

# PLYMOUTH STEAM II

NATURAL OR PROPANE  
GAS-FIRED BOILERS



**Dunkirk®** 

*America's Hottest Boiler Value!*

An ISO 9001-2000 Certified Company

# PLYMOUTH STEAM II

NATURAL OR PROPANE GAS-FIRED BOILERS

*Efficiency as High as 82.7%*

The Plymouth Steam II Boiler by Dunkirk offers the best combination of heating comfort, efficiency, reliability... and affordability, making it one of America's Hottest Boiler Values.

## Heating Efficiency

The high efficiency of the Plymouth steam boiler renders outstanding performance and low operating costs.

## Electronic Ignition

(Option) Pilot is lit automatically and stays lit only when needed, eliminating fuel waste.

## Integral Draft Diverter

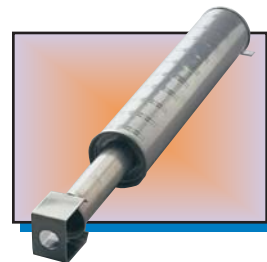
Dunkirk utilizes built-in draft diverter technology that is factory designed to protect against harmful carbon monoxide back drafts. Unlike competitor diverters erected in-field, Dunkirk eliminates any installation guesswork to ensure your family's safety.

## Effikal Vent Damper

Automatically closes when the unit turns off, preventing heated air from escaping up the chimney. Effikal provides the strongest vent damper warranty in the industry.

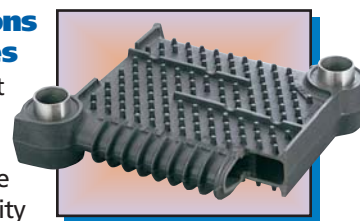
## Titanium Burners

Dunkirk's exclusive high-tech titanium composite burners resist corrosion and oxidation while withstanding more heat than conventional stainless steel or aluminized burners. They provide superior strength and longevity and are backed by a full 3-year warranty, triple the industry standard.



## Cast Iron Sections & Push Nipples

Dunkirk utilizes cast iron to construct the boiler's heat exchanger to provide heat transfer, reliability and strength. Since like materials expand and contract in the same proportion during heating and cooling, cast iron push nipples and sections produce stronger, more water-tight seals than steel push nipples or rubber gaskets.



## Easy Installation

Surprisingly compact, the Plymouth Steam II Boiler fits in tight spaces and is supplied assembled, with controls that are accessible and completely wired. Piping is also at hand for easy connection to the system.

## Easy Maintenance

Low water cutoff is electronic, therefore, results in minimal homeowner maintenance. Controls are easily accessible without having to remove the jacket, and our standard controls are readily available, making Dunkirk Boilers easy to service.



## Dunkirk Quality

Since 1928, American-made Dunkirk Boilers have been leading the industry in value and reliability with innovative designs and premium quality components. Assured performance has placed Dunkirk quality at the top in trusted reliability (99.91%\*).

Every gas boiler we manufacture is test fired prior to shipment. This boiler is certified by C.S.A. in the United States; heat exchangers by ASME; and efficiency ratings by the Hydronics Institute.



