

SUPERIOR **BOILER WORKS, INC.**

*"Demand **S**uperior Performance"*



OSAGE

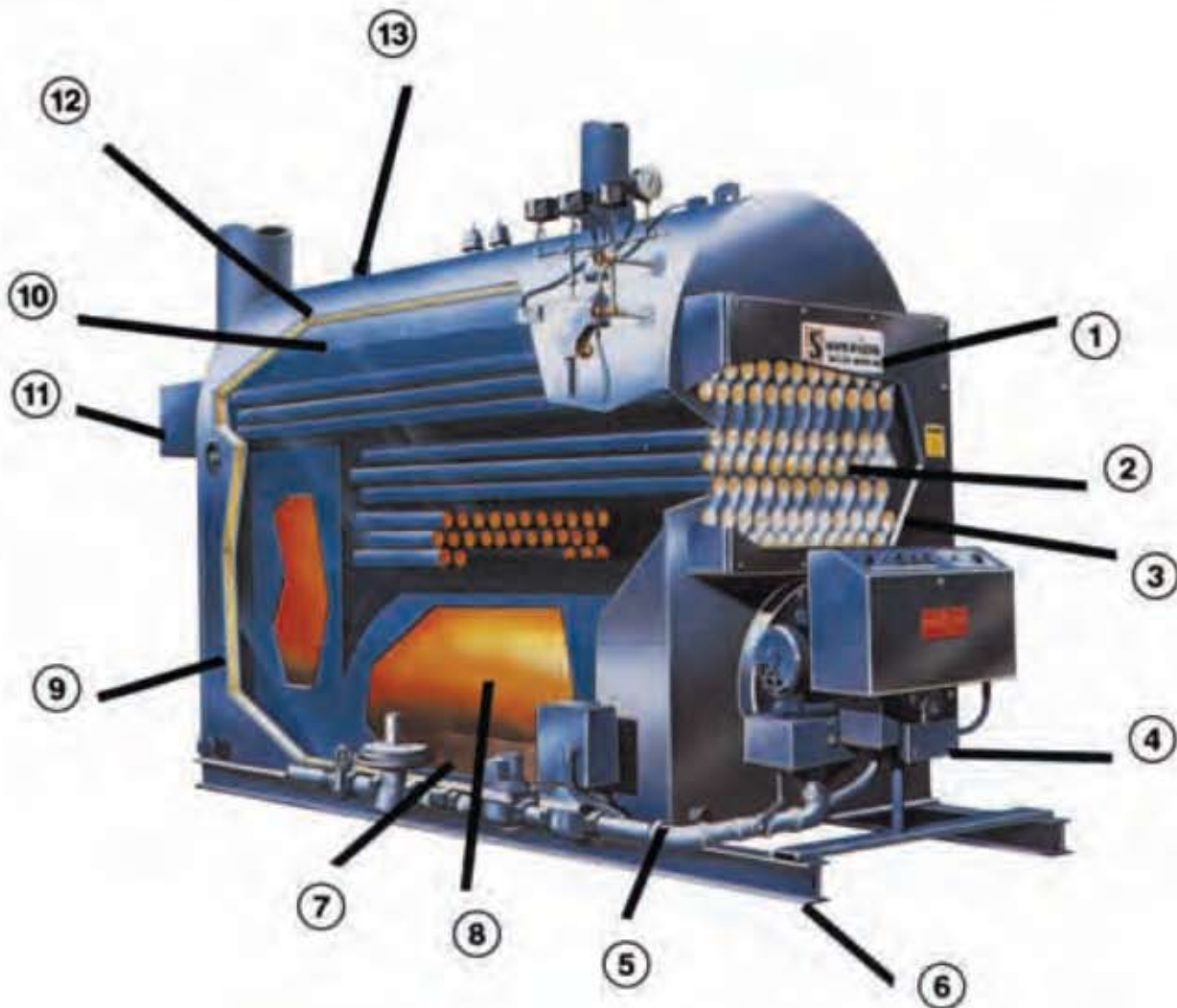
3-PASS FIREBOX PACKAGED BOILERS

LOW PRESSURE STEAM

HOT WATER

**GAS / OIL / OR COMBINATION GAS & OIL
AND ALTERNATIVE FUELS**

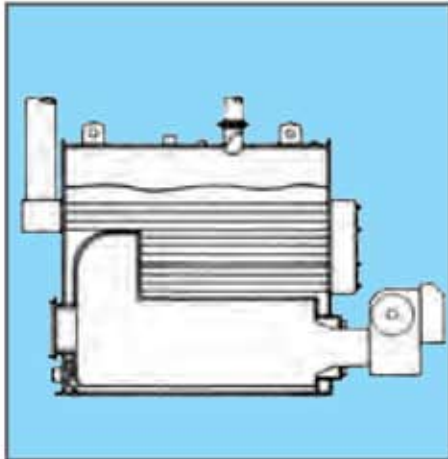
OSAGE - 3-PASS FIREBOX PACKAGED BOILER -- BURNER UNITS



