



WILLIAMS & DAVIS BOILERS

Established 1921

Series 3000W

3-Pass Water-Back Scotch Marine Boiler



**SIZES 15HP THROUGH 1500HP
GAS, OIL OR COMBINATION BURNER
FIRETUBE HOT WATER & PRESSURE STEAM BOILERS**



3000W Standard Features



(Shown w/ Powerflame Nova Plus Burner)

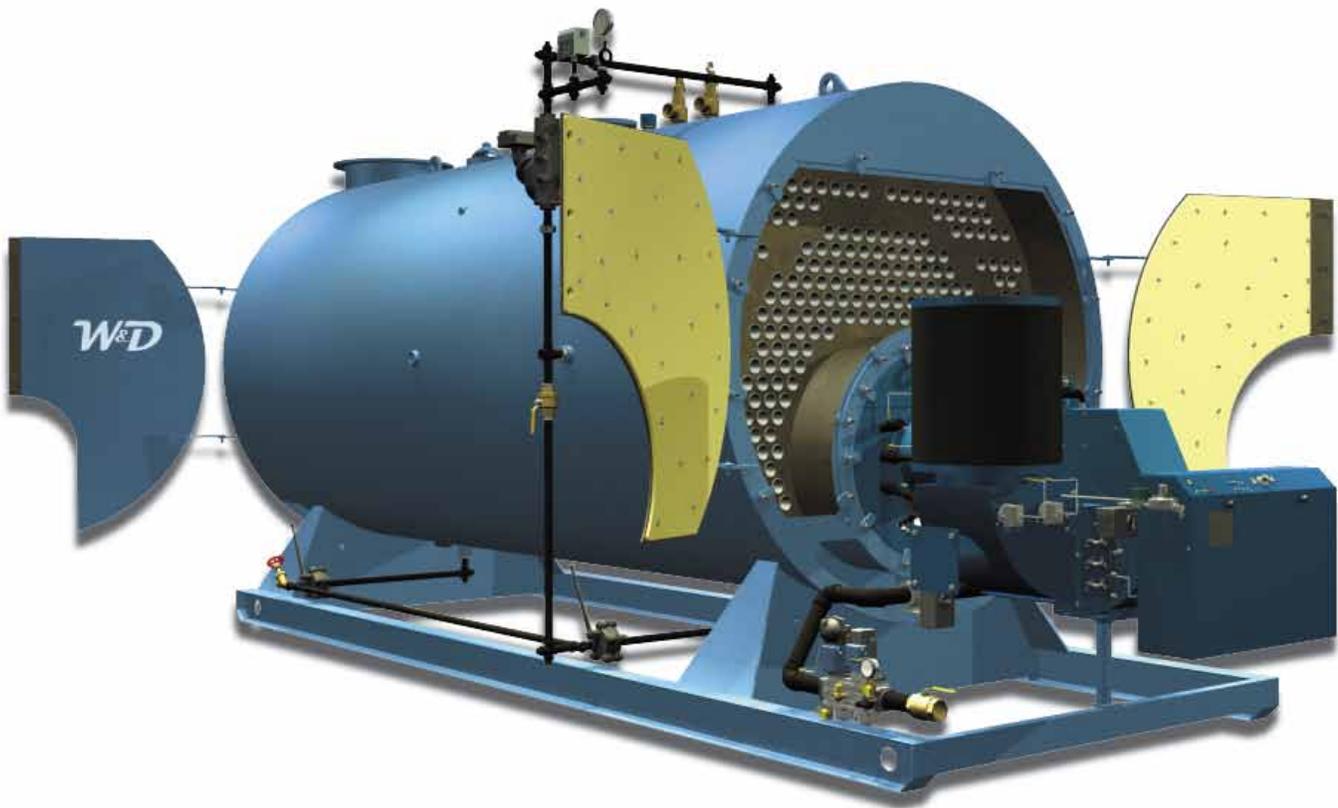
- Engineered and Built in Accordance With the Latest ASME Boiler Codes.
- McDonnell Miller Combination Pump Controller and Primary Low Water Cutoff.
- Completely Wired and Piped for Service Connections.
- Fully Modulating Burner Operation.
- Premium 2" Thick High-Density Insulation.
- "Off-the-Shelf" Industry Standard Parts Used Where Possible for Serviceability.
- Probe Type Auxiliary Low Water Cutoff.
- Epoxy Painted 20ga. Galvanized Steel Jacket.
- Solid State Honeywell Combination Pressure Control, Automatic Operating Control, and High Limit Manual Reset Control.
- Exceeds Industry Standards for Heating Surface Area for Exceptional Efficiency.
- Pressure Tested to 1.5X Operating Pressure. (225psi for 150psi Vessels)
- Flanged Exhaust Stack – Includes Additional Flange for Installation.
- Furnace Diameters and Combustion Area Volume Optimized For Lox NOx Operation.

