

HORNE®

STEAM INJECTION HEATER

HEATING WATER BY
DIRECT STEAM INJECTION

VERY LOW NOISE

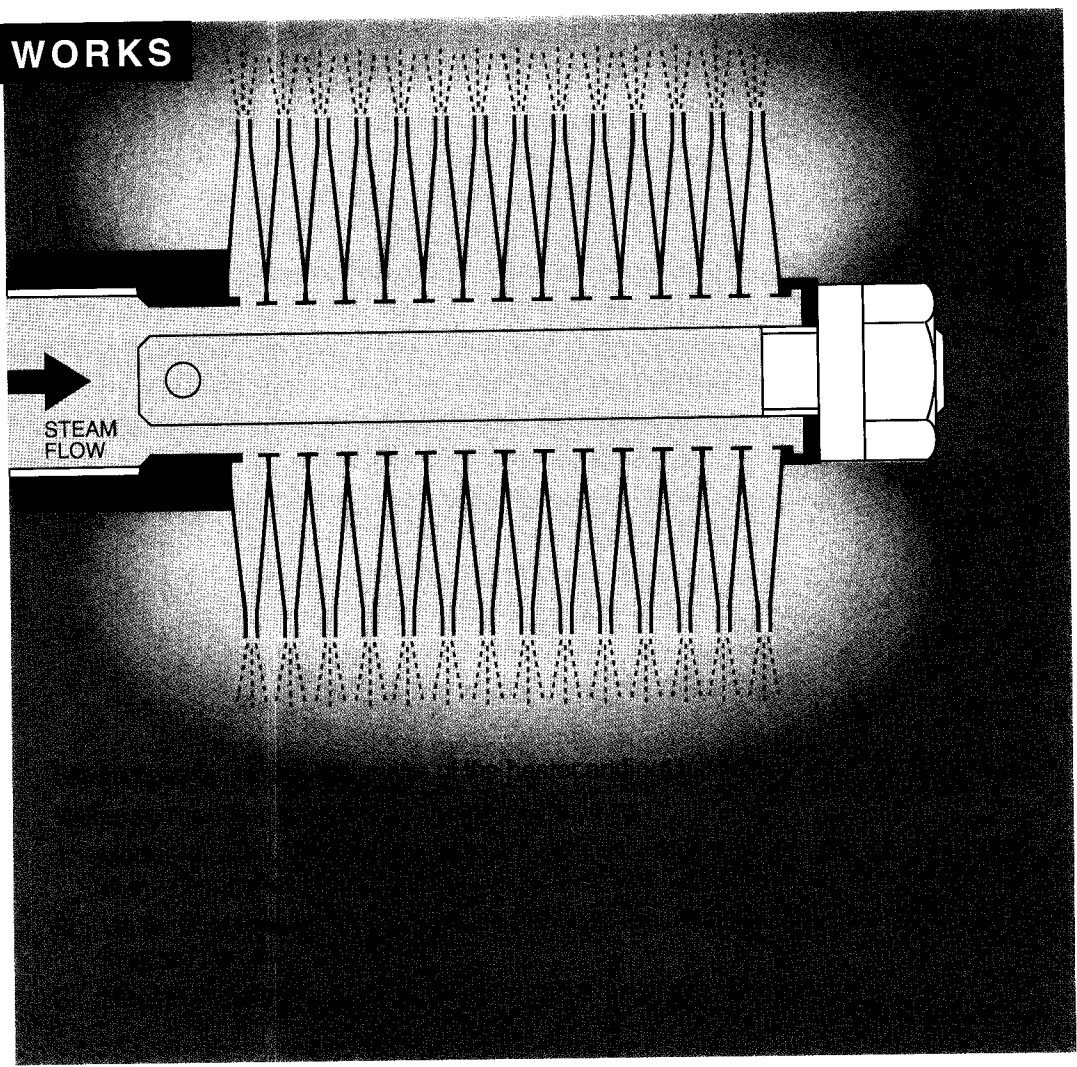
VERY LOW VIBRATION



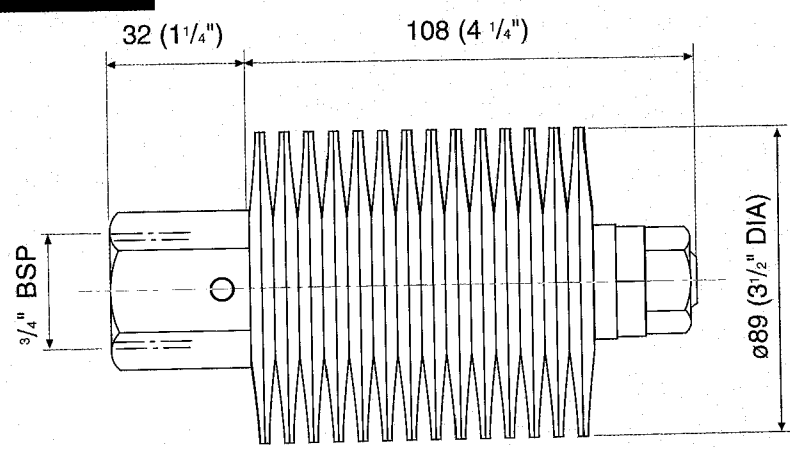
TYPICAL APPLICATIONS

- Heating the contents of : Industrial Washing Machines
- Hot Rinse Tanks
- Boiler Hot Wells

HOW IT WORKS



DIMENSIONS



MATERIAL :
Stainless Steel
Type 304

The HORNE
Steam Injection
Heater can not
be dismantled
and needs no
maintenance.

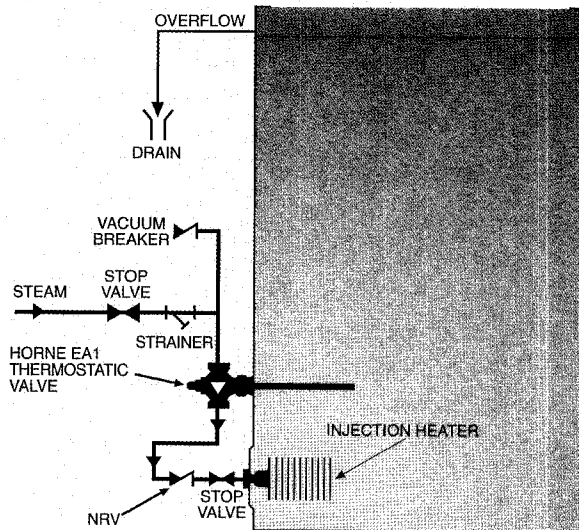
WEIGHT :
1.85 Kg.

INJECTION HEATER

TYPICAL INSTALLATIONS

