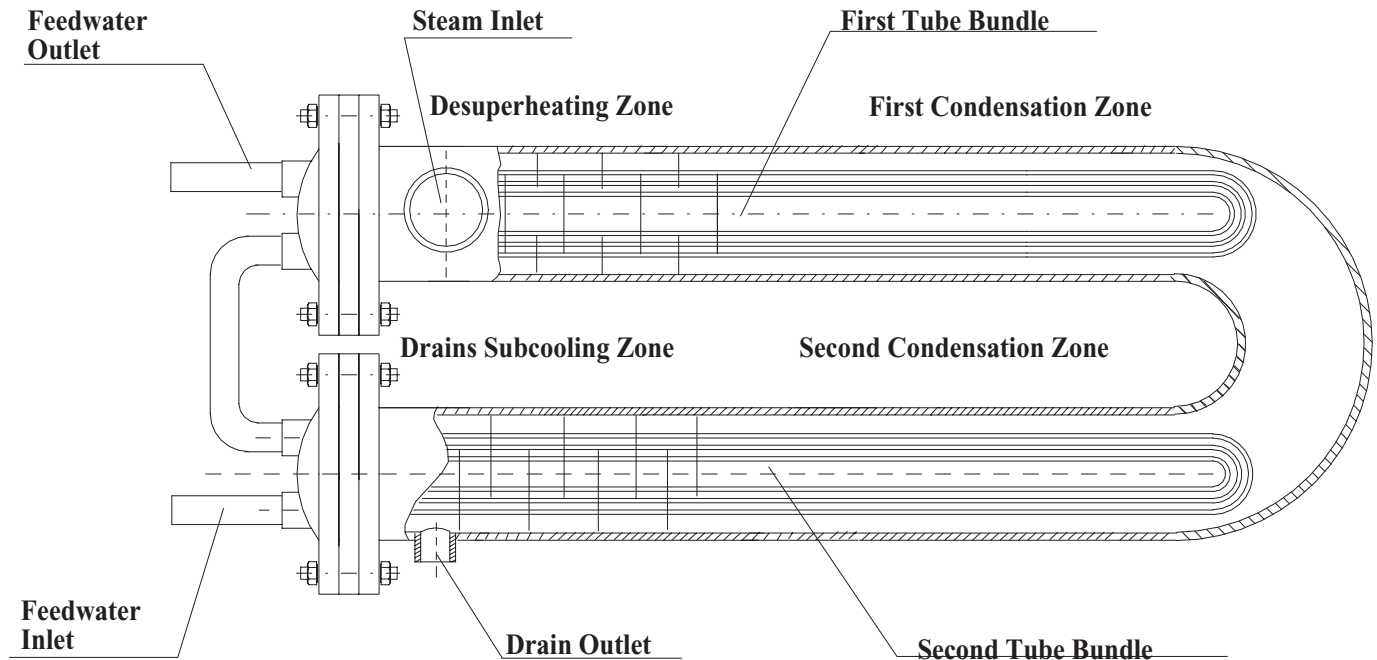


Alstrom Feedwater Heaters Series "AFH-DTB"

