# Steam Ejector

the best choice for pumping using low-grade waste heat





#### **PRODUCT OVERVIW**

A steam-jet pump consists of a nozzle, a mixing chamber, throat and a diffuser. The primary fluid (steam) is accelerated with high pressure (0.3-1.6MPa) through a nozzle and obtains supersonic flow at the outlet of the nozzle resulting in a low pressure (vacuum). The supersonic primary steam entrains and draws the secondary fluid into the suction chamber, where the secondary fluid is accelerated. The mixing process of energy and momentum exchange between primary and secondary flow happens through the suction chamber. Further compression is achieved when the mixed flow passes through the diffuser.

## **TYPICAL APPLICATIONS**

The steam-jet vacuum pump is an important equipment widely used in chemistry, petroleum, metallurgy, power plants and food industry to obtain a vacuum environment for various special techniques. Due to their simplicity of design and the absence of moving parts, ejectors are very reliable, require practically no maintenance, and have a relatively low installation cost.

## **PRODUCT RANGE**

In the field of vacuum processing, steam jet ejectors have been most widely used. Our ejectors are ideal for use on all kinds of stills, vacuum deaerators, evaporators, crystallizers, oil deodorizers, steam vacuum refrigeration, flash coolers, condensers, vacuum pan dryers, dehydrators, vacuum impregnators, freeze dryers, vacuum filters and more recently on stream degassing of metals and vacuum melting of metals. Different sizes are designed and manufactured to meet your specific requirements.

DESIGN CODES & STANDARDS : ASME Sec.VIII Div 1, HEI, TEMA MECHANICAL DESIGN SOFTWARES: PVElite, Abaques, NozzlePro, Solidworks

### ACCESSORIES

All applicable sizes are supplied with the following accessories:

- Motive Nozzle
- Diffuser
- Connection Flanges and interconnecting
- Bolts & Nuts and Gaskets
- Silencers
- Steam Valves