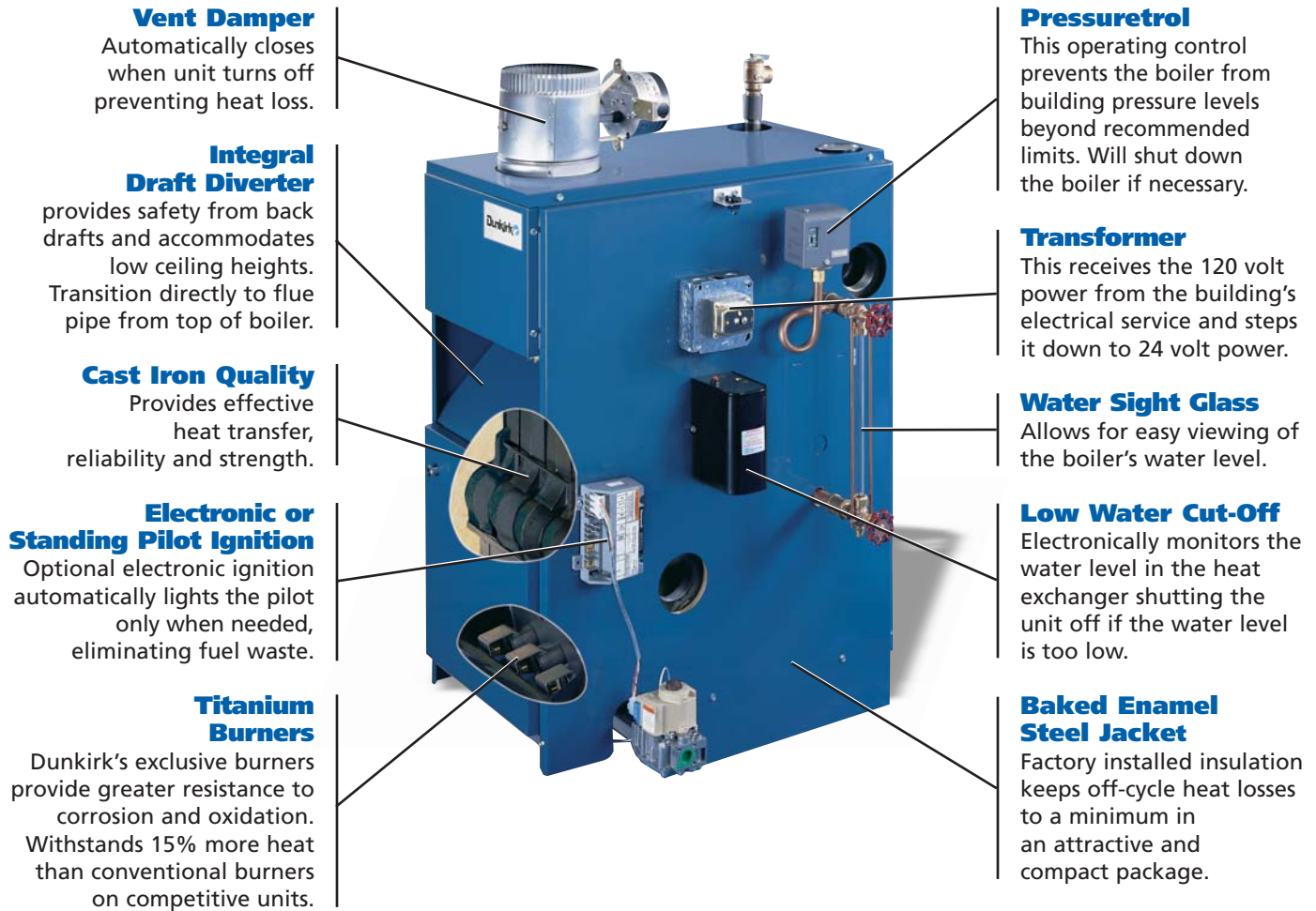
## Strongest Warranty in the Industry

Dunkirk backs all of its residential cast iron steam boilers with a full twelve year warranty covering the entire heat exchanger. Most competitor's warranties cover heat exchanger sections only and most last for 10 years.



\* Data on file - Dunkirk Boilers

## FEATURES & BENEFITS



### Vent Damper

Automatically closes when unit turns off preventing heat loss.

### Integral Draft Diverter

provides safety from back drafts and accommodates low ceiling heights. Transition directly to flue pipe from top of boiler.

### Cast Iron Quality

Provides effective heat transfer, reliability and strength.

### Electronic or Standing Pilot Ignition

Optional electronic ignition automatically lights the pilot only when needed, eliminating fuel waste.

### Titanium Burners

Dunkirk's exclusive burners provide greater resistance to corrosion and oxidation. Withstands 15% more heat than conventional burners on competitive units.

### Pressuretrol

This operating control prevents the boiler from building pressure levels beyond recommended limits. Will shut down the boiler if necessary.

### Transformer

This receives the 120 volt power from the building's electrical service and steps it down to 24 volt power.

### Water Sight Glass

Allows for easy viewing of the boiler's water level.

