

## Instantaneous Jet Heaters

Transvac's range of Instantaneous Jet Heaters provide a simple, low cost, silent and reliable method of heating a liquid inline.



**Instantaneous Jet Heater**

By bringing the steam into direct contact with the cold liquid both the sensible and latent heat of the steam is fully dissipated within the liquid, making the Transvac Jet Heaters very efficient. Transvac Heaters are also designed to perform this operation silently to prevent undue noise and wear normally associated with steam 'collapse'.

### Advantages

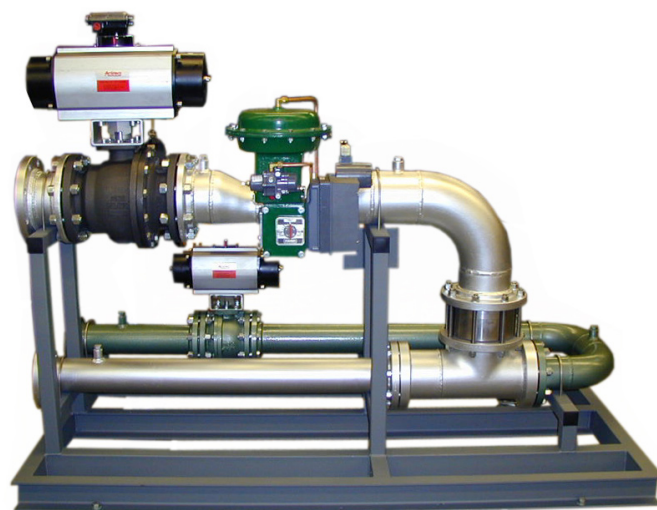
- Custom designed
- Simple to install
- Silent in operation
- Compact
- Rapid response to automatic control
- No residence time
- No flameproofing necessary
- Materials selected to suit process

### Typical Applications

- General process water heating
- Reactor jacket water heating
- Vegetable blanching
- Chemical heating

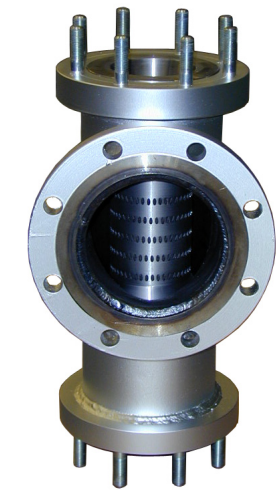
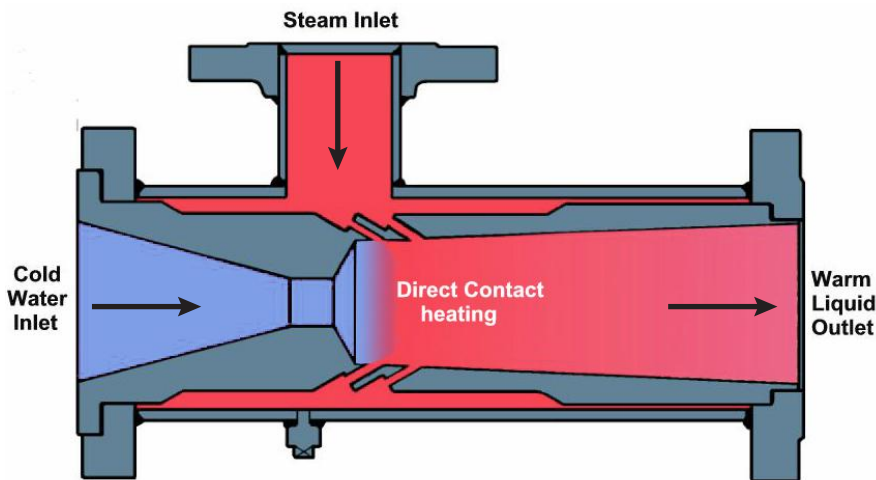


**Silent Water Heater for Chemical Plant**



**Hot Water System for Chemical Works**

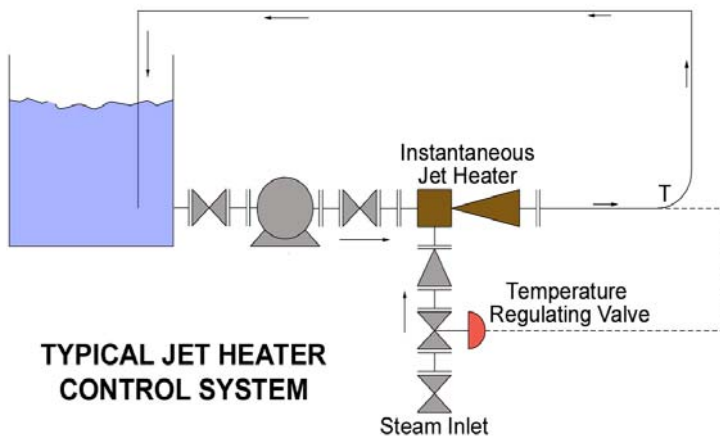
## Instantaneous Jet Heaters



**Jet Heater  
for Mining Application**

### Principle of Operation

Pressurised cold liquid is introduced to the Heater and is immediately accelerated through the combining nozzle, resulting in a local pressure drop. Pressurised steam enters the unit and is discharged into the liquid at high velocity, via a number of jets around the combining tube. This method of combining steam and liquor prevents 'backing up' should the steam be under a much higher pressure than the liquid. The two streams combine and mix intimately fully condensing the steam silently and instantaneously.



**TYPICAL JET HEATER  
CONTROL SYSTEM**



**Jet Heater with Actuated  
Steam Control Valve**

### Construction

All units are custom designed to suit each application with either single units or complete systems available. Proprietary and recognised codes of practice are used including ASME, PD5500 etc. Designs comply with the latest European standards and units are CE marked where applicable.

Typical materials of construction include carbon steel, stainless steel, hastelloy, PTFE etc. Connections include flanged, screwed or hygienic.