Standard Available Options

- Customizable Controls and Connections
- Additional Hand Holes and Manway Access
- Davited Front and Rear Doors.
- Burner Make and Model
- O2 Trim System
- "Linkage-less" Modulation

The Williams & Davis Series 3000W is a traditional 3-pass, water-back horizontal firetube boiler that offers high efficiency, flexibility, reliability, safety and ease of operation. Series 3000W provides high flue gas velocities and low stack temperatures to maximize its performance. All units are factory fire tested and shipped as an integrated package, ready for quick connection to utilities.

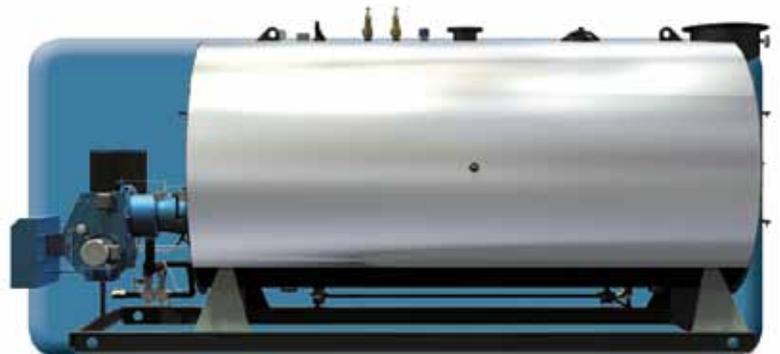
With quality second-to-none, the 3000W is another safe, reliable, and easily maintainable boiler in the Williams & Davis family of products. As such, we demonstrate our confidence in our boilers by offering the industry's best pressure vessel warranty of 10 years (25 year available) with an approved water testing and treatment program.



(Shown w/ Powerflame Nova Plus Burner)

Stainless Steel Jacket Available >>

- *3Pass Water-back*
- *Low Radiant Heat Losses*
- *High Gas Velocities*
- *High Efficiency*
- *Space Saving Design*





Flanged Exhaust Stack

All 3000W boilers are equipped with a vertical flanged exhaust stack and are supplied with a matching installation flange. Flanges ease vent positioning during installation and provide more reliable exhaust seals during operation.

Burner

Burners are available to operate with natural gas, a variety of fuel oils, or a combination of gas and oil. NOx output levels may be specified as low as sub 7 PPM when burning natural gas and 70 PPM for burning #2 fuel oil when the fuel-bound nitrogen is at 0.02% or less. Control cabinet is typically mounted to the front of the burner. Side mounting or remote boiler room mounting is available upon request.

Safety Relief Valves

Wide hex on valve nozzle provides wrenching service clearance for easy installation and maintenance. Dual control rings offer easy adjustability for precise opening with minimum pre-open or simmer and exact blow-down control.

Tubes & Turbulators

All fire tubes are industry standard 2.5" outside diameter and 0.109" typ. wall thickness. The fire tubes are inserted with uniquely-shaped corrosion resistant alloy steel Turbulators designed to break up laminar flow and maximize heat transfer.