The HORNE Steam Injection Heater should be fitted as low as possible in the tank. The HORNE EA1 Thermostatic Valve must be fitted above the Steam Injection Heater with a gap of at least 50mm between it and the heater. A Vacuum Breaker should be fitted between the Strainer and the HORNE EA1 Thermostatic Valve to prevent a vacuum forming in the steam supply pipe.

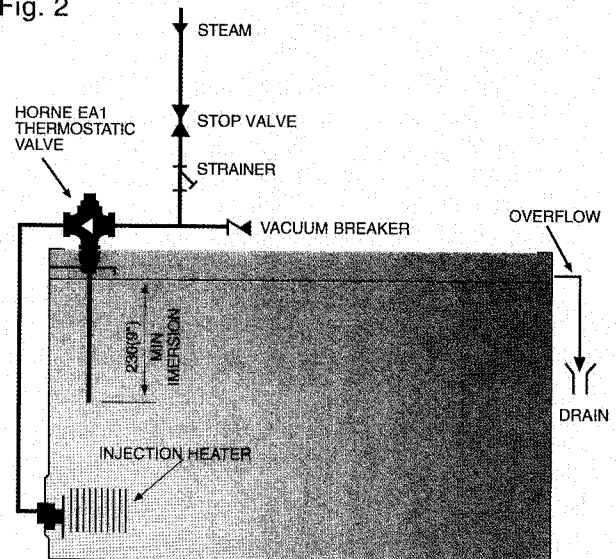
Fig. 1



Where the steam supply pipe is below the level of the water in the tank, a non-return valve must be fitted between the HORNE Steam Injection Heater and the HORNE EA1 Thermostatic Valve to prevent water from the tank flowing back up the steam pipe, due to gravity, when the steam supply is turned off.

