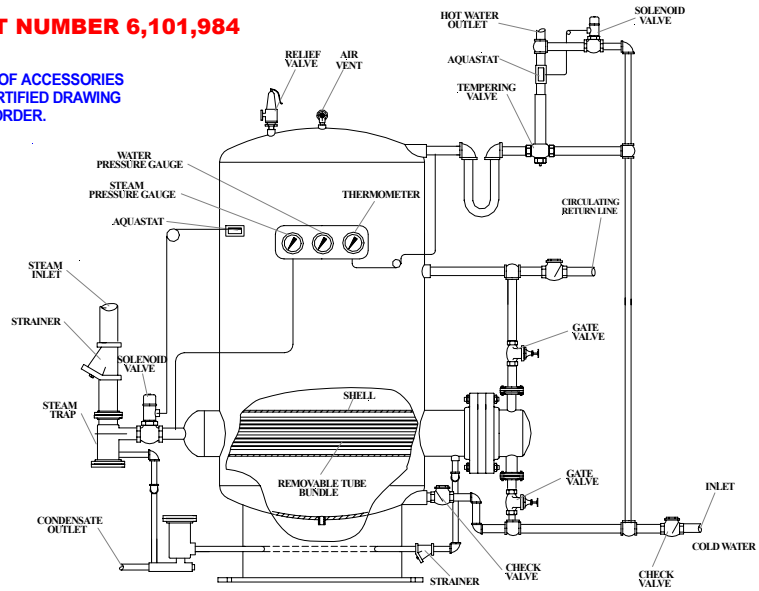


Hot Water Generator Series "ASH-VF"

U.S. PATENT NUMBER 6,101,984

ACTUAL LOCATION OF ACCESSORIES IS PROVIDED BY CERTIFIED DRAWING UPON RECEIPT OF ORDER.



| | STORAGE TANK | HEAT EXCHANGER |
|--------------------|----------------------|----------------------|
| MATERIALS | 316L STAINLESS STEEL | 316L STAINLESS STEEL |
| DESIGN PRESSURE | 125 psig | 150 psig |
| DESIGN TEMPERATURE | 400 F | 400 F |

The Alstrom Compact Water Heater combines the advantages of both instantaneous and storage heaters. The package is constructed from a vertical storage tank and a built-in shell & tube heat exchanger. Steam, hot water or heat transfer fluid passes through the shell of the heat exchanger. City water is heated by forced convection in the tubes of the heat exchanger and enters the storage tank. When the

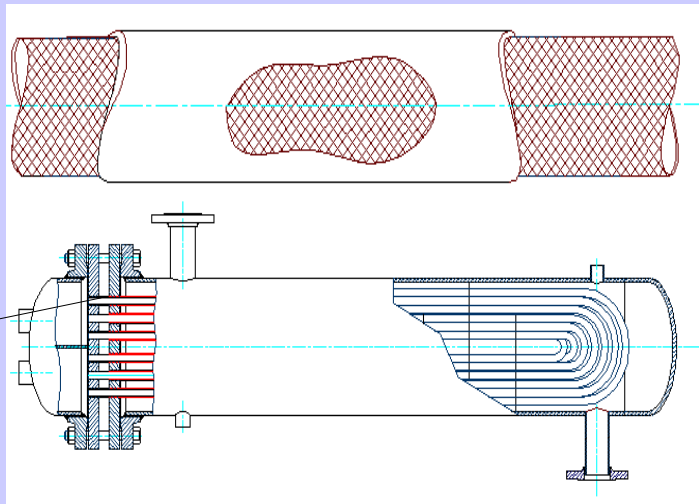
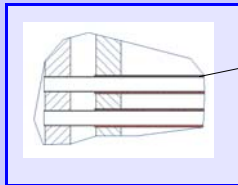
consumption of hot water stops, the heat losses are compensated by natural convection heat transfer between the external surface of the heat exchanger's shell and stored water. In addition, the heated water is circulating between the heat exchanger and the storage tank by natural convection, **eliminating the need for recirculating pump**. This system's design permits **fast cleaning, repair and replacement of the tube bundle without draining the water from the tank**. The storage tank is already full of **heated water that is available to the user during the shutdown**. Unique features of this system **reduce it's price and maintenance expenses while making it more reliable**. Model "ASH-VF" stores water at 200 deg. F (other storage temperatures are optional). A small tank with a large heat transfer section is used as a semi-instantaneous heater. A large tank with a small heat transfer section will serve as a storage heater.

Optional Double Wall Tube Bundle prevents cross-contamination of water used in potable Hot Water Storage systems

Vented double wall construction for use on potable water systems. Unique diamond shape pattern provides multiple vented leak ports for positive indication of potential contamination. Double wall tubes are available on "ASH" Series Hot Water Generator. Double wall tube options include Copper, 90/10 Cu-Ni, and 316 SS materials.

Double Wall heat exchangers are designed to give a positive indication of potential cross-contamination of potable water and other liquids in an economical and thermally efficient way.

Heat transfer section of this double wall heat exchanger is available for "ASH" series.



VERTICAL STORAGE TANK DIMENSIONS IN INCHES

| TANK SIZE | STORAGE CAPACITY IN GALLONS | TANK DIAMETER | TANK OVERALL HEIGHT | SIZE OF WATER INLET & OUTLET | TANK SIZE | STORAGE CAPACITY IN GALLONS | TANK DIAMETER | TANK OVERALL HEIGHT | SIZE OF WATER INLET & OUTLET | TANK SIZE | STORAGE CAPACITY IN GALLONS | TANK DIAMETER | TANK OVERALL HEIGHT | SIZE OF WATER INLET & OUTLET |
|-----------|-----------------------------|---------------|---------------------|------------------------------|-----------|-----------------------------|---------------|---------------------|------------------------------|-----------|-----------------------------|---------------|---------------------|------------------------------|
| 1ASH-VF | 170 | 30 | 84 | 1-1/2 | 5ASH-VF | 392 | 36 | 120 | 2 | 9ASH-VF | 865 | 48 | 144 | 3 |
| 2ASH-VF | 240 | 30 | 108 | 1-1/2 | 6ASH-VF | 460 | 42 | 108 | 2 | 10ASH-VF | 1300 | 60 | 144 | 4 |
| 3ASH-VF | 284 | 36 | 96 | 1-1/2 | 7ASH-VF | 530 | 42 | 120 | 2-1/2 | 11ASH-VF | 1980 | 72 | 144 | 4 |
| 4ASH-VF | 338 | 36 | 108 | 2 | 8ASH-VF | 680 | 48 | 120 | 2-1/2 | CUSTOM | | | | |