

# CREEKST

CONDENSING BOILER



DEMAND **SUPERIOR** PERFORMANCE





**CREEKST**  
CONDENSING BOILER

HIGH EFFICIENCY  
CONDENSING  
HOT WATER  
BOILER

- Sizes from 300,000 - 2,000,000 btu/hr
- High Water Volume w/**LOW** Waterside Pressure Drop Reducing System Pump HP
- Twin Water Return for Maximum Efficiency
- Complete Heat Exchanger Made w/316Ti
- Available w/#2 fuel oil
- Available w/Low Emissions <9ppm Technology

# THE FACTS & FIGURES

	ST-300	ST-500	ST-750	ST-1000	ST-1400	ST-2000
input (btu/hr)	300,000	500,000	750,000	1,000,000	1,400,000	2,000,000
fuel consumption NG (ft <sup>3</sup> /hr)	300	500	750	1,000	1,400	2,000
fuel consumption #2 oil (GPH)*	2.1	3.6	5.4	7.1	10	14.3
output (btu/hr)	285,000	475,000	712,500	950,000	1,330,000	1,900,000
water content (gal)	40	55	81	75	104	148
weight (lbs) dry	975	1140	2200	2300	3200	3940
weight (lbs) operating	1310	1600	2875	2925	4065	5175
DIMENSIONS (inches)						
width**	28 1/2	28 1/2	32 5/8	32 5/8	36 3/4	36 3/4
height	71 3/8	71 3/8	77 1/2	77 1/2	80 1/2	80 1/2
depth	36 1/2	49 5/8	60 5/8	60 5/8	71	91 3/8
stack connection O.D.	6	7 1/4	8	8	10	10
water inlet/outlet diameter	2	2	2 1/2	2 1/2	4	4
min. clearance to ceiling	20	20	20	20	20	20
min. side clearance	4	4	4	4	4	4
system filling/drainage	1 FPT	1 FPT	1 FPT	1 FPT	1 FPT	1 FPT
boiler condensation drain	3/4 MPT	3/4 MPT	3/4 MPT	3/4 MPT	3/4 MPT	3/4 MPT

\*Oil is for emergency back up use only \*\*Boiler width is less jacket

## BENEFITS

- **The most powerful**

Exhaustive thermodynamic studies over the course of many years allowed us to create a specially designed heat exchange surface for maximum total efficiency in a compact package. The efficient design has withstood the test of time with the first prototype still in operation nearly two decades later and with an installed base numbering in the thousands.

- **Maximum operating flexibility**

For any plant application, with industry leading water volume, heating surface and high thermal inertia.

- **Twin water return**

The boiler design has two return connections allowing for optimal stratification for maximum operating efficiency in multi-loop systems.

- **Quality materials**

*All* components in contact with flue gases are made from AISI 316Ti for highest corrosion resistance against acidic condensate in the *entire* heat exchanger.

- **Large volume**

A large volume furnace ensures proper combustion of natural gas, LP, and emergency backup #2 oil. Having a furnace also allows us to run at low excess air levels of 15%, and in some cases, less ensuring the dew point remains high for maximum condensing operating hours even in high load periods.

- **Simple maintenance**

With a burner mounted directly to the robust front door, yearly burner tune-ups or maintenance checks have never been easier. Access to the furnace is provided by an ample, hinged front door which can be opened in a matter of seconds with simple tools. Waterside inspection points are also provided.