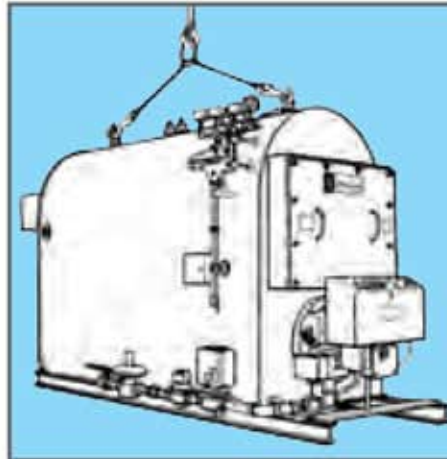
OSAGE - QUALITY CONSTRUCTION FEATURES

- ① **Single source responsibility:**
Osage packaged boiler/burner units are covered by Superior's warranty, effective for 18 months from shipment or one year from date of start-up. See warranty for complete details.
- ② Tubes Roller Expanded - All boiler tubes are secured by roller expanding and flaring for tight seal.
- ③ Front smokebox and access cover are lined with modern spaceage ceramic fiber blanket for light weight. Cover provides access to the tubes without disconnecting any fuel or electrical connections or disturbing the firing equipment.
- ④ Forced draft burner design fir efficient operation and ease of maintenance. Standard burners are specifically matched with the firebox volume and size to provide complete / efficient combustion. Forced draft firing requires only a stub stack to the outside.
- ⑤ All steel/welded construction to ASME Code Section IV for low pressure heating boilers.
- ⑥ Structural steel base provides even distribution of weight and allows for ventilation under the boiler.
- ⑦ Combustion chamber floor is poured with high temperature castable refractory securely anchored to the base plate.
- ⑧ Large firebox volume insures complete combustion with clean firing, smooth starts and quiet operation.
- ⑨ Two-inch fiber insulation with 8-lb. density provides minimal jacket heat loss and jacket rigidity.
- ⑩ Large steam disengaging area and storage volume insures steady water level with a dry steam supply.
- ⑪ Rear smokebox with vertical vent connection and tube access cover.
- ⑫ Factory installed 22 gauge phosphate coated steel jacket. Finish coated with hard enamel paint.
- ⑬ Heavy steel lifting eyes for ease of handling.

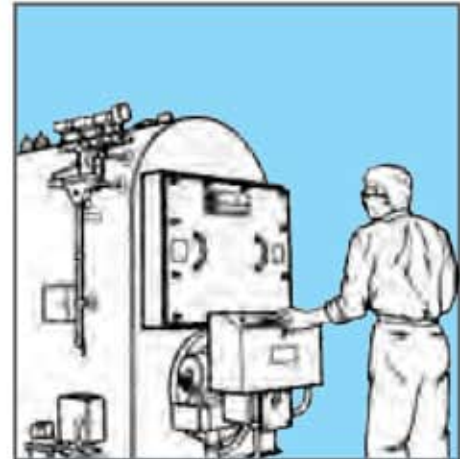
OSAGE - QUALITY IN ENGINEERING



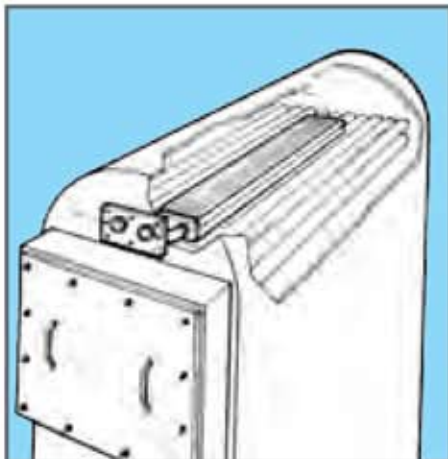
Three pass design assures maximum heat transfer with low stack temperatures resulting in high operating efficiencies and low operating costs.



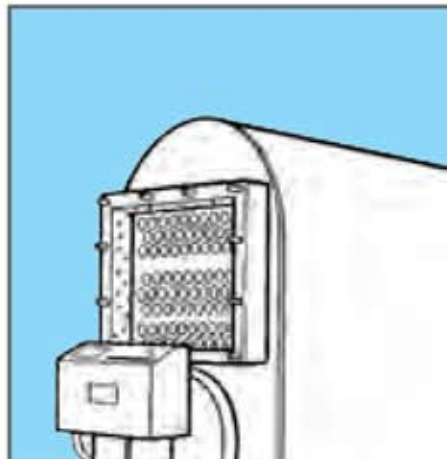
Completely assembled package has refractory lined base, mineral fiber insulation with enamel finished jacket, factory assembled controls, burners, and fuel trains.



