact your local Utica Boilers distributor. Or call the Utica Boilers Customer Service Department at 1-800-325-5479.



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