

TC 01.5 - DOUBLE JACKETED VESSEL AND COIL HEAT EXCHANGER



This type of exchanger is generally used in the chemical and process industry, when a very well adjusted temperature is needed.

The exchanger can work with the vessel, or with the coil, and also there is the possibility to work with a continuous flow in the vessel, or to heat a given quantity of water.

This exchanger also has a thermocouple to keep a continuous reading of the fluid temperature inside the vessel, as well as a variable-speed mixer, to study how it affects heat exchange.



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LEARNING OBJECTIVES

- Energy balance in the exchanger
- Temperature log mean value difference study
- Determination of the global coeficient of heat transfer
- Efectivity calculation

TECHNICAL DATA

• Dimensions: 440 x 250 x 430 mm

• Inner vessel capacity: 1840 cm3

• Coil lenght: 290 cm

• Coil-inner vessel exchange surface: 0,044 m2

• Exterior vessel capacity: 1691,5 cm3

• Inner-outer vessel exchange surface: 0,0899 m2

REQUIREMENTS

• TC 01.1 HEAT EXCHANGER SUPPLY UNIT