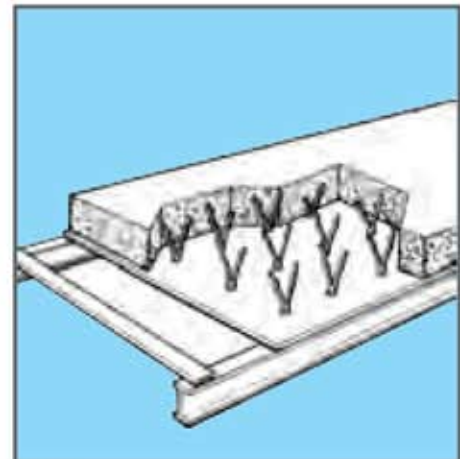
Through factory firetesting, the completed boiler/burner package is subjected to a rigorous factory test to check each electrical component for proper operation and to adjust the fuel/air ratio for smooth operation.



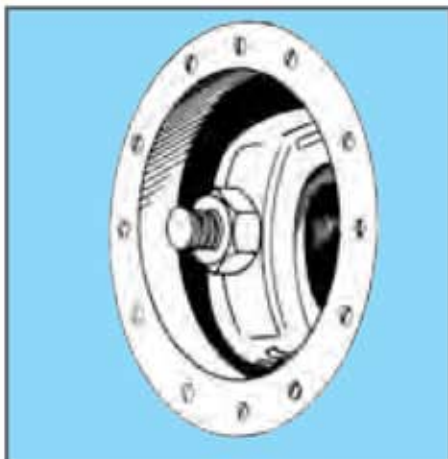
Optional domestic hot water heating coils. Below water level coils are available for both low pressure steam and hot water boiler applications.



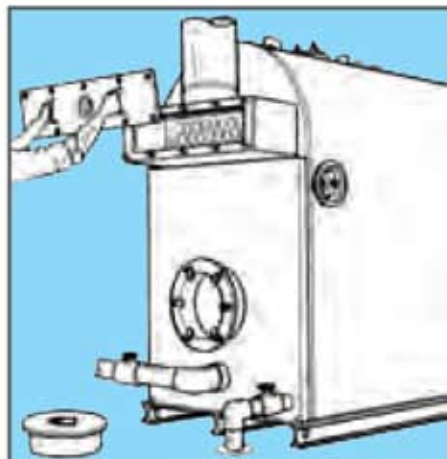
Front smokebox access cover allows for fireside access without burner removal, or disconnecting electrical or fuel lines. Access cover and smokebox are lined with ceramic fiber to reduce heat loss and weight.



Castable refractory for the firebox base poured in place and securely anchored to the structural steel base provides long life and reduced heat loss.



Waterside access is provided by 3" x 4" handholes located (1) at the line of the crown sheet, (1) at the top of the furnace, and (1) 3" x 4" handhole or 12" x 16" manway on the top centerline.



The rear access cover allows for inspection and cleaning of the rear tubesheet and tubes without the removal of the stack. On boilers with 441 sq. ft. of heating surface and larger, a 17" rear access plug allows for firebox and refractory inspection.



Osage packaged firebox boilers are manufactured to the requirements of ASME code section IV for low pressure heating boilers. Each unit receives inspection by a registered national board inspector. IRI/FM and other code requirements are available.



Superior Boiler Works, Inc. has been manufacturing Scotch Marine Boilers in Hutchinson, Kansas since 1930. Over twenty thousand of our boilers have been shipped throughout the United States and to many foreign countries. Their superior performance is evidenced by the highest recommendation that can be given a product - the many customers who have purchased their second, third, tenth and even twentieth units. Superior Boiler Works, Inc., in conjunction with our network of independent sales and service organizations, forms an unbeatable team geared to meet your needs.



Superior Boiler Works, Inc. has been manufacturing a line of quality firetube boilers in Hutchinson, Kansas since 1930 with over 20,000 boilers of Superior manufacture located throughout the United States and many foreign countries. Superior Boiler Works entered the waste heat recovery market in 1969 with the design and manufacture of a 3,000 square foot waste heat recovery boiler with supplemental firing. Since that time Superior has developed single, two and three pass units, with supplemental firing.



"Demand Superior Performance"

CORPORATE OFFICE • 3524 E. FOURTH ST. • HUTCHINSON, KANSAS 67501

MAILING ADDRESS • P.O. BOX 1527 • HUTCHINSON, KS 67504-1527

TELEPHONE: 620 662-6693 • FAX: 620 662-7586 • www.superiorboiler.com