Fuel-Fired Vertical Tubeless Boilers

Classic, Edge, Tribute and VMP Models

From 4 to 150 BHP (138 - 5,021 lbs/hr)

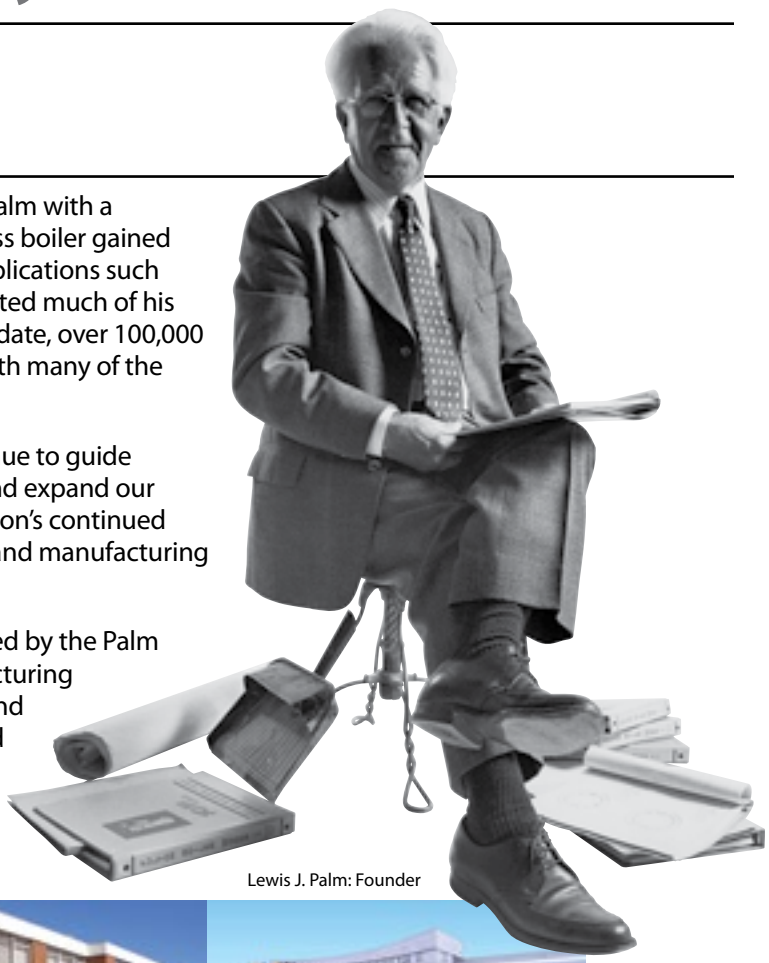
Fulton: An industry leader since 1949.

OUR HISTORY

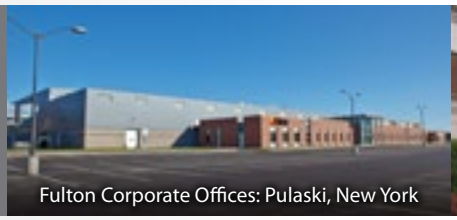
Fulton Boiler Works, Inc. was founded in 1949 by Lewis J. Palm with a revolutionary design for vertical steam boilers. The tubeless boiler gained rapid acceptance as the premier small steam boiler for applications such as baking, sterilizing, and dry-cleaning. Mr. Palm also devoted much of his time developing both domestic and overseas markets. To date, over 100,000 vertical tubeless boilers have been shipped worldwide, with many of the original boilers still in operation.

Six decades after Fulton's start, our founder's values continue to guide our business approach. We constantly strive to improve and expand our capabilities, both in production and customer service. Fulton's continued growth has led to the development of new product lines and manufacturing facilities to meet the needs of a growing customer base.

The Fulton group of companies are still owned and directed by the Palm family. We have developed into a global group of manufacturing entities backed by over 60 years of research, innovation, and experience. Fulton is building on a tradition of success and dedicated to our core purpose of *improving life through heat transfer solutions*.



Lewis J. Palm: Founder



Fulton Corporate Offices: Pulaski, New York

Fulton UK: Bristol, England

Fulton China: Hangzhou, China

GLOBAL CAPABILITIES

Collectively, the Fulton Companies employ more than 650 people in ten manufacturing facilities on three continents. Both design and manufacturing resources are shared and coordinated around the world: regardless of where your Fulton product comes from, you can count on it being produced at a quality that is second to none.

We utilize the best craftsmen worldwide so that we can continue to provide our customers with products and solutions that meet their needs. Our experienced staff is at your service to offer design and engineering assistance, discuss ideas and answer questions about your specific application needs. Industries throughout the world depend on Fulton as the "Single Source" for all their boiler needs, saving them valuable time and money.

