

BURNHAM®

Commercial Boilers

HIGH EFFICIENCY

20 – 200 BHP

ASME SECTION
I AND IV

ECONOMICAL

IDEAL FOR
BREWERY
APPLICATIONS

QUICK
TURNAROUND



C Series

COMPACT PACKAGE BOILER

C Series COMPACT PACKAGE BOILER

America's Boiler Company

The Burnham Commercial C Series compact packaged boiler was designed with extensive manufacturing experience and is sold and serviced through the largest and most experienced network of sales representatives in the country. With a complete commercial product offering an unmatched sales and technical support, it's no wonder why Burnham Commercial is America's Boiler Company!

Packaged Boilers That Can Actually Fit Through A Door!

The C Series Firetube boiler is fully packaged and designed to provide maximum cost and energy efficiency. The C Series boiler fits through any standard 36" x 80" doorway, up to 100HP. It eliminates the need for any costly building alterations or difficult site assemblies. This convenient size allows for easier and less expensive retrofit or upgrade of an existing boiler room.

A forced-draft unit, the C Series avoids the expense of a tall stack and is much more economical to operate and install than atmospheric-fired boilers. The forced draft creates a more controlled combustion, and a more thorough mixture of fuel and air is achieved resulting in optimum efficiency.

Other design features help maintain this durability and economy over the years. While the original efficiency of some other boilers can decrease when outer wrappers develop air leaks and tubes cannot be cleaned thoroughly, the C Series overcomes these problems. Built to ASME standards, its outer shell of heavy welded steel boilerplate and extra heavy tube sheets assure the continued airtight conditions necessary for efficient combustion. Its heavy construction materials and welded design assure durability and longevity that throw away designs can't offer. Opening the front flue door allows convenient access to the firetubes. By brushing out all of the firetubes, the original efficiency of the boiler is restored in a matter of minutes. All tube ends are rolled in accordance with the ASME code and are inspected for hydraulic tightness by an independent insurance inspector, prior to shipping.

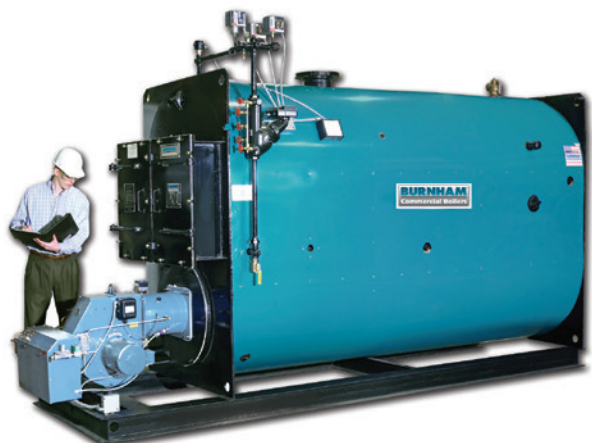
These installation, operation and maintenance features add up to real savings for you. Factory testing assures you that the boiler will deliver clean, quiet and reliable heat from the day it's installed.



FRONT

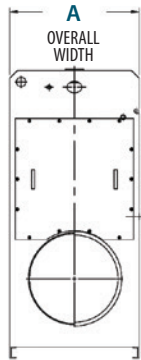


REAR

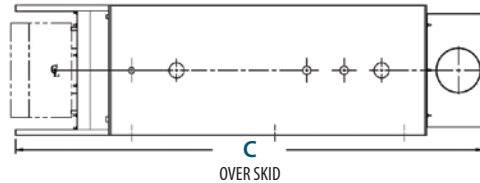


DIMENSIONS AND FEATURES

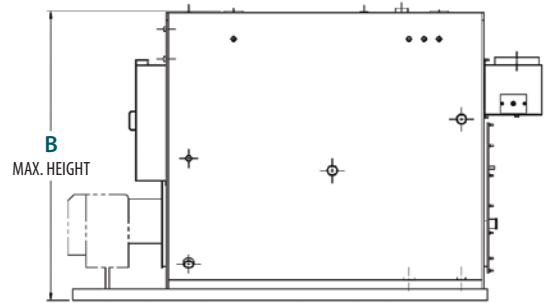
C Series Dimensions



FRONT VIEW



PLAN VIEW



SIDE VIEW

Specifications subject to change without notice. All connections are threaded unless otherwise specified.

MODEL	A	B	C
C-20	30	67-3/8	75-5/8
C-30	30	67-3/8	82-5/8
C-40	34-1/2	74-7/8	90-1/8
C-50	34-1/2	76-3/8	100-5/8
C-60	34-1/2	76-3/8	113-1/8
C-70	34-1/2	79-1/2	114-5/8
C-80	34-1/2	79-1/2	125-1/8
C-90	34-1/2	79-1/2	135-1/8
C-100	34-1/2	79-1/2	145-1/8
C-125	50-3/4	94-3/4	144-5/8
C-150	50-3/4	94-3/4	161-1/8
C-175	50-3/4	94-3/4	177-3/8
C-200	50-3/4	94-3/4	193-5/8

Firing rates are nominal catalog rates based on 82% efficiency firing natural gas and 84% firing #2 oil. Higher efficiencies can be expected as shown on steam sheet.

