Maguin
A Moret Industries Company

CHACOUX© THERMO-EJECTOR
Steam Recompression

General View

Nozzle Bodies

Distillation Unit with Thermo-Ejector

Thermo-ejectors use the kinetic energy of high-pressure steam to compress a low pressure steam. Via this method, energies which were previously "fatal" can be reused to provide an overall energy gain.

Maguin is the exclusive owner of the licence for Chacoux© thermo-ejectors, which have earned an excellent reputation in the sugar industry.
The Maguin thermo-ejector technology has been specifically developed for steam recompression.

Maguin ensures the dimensioning, manufacturing, installation and commissioning of its thermo-ejectors.

MAIN FEATURES

- No moving parts
- A device tailored to specific needs
- Covers an extensive flow and pressure range
- Technology with a proven track record of over 30 years
- Numerous available construction materials
- Booster version in subsonic flow for a weak recompression rate
- Compression version in supersonic flow for a high recompression rate
- Device can be dismantled and controlled in full
- Device delivered conforming to the European Pressure Equipment Directive (97/23/CE)

ADVANTAGES

- Up to 30% of steam saved compared to a similar single-nozzle device
- Consumes no electricity
- User-friendly and absolutely safe when in operation
- Ease of installation
- Durability – minimal maintenance required
- Can be installed on a new or existing unit

A preliminary expert appraisal may be conducted to identify potential areas of improvement.
Maguin offers a tailored solution, which may range from simply providing a "bare" device right up to full "turnkey" installation.

APPLICABLE FIELDS

- Evaporation plant in a sugar refinery
- Energy recovery in an alcohol dehydration plant
- All applicable fields involving single-nozzle thermo-ejectors
- Any application involving condensed steam not yet recovered

OPERATING PRINCIPLE

The operation of these devices, which is based on classic theorems of thermodynamics and fluid mechanics, can be divided into three phases:

Motive nozzle: fluid expansion and transformation of energy into speed

Mixer: transmission of part of the speed of the moving fluid to the fluid drawn in until both paths are unified

Diffuser: recompression of steam by transformation of the kinetic energy of the mixture into potential energy

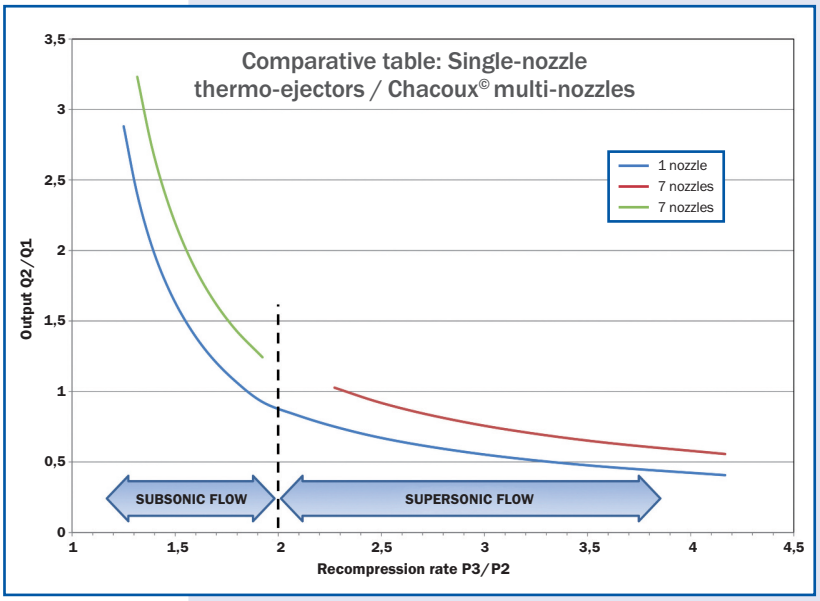
Statocompressor DN250
cutaway 3D view

THE MAGUIN OFFER

- Energy audit
- Supply as bare device
- "Turnkey" installation
- Retrofit of existing thermo-ejectors

High-pressure connection

Soundproof housing (optional)



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