### Low Water Cut-Off

Electronically monitors the water level in the heat exchanger shutting the unit off if the water level is too low.

### Baked Enamel Steel Jacket

Factory installed insulation keeps off-cycle heat losses to a minimum in an attractive and compact package.

## PLYMOUTH STEAM STANDARD EQUIPMENT

### P(V) SB SERIES STANDARD EQUIPMENT

- Assembled boiler with insulated jacket
- Two 2-1/2" supply tappings and two 2-1/2" return tappings.
- Integral draft diverter – built into jacket
- 24 volt, 40VA transformer
- Pressure limit control
- Electronic probe type low water cut off
- Flame rollout safety shut-off fuse link and blocked vent safety shut-off switch with spare fuse link included
- Sight Glass Water Level Gauge
- Steam pressure gauge
- 3/4" boiler drain valve
- 15 lb. ASME pop safety valve
- Two 2-1/2 square head pipe plugs – to plug unused supply and return tappings
- Vent damper
- Complete installation instructions

- Completely installed and wired gas control systems with burners and manifold, consisting of:

- Titanium composite burners
- Automatic redundant combination gas valve, 24 volt

#### ELECTRONIC IGNITION ONLY:

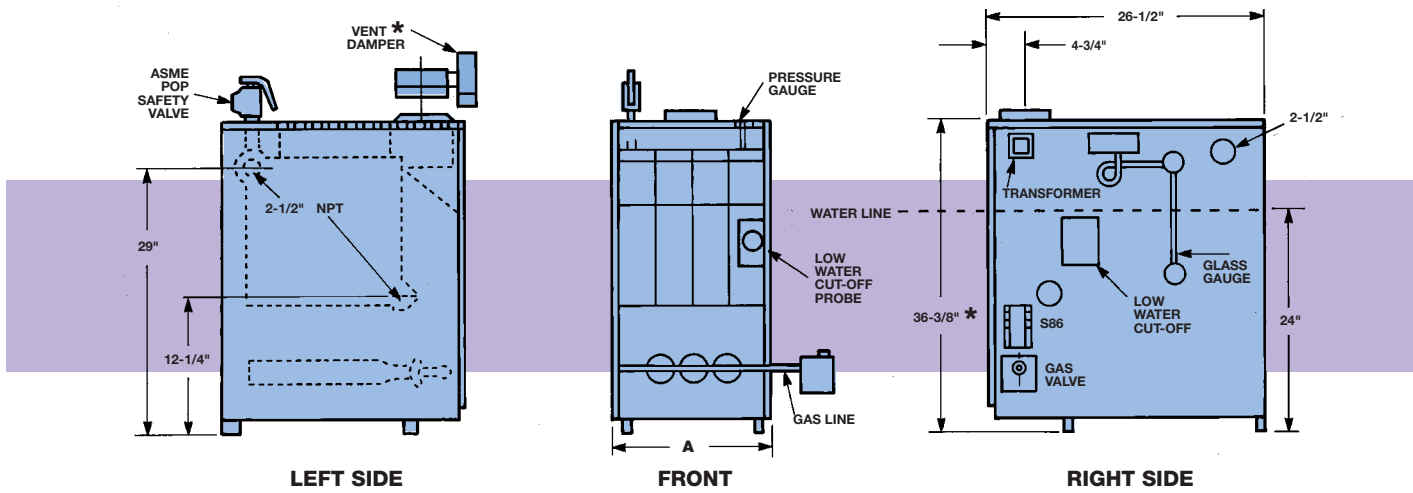
- Intermittent Pilot Control, continuous re-try, 100% shut off
- Combination pilot burner/electrode/flame sensor

#### STANDING PILOT ONLY:

- Pilot burner & thermocouple

## OPTIONAL EQUIPMENT

- Combustible floor plate – 14614031 for 3-6 section; 14614032 for 7-9 section
- Electronic Water Feeder
- Natural to propane conversion kit (when ordering kit, please provide serial number of boiler to be converted)