Pressure Controller

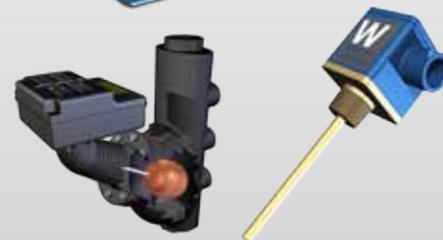
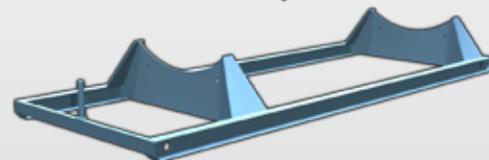
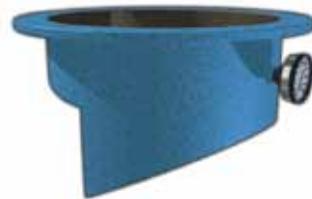
Standard Honeywell P7810 Pressuretrol provides solid state automatic operating control, automatic limit protection, manual reset limit protection, and 4-20ma modulating firing rate control for pressure systems up to 300 psi. Other pressure and temperature controllers are available upon request.

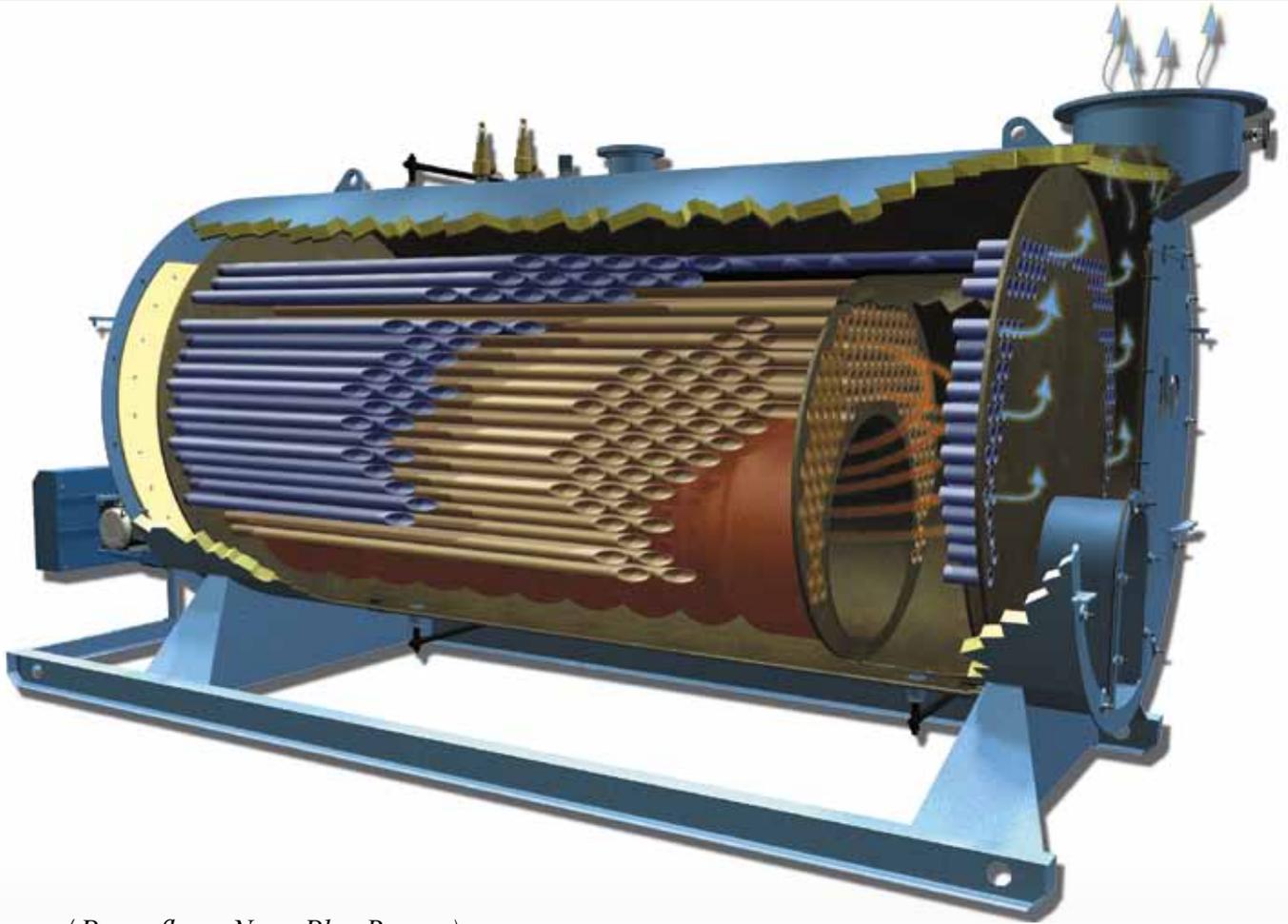
Structural Skid

The 3000W's rugged structural steel skid provides stability during transport and installation. Wide beam flanges distribute weight evenly across the boiler room floor during flooded operation.

Low Water Controls

McDonnell Miller 157S float level system provides reliable feedwater pump control and primary low-level shut down. Probe type sensor and Warrick relay are used for reliable secondary shutdown and to provide code-required manual reset.





(Shown w/ Powerflame Nova Plus Burner)



3000W Heating Passes

First Pass - The burner fires at the entrance of the furnace, transferring up to 70% of the available heat energy into the water.