Gas Train Assembly

Electrical Panel Assembly

Scroll Assembly

Pressure Vessel Assembly

Insulation Packing

Weld

RUGGED, ROBUST AND RELIABLE

Fulton vertical tubeless boilers are hand-built by skilled craftsmen. The impressive workmanship that goes into constructing the pressure vessel is performed by Fulton's ASME certified welders, who average over 20 years of experience.


ding Pressure Vessel Heads


Blast-tube Assembly


Final Wiring


Painting


Final Crating and Shipping

THE VMP
VERTICAL MULTI-PORT BOILER

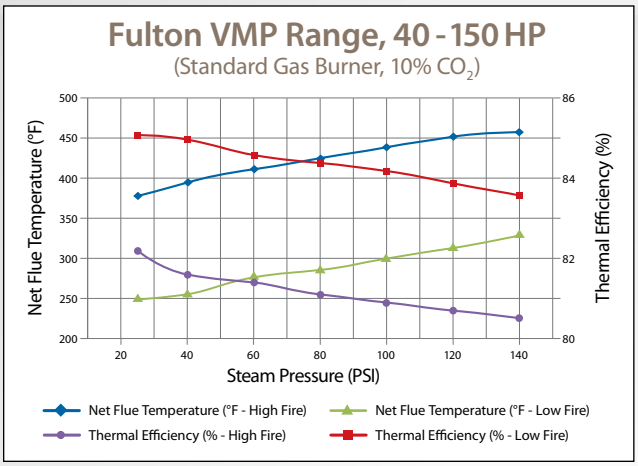
FEATURES

- Vertical 2-pass design with heavy-walled Schedule 80 flue pipes (No tubes to replace)
- Water-backed, insulated blanket surrounding the boiler results in lower radiant losses
- Small footprint - compact design
- Built/Certified to ASME, CSD-1 and other applicable codes, UL Packaged Boiler
- Low emissions burner available
- Largest vertical tubeless steam boiler available to the market

DURABLE AND RELIABLE CONSTRUCTION

Within the Fulton VMP (Vertical Multi-Port) Boiler, a series of heavy-walled large-diameter Schedule 80 flue pipes are welded to the top and bottom heads in the pressure vessel, and these pipes are surrounded by water. Within these pipes are "ribboned" turbulators that maximize overall heat transfer. The water-backed design speeds up boiler start up time and creates even heating throughout. These, along with the many other design features of the VMP, result in fuel to steam efficiencies of up to 84%.