A Stop Valve should be fitted between the HORNE Steam Injection Heater and the non-return valve to enable maintenance work to be carried out on both the HORNE EA1 Thermostatic Valve and the non-return valve.

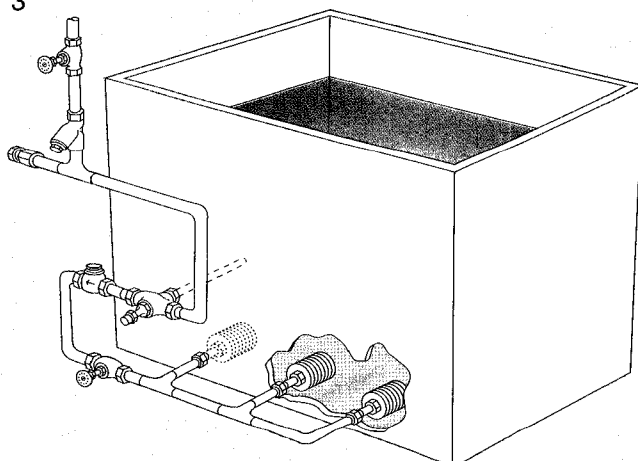
Fig. 2



The HORNE EA1 Thermostatic Valve can be mounted vertically as shown in Fig. 2.

If the level of liquid in the tank varies, the pocket on the HORNE EA1 Thermostatic Valve must be long enough to ensure that when the liquid is at its lowest level at least 230mm of the Thermostatic Pocket is immersed in the liquid.

Fig. 3



More than one Steam Injection Heater may be required and, if so, they can be fitted to a common steam supply pipe as shown in Fig. 3.

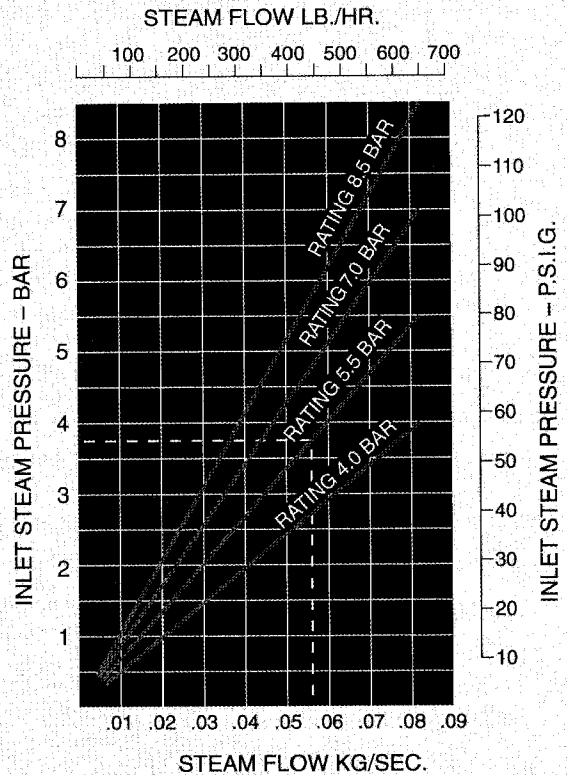
SIZING CHART

The HORNE Steam Injection Heater is made in one size with four pressure ratings. The pressure rating is stamped on the inlet to the heater. If one heater does not pass sufficient steam then two or more heaters should be fitted to a common steam supply pipe as shown in Fig. 3.

EXAMPLE

If a Steam Injection Heater is required to pass 0.052 kg/sec of steam at a steam inlet pressure of 3.75 bar, the pressure rating can be chosen as follows.

1. Read along horizontally from 3.75 bar on the inlet steam pressure scale.
2. Where the horizontal line intersects with a pressure rating line, read vertically downwards to the steam flow line
3. It will be seen that a 5.5 bar rating will pass 0.056 kg/sec of steam and this rating should be chosen for this example



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