# Plymouth Steam II

## NATURAL OR PROPANE GAS-FIRED STEAM BOILERS RATINGS & CAPACITIES

BASIC BOILER UNIT NO.		NUMBER OF SECTIONS	† NATURAL GAS				† PROPANE GAS				DIMENSIONS		A.F.U.E.	
CONT. PILOT W/DAMPER	E/I PILOT W/DAMPER		AGA INPUT †† MBH	HEATING CAPACITY †† MBH	NET I=B=R †† MBH	NET ‡ I=B=R SQ. FT. EDR	AGA INPUT †† MBH	HEATING CAPACITY †† MBH	NET I=B=R †† MBH	NET ‡ I=B=R SQ. FT. EDR	FLUE DIAMETER	"A" WIDTH	PVSB W/DAMPER	PSB W/DAMPER
PVSB-3D	PSB-3D	3	75.0	62	47	196	70	58	44	183	5"	11 1/4"	81.1	82.7
PVSB-4D	PSB-4D	4	112.5	91	68	283	105	85	64	267	6"	14 1/2"	78.8	82.0
PVSB-5D	PSB-5D	5	150.0	122	92	383	140	114	86	358	6"	17 3/4"	79.2	82.0
PVSB-6D	PSB-6D	6	187.5	153	115	479	175	143	107	446	7"	21"	79.6	82.0
PVSB-7D	PSB-7D	7	225.0	183	137	571	210	171	128	533	7"	24 1/4"	80.1	82.0
PVSB-8D	PSB-8D	8	262.5	214	161	671	245	200	150	625	7"	27 1/2"	80.5	82.0
PVSB-9D	PSB-9D	9	299.0	245	184	767	280	229	172	717	7"	30 3/4"	80.9	82.0

†† MBH = 1,000 Btu/h

Btu/h = BRITISH THERMAL UNIT PER HOUR

† FOR ALL ALTITUDES ABOVE 2,000 FEET RATINGS SHOULD BE REDUCED AT THE RATE OF 4% FOR EACH 1,000 FEET ABOVE SEA LEVEL.

NEW YORK CITY MEA NUMBER 77-91-E

‡ RATINGS IN SQUARE FEET ARE COMPARED AT 240 BTU/h / SQUARE FOOT FOR STEAM BOILERS

HEATING CAPACITY BASED ON D.O.E (DEPARTMENT OF ENERGY) TEST PROCEDURE.

\* ADD 5-1/2" TO HEIGHT FOR VENT DAMPER

EDR= EQUIVALENT DIRECT RADIATION



Tested for 50 lbs. ASME Working Pressure

- The ratings marked Net I=B=R Ratings represent the heat available to the radiation or terminal units. The Net I=B=R Ratings shown are based on an allowance of 1.33 in accordance with the factors shown in the I=B=R Code as published by The Hydronics Institute.
- Selection of boiler size should be based upon Net I=B=R Rating being equal to or greater than the installed radiation in square feet EDR.
- Consult manufacturer before selecting a boiler for installations having unusual piping and pick-up requirements.

- These boilers may be installed on combustible flooring when placed on combustible floor plate.
- These gas-fired boilers are sectional cast iron boilers design certified by C.S.A. in the U.S. for use with natural gas and propane gas. They are constructed and hydrostatically tested for a maximum working pressure of 50 psi in accordance with A.S.M.E. (American Society of Mechanical Engineers) Boiler And Pressure Vessel Code Section IV standards for cast iron heating boilers. They are capacity rated in accordance with the code of The Hydronics Institute.

**DUNKIRK QUALITY HEATING. AMERICA'S HOTTEST BOILER VALUE!** Dunkirk hydronic boilers lead the industry in value, with premium quality design and componentry. In fact, some of the most respected "brand name" boilers are produced by Dunkirk. These major manufacturers selected Dunkirk hydronic boilers for the same basic reasons you should: superb quality and unmatched value. Just compare our quality to cost ratio, and your boiler choice will become perfectly clear.

Specifications and dimensions are subject to change without notice. Made in America by American Craftsmen.



Since 1928. America's Hottest Boiler Value.

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An ECR International Brand

An ISO 9001-2000 Certified Company



**USA Homeowner Assistance: 866-847-6656**