Standard Features*

- 3-Pass firetube construction
- ASME Section IV construction
- Water-cooled side walls
- Rolled and flared tube ends
- Front and rear flue doors
- Oversized combustion chamber
- Washout openings
- Top/Vertical smokebox discharge
- Lifting lugs
- Enameled steel jacket
- Fiberglass insulation
- Structural steel base with extended skid to protect burner during shipment
- Quick shipping options available

Optional Equipment*

- Locking quadrant damper
- Combustion relief door
- Read/Horizontal smokebox discharge in lieu of top
- Stack thermometer
- Bolt-on front smokebox
- Flue brush with handle
- Beaded tubes
- Drain valve
- Fork-lift base
- Pre-piped and wired gas train
- Oversized gauges
- Steam & water trim connections
- Stainless steel jackets

Steam Controls

- Gauge glass set
- Steam pressure gauge
- Operating control
- Manual-reset high limit
- Firing rate control
- Low fire hold aquastat (when required)
- Manual-reset probe-type low water cut-off
- Pump control/low water cut-off

Water Controls

- Manual-reset low water cut-off
- Pressure/Temperature gauge
- Operating control
- Manual-reset high limit
- Firing rate control
- Low fire hold aquastat (when required)

*Burnham Commercial offers a wide variety of application specific optional equipment on the boiler and the burner. Contact your local representative for options not shown here.

C SERIES RATINGS

Ratings and Data

Model	INPUTS			GAS EFFICIENCIES				OIL EFFICIENCIES				OUTPUTS					IBR NET RATING		
	Gas Input MBH	Oil Input MBH	Oil Input GPH	Water		Steam		Water		Steam		Water		Steam			Steam MBH	Steam SQ FT	Water MBH
				Comb. Eff. %	Therm. Eff. %	Comb. Eff. %	Therm. Eff. %	Comb. Eff. %	Therm. Eff. %	Comb. Eff. %	Therm. Eff. %	MBH	BHP	MBH	BHP	Lb./Hr.			
C-20	816	784	5.6	85.5	82.5	85.0	80.9	88.8	86.2	87.9	84.5	673	20.1	660	19.7	681	495	2,063	585
C-30	1,225	1,176	8.4	85.4	82.9	84.8	81.3	88.7	86.5	87.7	84.9	1,015	30.3	996	29.8	1,027	747	3,114	883
C-40	1,633	1,568	11.2	85.2	83.3	84.6	81.8	88.5	86.8	87.5	85.3	1,359	40.6	1,335	39.9	1,376	1,008	4,200	1,182
C-50	2,041	1,960	14.0	85.1	83.6	84.5	82.2	88.4	87.0	87.4	85.7	1,706	51.0	1,677	50.1	1,729	1,293	5,388	1,483
C-60	2,449	2,352	16.8	85.0	84.0	84.3	82.6	88.3	87.3	87.2	86.1	2,057	61.4	2,023	60.4	2,085	1,571	6,544	1,789
C-70	2,858	2,744	19.6	85.0	84.0	84.1	82.9	88.1	87.3	87.5	86.0	2,400	71.7	2,369	70.8	2,442	1,840	7,665	2,087
C-80	3,266	3,136	22.4	85.2	84.2	84.2	83.1	88.2	87.5	87.7	86.2	2,749	82.1	2,714	81.1	2,798	2,107	8,780	2,390
C-90	3,674	3,542	25.3	85.3	84.4	84.4	83.4	88.3	87.6	87.8	86.4	3,100	92.6	3,064	91.5	3,158	2,379	9,912	2,696
C-100	4,082	3,934	28.1	85.5	84.7	84.5	83.7	88.5	87.9	87.9	86.6	3,457	103.3	3,417	102.1	3,522	2,653	11,053	3,006
C-125	5,102	4,900	35.0	85.1	84.2	84.1	83.2	88.3	87.7	87.8	86.5	4,295	128.3	4,245	126.8	4,375	3,296	13,732	3,735
C-150	6,123	5,880	42.0	85.2	84.5	84.2	83.5	88.4	87.9	87.9	86.7	5,173	154.5	5,113	152.7	5,270	3,969	16,540	4,498
C-175	7,144	6,874	49.1	85.3	84.7	84.3	83.7	88.5	88.0	87.9	86.8	6,050	180.7	5,980	178.6	6,163	4,642	19,344	5,261
C-200	8,165	7,854	56.1	85.5	85.0	84.3	84.0	88.5	88.3	88.0	86.9	6,940	207.3	6,859	204.9	7,069	5,325	22,188	6,035