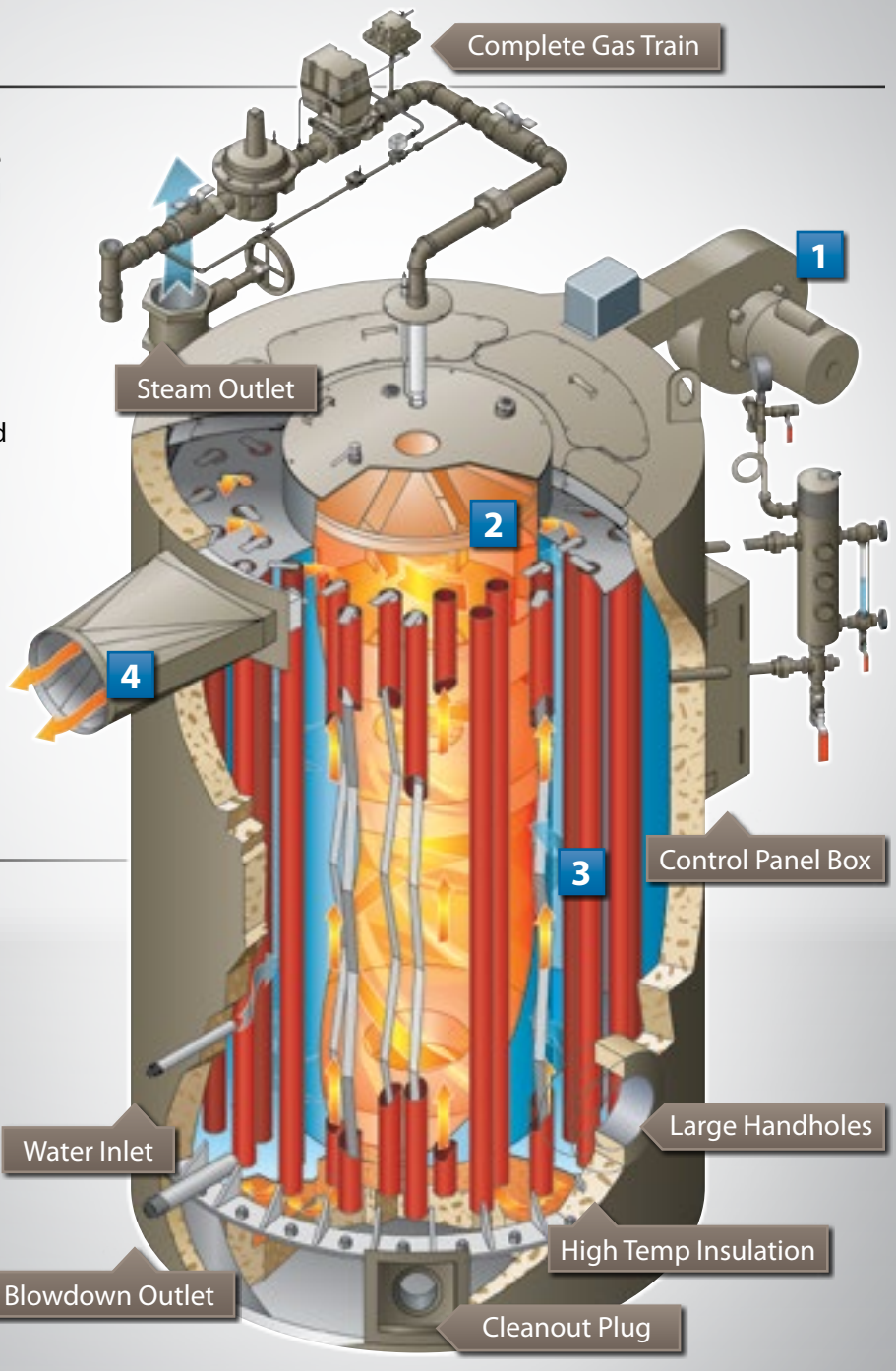
VMP BOILER	INPUT FT3/HR	STEAM OUTPUT	WATER CONTENT	OPERATING WEIGHT
40	1,595	1,380 lbs/hr	172 gal	7,200 lbs
49.5	1,972	1,708 lbs/hr	274 gal	8,850 lbs
50	1,992	1,725 lbs/hr	242 gal	8,600 lbs
60	2,392	2,070 lbs/hr	270 gal	9,650 lbs
80	3,188	2,760 lbs/hr	383 gal	11,200 lbs
100	3,985	3,450 lbs/hr	518 gal	13,850 lbs
130	5,181	4,485 lbs/hr	810 gal	19,150 lbs
150	5,978	5,175 lbs/hr	810 gal	19,150 lbs



A LOOK INSIDE THE VMP

THE COMBUSTION PROCESS

1 Air is drawn into the top-mounted power burner, where it is sent through the swirl plate and mixed with fuel for optimal combustion. 2 The ignition assembly ignites the air/fuel mixture and sends a spinning cyclonic flame down the length of the furnace chamber, forming the first pass. 3 The flue gases are turned at the base of the furnace then return through the Schedule 80 pipes, forming the second pass. The turbulators within the pipes distribute the flow of the flue gases to transmit the remaining heat to maximize heat transfer. 4 The flue gases are then collected at the upper portion of the boiler and are expelled through the flue outlet.



PIPE vs. TUBE

The Pipe-type boiler is constructed of Schedule 80, heavy wall pipes, tube replacement is a thing of the past. This simple design is proven by decades of experience, and is backed by our unmatched warranty.

ANCILLARY EQUIPMENT

A steam boiler is just one part of a well-designed steam system. Proper delivery of feedwater and collection of condensate are essential to the operation of a steam system. Fulton is able to manufacture standard or custom vessels to perform these tasks to ASME code or non-code, depending on the requirements in your area or system. Our auxiliary equipment is used to control the quality, pressure, storage capacity and enthalpy (heat content or temperature) of steam. The quality of the water used in a steam boiler will affect its life. Water treatment equipment will help provide quality feedwater so that corrosion and deposition in the boiler will be minimized. Fulton engineers can match equipment to just about any application you may encounter today.

ENGINEERED SYSTEMS

As demand for creative solutions to complex heat transfer applications grows, Fulton has excelled in the design and fabrication of customized skid systems. With more than three decades of experience in designing and building skid systems, Fulton has become a single source manufacturer for custom pre-piped heat transfer equipment and accessories.

- Turnkey
- Plug and Play
- Single point manufacturing
- Flexible designs - 1.5HP to 900 BHP
- Over 2,000 skids installed around the globe

Fulton® The heat transfer innovators.

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