Us Patent Worldwide Patent Pending

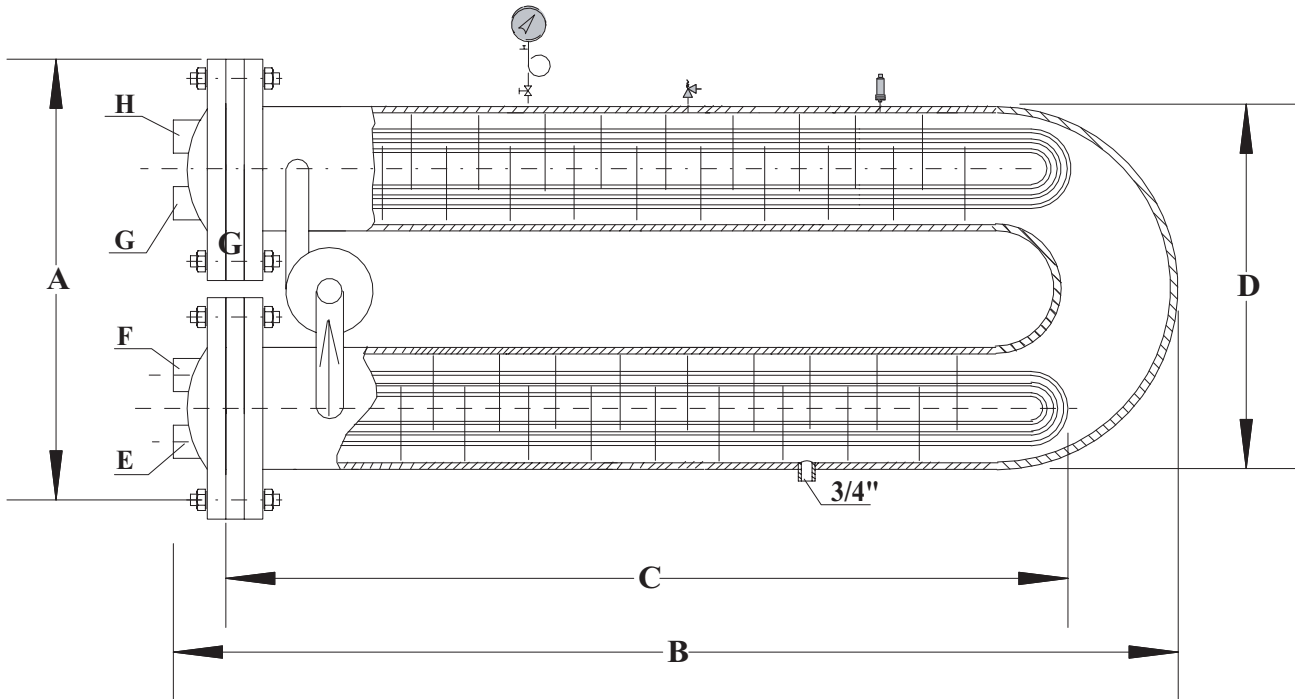
<p>Typical Applications</p> <p>Power Plants. Process heat transfer.</p>	<p>To have the capacity to heat _____ gpm of water from _____ F to _____ F using _____ lbs/hour (saturated) (superheated) steam, entering at _____ psi & _____ F</p>
<p>Easy removal of tube bundles. Wide selection of tube materials. Unaffected by thermal expansion.</p>	<p>The condensate should be subcooled to _____ F.</p> <p>Unit to be constructed in accordance with ASME requirements. ASME Stamp is (not) required.</p> <p>Unit to have no more than _____ ft. of total length and _____ psi pressure drop of steam and _____ psi pressure drop of water.</p>



The Alstrom Feedwater Heater "AFH-DTB" represents an important implementation of the innovative Alstrom Double Tube Bundle shell and tube heat exchanger. The superheated steam enters the heater via the steam inlet between the inner rows of tubes of the first tube bundle and cooled in the desuperheating zone. The double segmental baffles control the velocity of superheated steam. The condensation of steam begins in the first condensation zone, when the temperature of the heat transfer surface is equal to or below the temperature of saturation at given steam pressure. Uncondensed steam and condensate from the first tube bundle pass to the second tube bundle, where steam is condensed totally in the second condensation zone. The condensate is cooled in the drains subcooling zone and drained via drain outlet. The segmental baffles provide the required velocity of the condensate. When saturated steam is used, the desuperheating zone is not necessary. Also the drains subcooling zone is eliminated when subcooling of condensate is not required. Compared to the commonly used closed feedwater heaters, recommended by Heat Exchange Institute, the Alstrom Feedwater Heater features simple construction, better usage of the inner volume, savings of materials, simplicity of repair and replacement of the damaged tube bundles and a lower price. Due to smaller diameter of the shell, the advantages are significantly greater for high pressure applications. The Alstrom Feedwater Heater "AFH-DTB" is fabricated according to ASME Code, Section 8, Div. 1, and TEMA Standard. While the conceptual design of the heater is different, all major recommendations for Feedwater Heaters closely follow the standards of the Heat Exchange Institute.

**Alstrom Feedwater Heaters
Series "AFH-DTB"**

Pct Worldwide Application



Dimensions In Inches

A	B	C	D	E	F	G	H

Pump Data

Model	Power Hp	Phase	Voltage Volt	Flow Rate Gpm	Special Requirements

The actual dimensions of the heaters depend on performance and maximum length requirements. The heaters are designed and fabricated per order. The certified drawings are available for customers' approval.

* - All Heat Exchangers are designed and manufactured according to ASME Code, Section VIII, Div.1. ASME U-1 Form, Stamp, and N.B. Number are provided upon request for an additional cost.

* - The heaters have a 1-year guarantee against failure caused by materials or workmanship, but not against gasket failure or damage caused by corrosion, water hammer, excessive pressure or temperature.