Second Pass - Hot flue gas travels from the water-backed turnaround chamber through the central tubes to the boilers heavily-insulated front turnaround chamber.

Third Pass - The flue gas is directed outward into the outermost tubes by the front turnaround chamber. The flue gas then travels the entire length of the pressure-vessel in its third pass, exiting the system through the rear-mounted exhaust stack.

Wide Range of Applications

Asphalt Cement



Bottling Companies



Clothing



Feed Mills



Hospitals



Hotels



Laundry



Lumber Mill



Meat Processing



Nat. Gas Refineries



Oil Drilling



Pharmaceutical



Polystyrene Foam



Power Generation



Research



Schools



Additional Product Offering



Fully Condensing Hydronic Boilers



Heat Recovery Systems



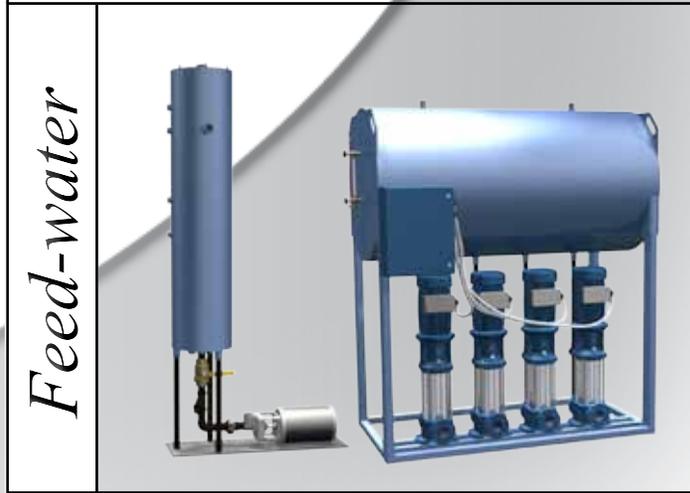
Electric Boilers



Vertical Tube and Tubeless Boilers



Blow-down Separators



Vertical or Horizontal Feed-water Systems



Your Authorized Williams & Davis Representative

P.O. Box 539
2044 S. I-45
Hutchins, Texas 75141

(800) 8-BOILER
(800) 826-4531

(972) 225-2356
(972) 225-5739 FAX

www.wdboiler.com
info@wdboiler.com