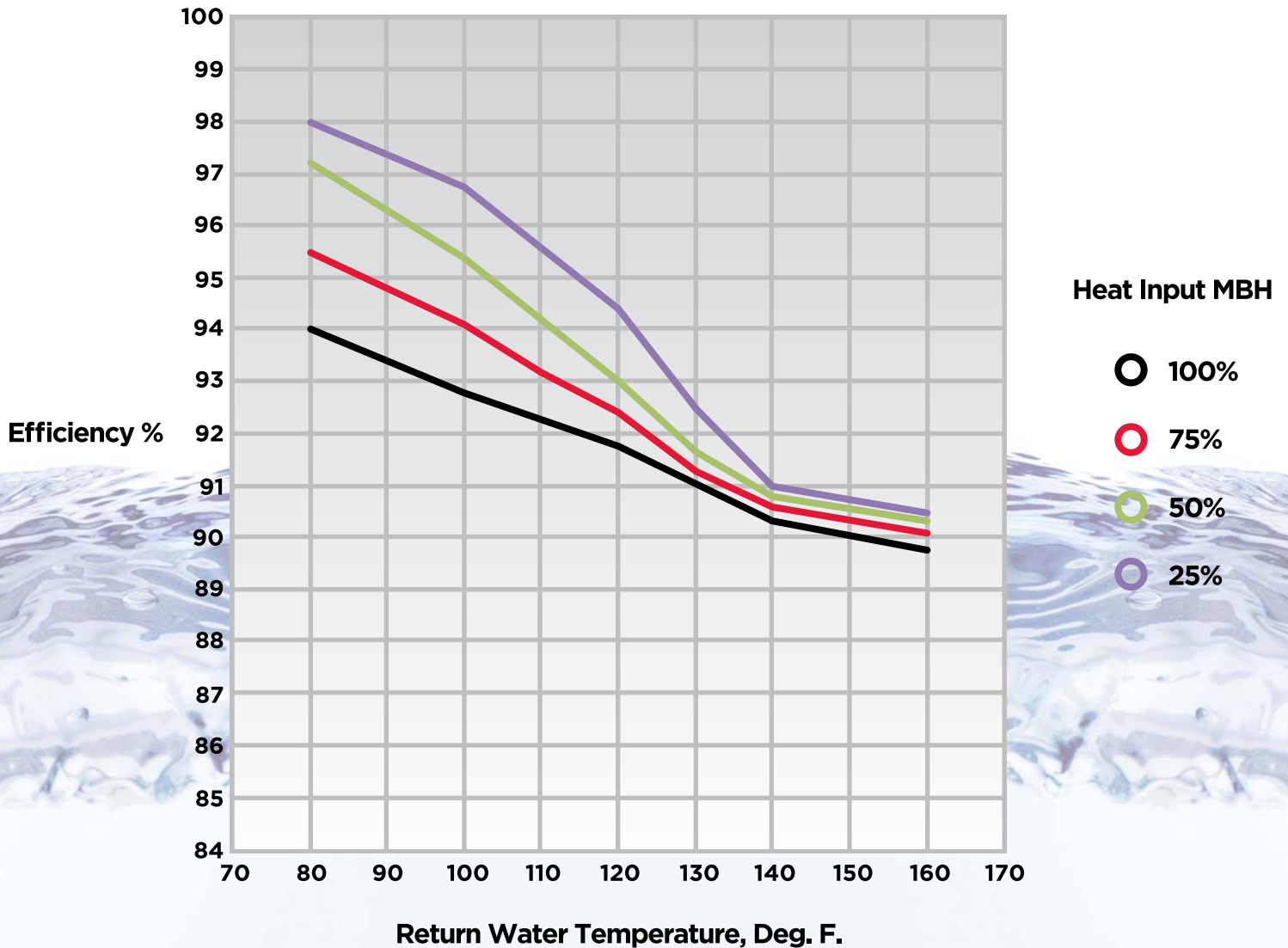


# BOILER EFFICIENCY

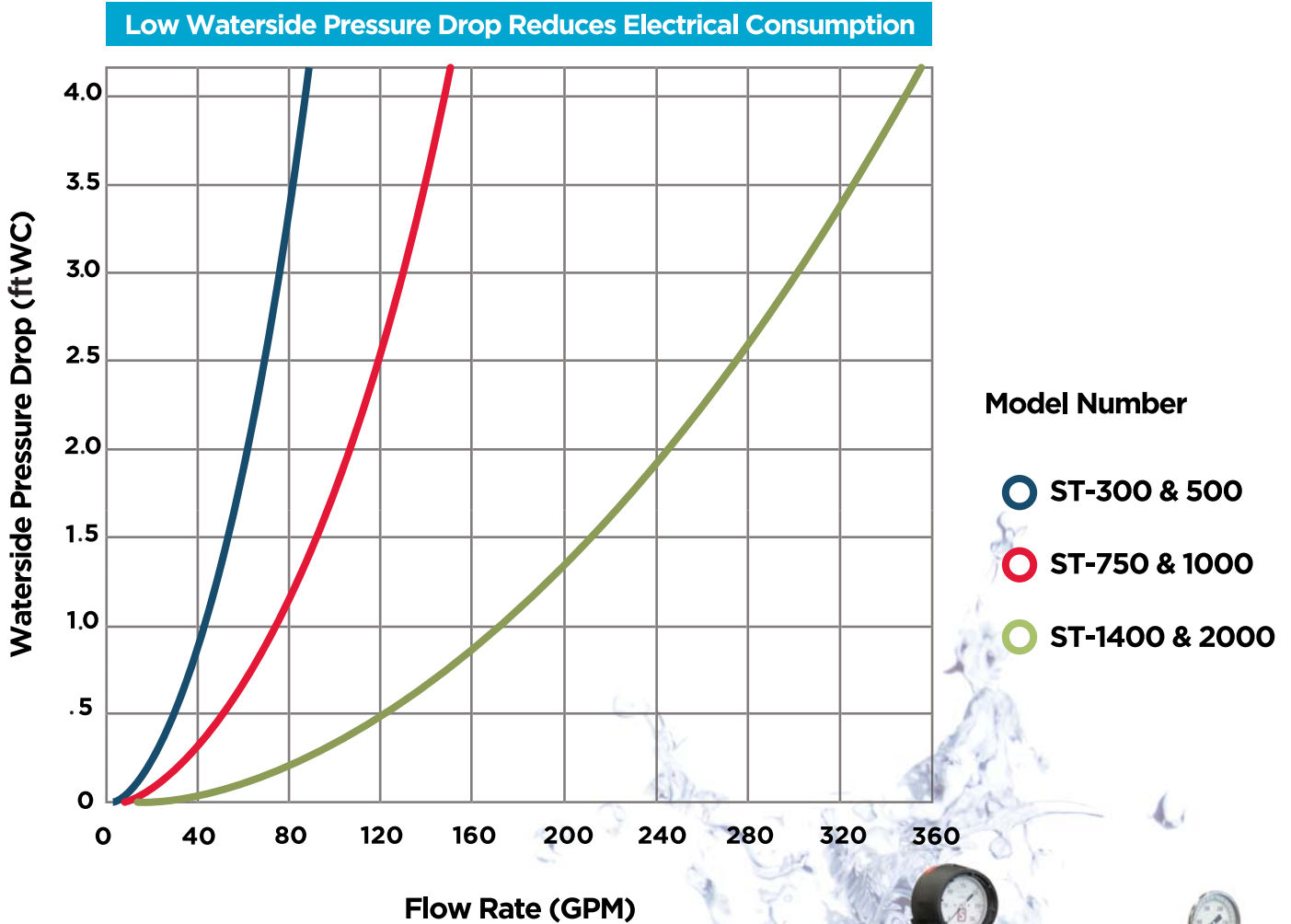
## CREEK-ST 1400

Heat Input MBH	Firing Rate %	Return Water Temperature					
		80	100	120	130	140	160
1400	100	93.96	92.76	91.76	90.96	90.26	89.76
1050	75	95.46	94.06	92.36	91.26	90.56	90.06
700	50	97.26	95.36	92.96	91.66	90.76	90.36
350	25	97.96	96.76	94.36	92.46	90.86	90.46

## Performance per BTS-2000



# WATERSIDE PRESSURE DROP



“Introducing a product that will change the way our industry sees condensing boiler technology.”

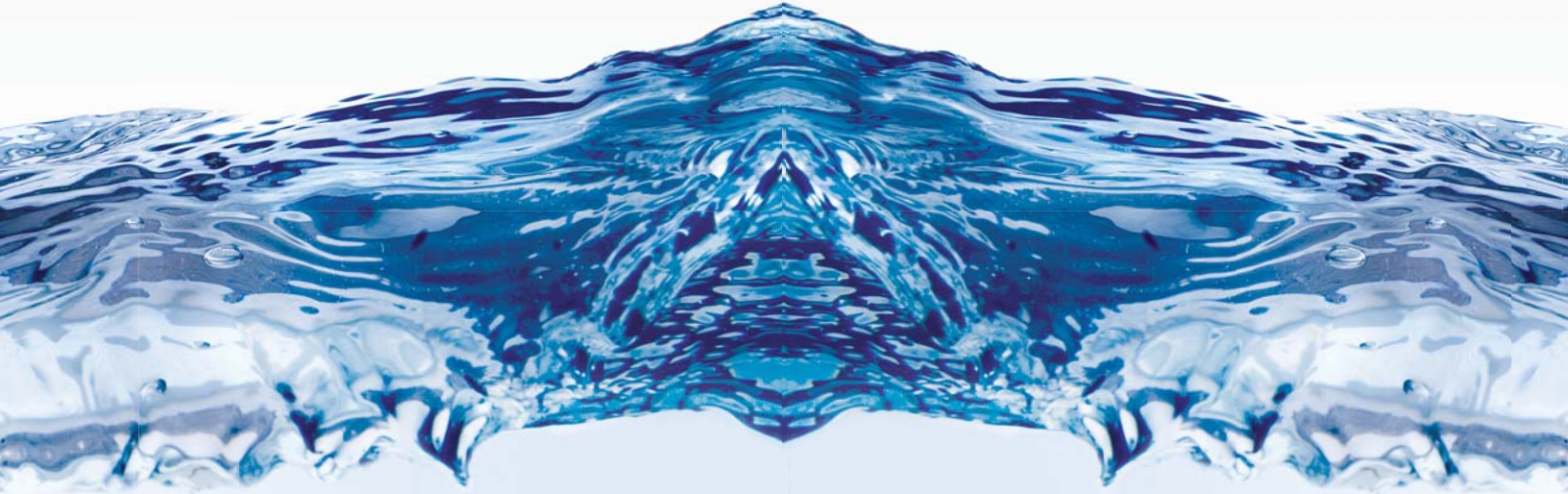
Superior Boiler Works, Inc. Press Release - 01/2013

The Creek ST condensing boiler is specifically designed to deliver maximum total efficiency and lowest total emissions, while maintaining a responsive load response and low waterside pressure drop, for both the replacement heating boiler market and new construction. Uniquely constructed with a large volume furnace, dimpled heating surfaces, and generous water content, the boiler can tolerate extremely low minimum flows approaching zero gallons per minute, making it the most versatile choice for any system.





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