

Steam Jet Thermocompressors

Introduction

Transvac Steam Jet Thermocompressors are energy saving devices that compress low pressure steam, often waste steam, to a higher useable pressure.

Transvac has been designing Steam Jet Thermocompressors for over 43 years and each unit is designed specifically to suit a customer's process requirements to ensure maximum operating efficiency.

Advantages

- No moving parts
- Minimal maintenance
- Simple to operate & install
- Low capital cost
- Custom designed
- Virtually silent operation
- Available in most materials
- Suitable for hazardous areas



Steam Jet Thermocompressors
for a Swedish Paper Plant



Variable Orifice Steam Jet Thermocompressor
to recover waste steam from Autoclave
on a municipal waste plant

Steam Jet Thermocompressors

Performance

For a given set of operating conditions a ratio of entrained suction vapour to motive vapour is determined and the amount of motive steam is calculated. The mass and pressure of the motive steam determines the size of the motive steam nozzle.

Although a standard Transvac Steam Jet Thermocompressor is suitable for most applications it has a relatively limited operating range due to the fixed bore steam nozzle.

For applications with varying operating conditions Transvac offers a variable nozzle design to ensure efficient performance is maintained over the range of desired operation.

To achieve variable performance a steam regulating spindle is fitted to the nozzle and actuated either manually or automatically.



**Standard fixed nozzle Steam Jet
Thermocompressor for waste steam recovery**

Construction

Transvac Steam Jet Thermocompressors are simple in construction and consist of three fundamental components: Motive Steam Nozzle, Suction body and a Diffuser (Throat).

A wide range of materials of construction are available including stainless steels, carbon steel, Titanium, chrome molybdenum etc.

All products comply with the requirements of the Pressure Equipment Directive (PED) and are CE marked where appropriate. All of our design and manufacturing processes are quality assured and certified to BS EN 9001:2015 and Transvac are also registered with 1st Point Assessment and Achilles.