



INSTALLATION AND MAINTENANCE INSTRUCTIONS ADCATHERM STH / STV SHELL & TUBE HEAT EXCHANGERS

GENERAL

1.The heat exchanger is the main component in any steam to water heating system. The hot fluid (steam) is connected to the tube bundle and, while condensing, transfer the latent heat to the cold fluid (water) which runs in the shell .So, there is no direct contact between the heating fluid and the fluid to be heated.

Warning !

-If malfunction of any other equipment or system operation failure may result in a dangerous overpressure ,overtemperature or even vacuum condition, a safety device must be included in the system to prevent such situations .A safety valve socket connection is provided on the shell side.If the selection of safety valve recommend the use of a valve connection bigger than that included on the vessel, then , we recommend it's installation in the pipe connection providing that no stop valve is installed in between .

-Do not touch the equipment without appropriate protection during working operation because it may conduct heat if the used fluid is at high temperature.

-Before starting maintenance be sure that the equipment is not pressurized or hot .

-If any of the socket connections is not being used, it must be closed with an appropriate carbon steel plug.

-Do not remove the nameplate attached to the equipment.Serial number and other useful information is stamped on it.

INSTALLATION

1.Prior to installation check that the product is suitable for the intended application : materials and pressure/temperature ratings.

2.Before to installation remove plastic covers placed on flanges or connection ends. The equipment has an arrow or Inlet/ Outlet designations.Be sure that it will be installed on the appropriate flow direction.

3.External stresses that may be induced by the system doing to pipe expansion,etc, can affect this product. The necessary precautions are recommend during the system design and equipment assembly.

4.The heat exchanger must be installed on horizontal or vertical position according to the design (STH/STV)with the condensate connection pinting to the ground. A float and thermostatic steam trap is recommended to automatically discharge the condensate .For detailed system design please consult factory and assembling instructions AS STH.20 and AS STV.20

5.After installation it is recommended the thermal insulation of the equipment with suitable material for the temperatures in use.

MAINTENANCE

1.The Adcatherm heat exchangers doesn't need any specific type of maintenance.Regular inspection may be recommended by local authorities according to specific or general pipe and/or vessels assembly procedures.

Estimated lifetime under satisfactory working conditions : 3 years ; after this period we recommend the wall thickness examination using appropriated inspection equipment.Poor quality water or corrosive fluids will reduce this period.

2.If poor quality water or steam is used, it is recommended to inspect the tube bundle in shorter periods . If the output and temperatures of the cold fluid start to decrease this can be a signal that the one or both of the fluids involved in the process are not in the ideal conditions.It is than recommended to contact the water treatment supplier.

LIMITING CONDITIONS

RATING	PRESS. bar	TEMP. °C
DIN PN16	16	120
	a)14	198
ANSI CL.150	13	250
	16	120
	a) 14	198

a) PMO - Maximum operating pressure for saturated steam .

Minimum operating temperature: -10°C

Design code: AD-Merkblatt .

GROUP 2 GASES CATEGORIES

RATING	MODEL	CATEGORY
DIN PN 16	STH/STV 5.075 to 5.150	1
	STH/STV 6.075 to 6.150	1
	STH/STV 8.075 to 8.150	2
	STH/STV10.075 to 10.150	2

CE Marking :

This product have been designed for use on water and steam which are in Group 2 of the PED-European Pressure Equipment Directive 97/23/EC and it comply with those requirements.

The product carry the CE mark .



LOSS OF GUARANTEE : Total or partial disregard of above instructions involves loss of any right to guaranti