

Silencing + Quality Steam Generation

APPLICATIONS:

- Hospitals
- Schools
- Office buildings
- Shopping centers
- Offshore platforms
- Oil & Gas production facilities
- Industrial plants
- Marine

CODE COMPLIANCE

All Maxim heat recovery equipment is designed and fabricated in compliance with Section VIII, Division I, ASME Code.

Size Range: Exhaust connections from 3" through 30" in diameter

Construction: The BVS is a unique annular jacket (tubeless) type heat exchanger intended for vertical installation. This unique construction eliminates problems with tube sheet joints and differential expansion among tubes associated with conventional firetube construction. Large volume chambers enclosed by the annular water jacket function as a highly effective silencer for the reduction of engine exhaust noise. The standard BVS is designed for a maximum working pressure of 20 psig, and is available at higher pressure ratings.

The Maxim model BVS heat recovery silencer combines highly effective silencing of exhaust noise with efficient recovery of exhaust heat to produce dry saturated steam.

Features

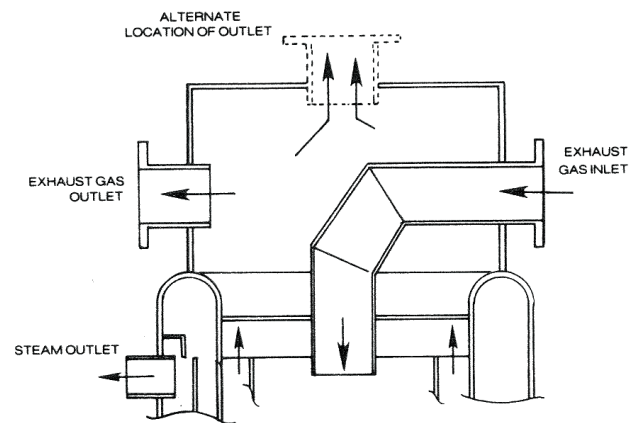
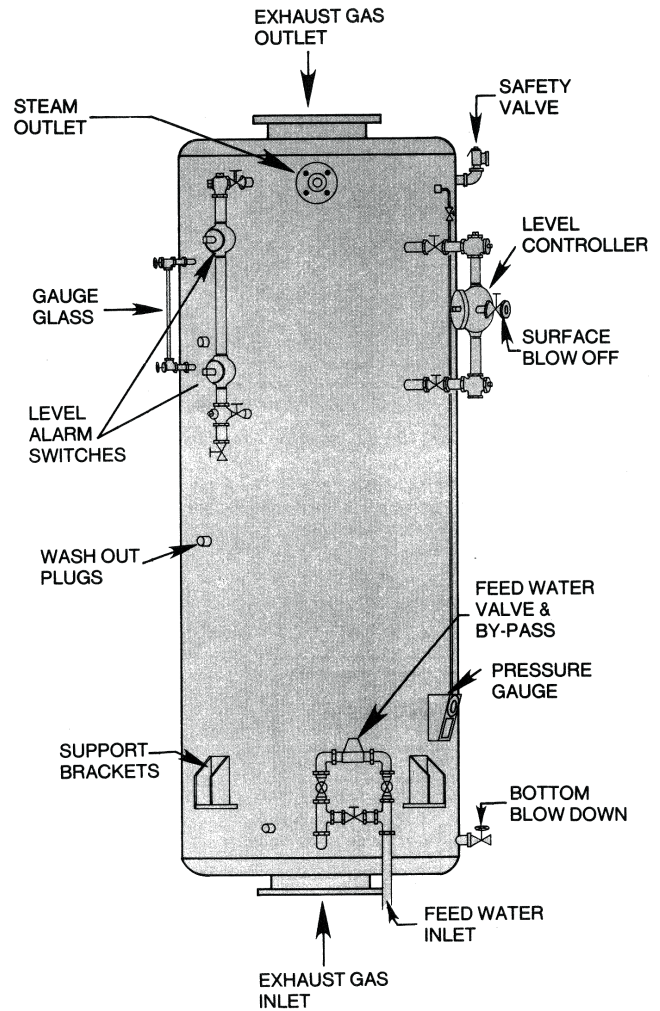
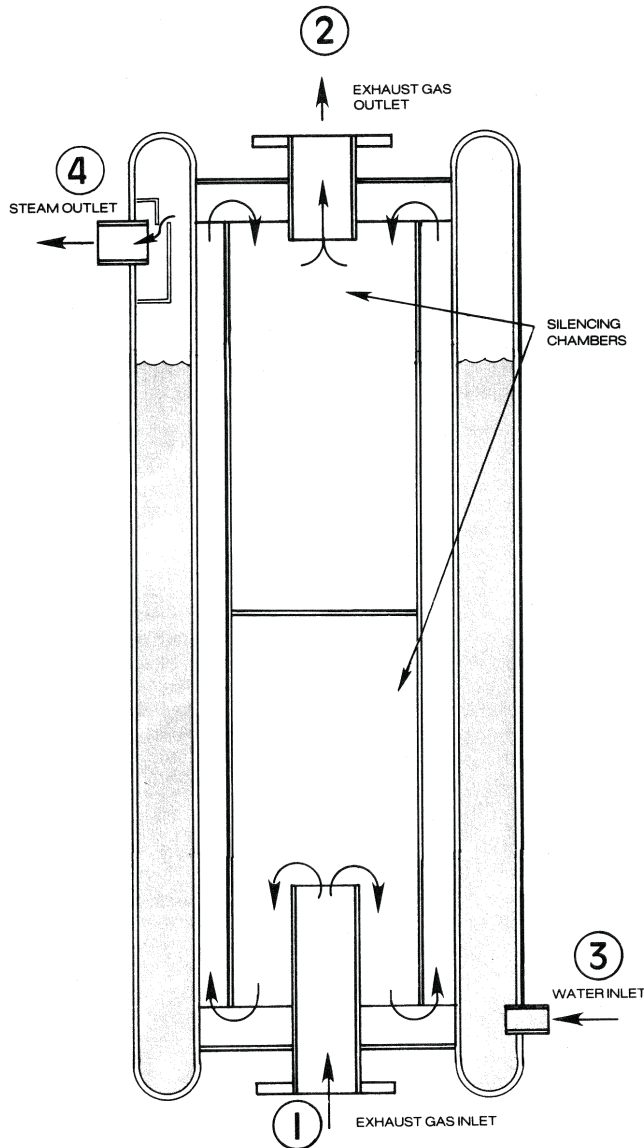
- Longitudinal fins are continuously welded to the inner wall of the water jacket to increase the heat transfer efficiency of the unit and permit design flexibility as to recovery rate and material selection
- An integral steam separator provides high quality (dry) saturated steam without the need for external vessels or auxiliary separation devices
- Removable cover plates on each end of the BVS allow access to the gas flow passages and heat transfer surfaces for inspection and cleaning
- The BVS can be supplied with the standard bottom inlet/top outlet connection or a variety of optional inlet and outlet configurations
- Preselected controls and factory applied insulation are offered as options
- Unique design and rugged construction make the BVS the choice for applications requiring maximum equipment life
- Provision for thermal expansion is integral in the design and allows operation at any water level without incurring excessive thermal stresses
- The BVS can be run dry with exhaust gas temperature up to 1000 °F
- Increased corrosion resistance may be achieved economically with low alloy weathering steel used in non pressurized parts exposed to the exhaust gases (this feature is especially beneficial in sewage treatment plant applications)

Flow Diagram

Exhaust gas enters the heat recovery silencer through connection (1), makes two reversals, then flows through a longitudinally finned annular passageway where heat is transferred to the water in the surrounding jacket. The gas exits from exhaust connection (2).

Water enters the annular jacket through connection (3), absorbs heat from the exhaust gas and is converted to steam. Entrained water is removed by an integral separator and steam exits from connection (4).

OPERATION



OPTIONAL EXHAUST INLET AND OUTLET CONFIGURATION