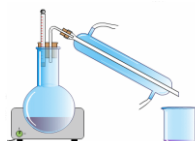


# APPLICATION SHEET: Vacuum extraction

## Application



In many industrial processes, it is required to concentrate the active ingredients through distillation.

One of the most well-known examples is the manufacturing of vegetable extracts, where the most-used technique is to extract the active material from the plant by placing it in contact with a solvent. This solvent is then eliminated through distillation (*heating the mix under pressure, and evaporating the solvent which is then uncondensed*). This process, ideally, should be done continuously. The solvent needs to be extracted from a run-down tank that has a maintained vacuum (*very low available NPSH and close to the total head*).

The constraints are:

- Very low NPSH required
- Variable flow between the start and finish of distillation from a few m<sup>3</sup>/h to several dozen l/h.
- Complies with ATEX for flammable liquids

## The **POMPES GROSCLAUDE** solution



### Analyzing the solution

- The low flow rate associated with a significant total head makes these pumps ideal for this application.
- These pumps are designed and manufactured in compliance with ATEX legislation.

Pump models installed:

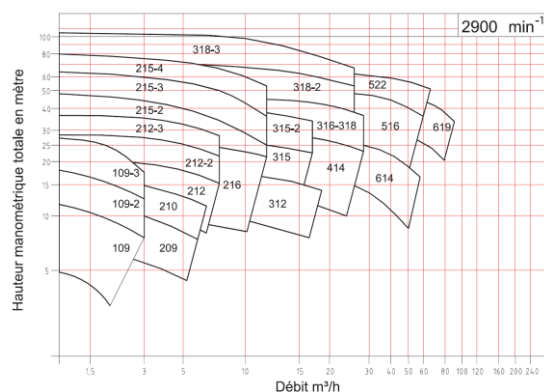
**EX109/2X-95/90-0,37-2A-GMD**  
& **EX109/3X-95/90/90-0,55-2A-GMD**

### Technical description

- **EX-BX** series pumps
- Industrial construction on base
- Material: 100% 316L stainless steel for parts in contact with fluid
- Tightness via double mechanical seal and lubrication tanks.
- Flow rate : 100 l/h à 2 m<sup>3</sup>/h @ 15 mCl & 100 l/h à 2 m<sup>3</sup>/h @ 22 mCl

### Main advantages

- Our pumps make it possible to work in transient mode and even in dry mode at the end of operation.
- Open impellers are compatible with particles that may be present in the conveyed liquid.
- Reduced maintenance



VACUUM  
EXTRACTION

THERMIC  
OILS

MAGNETIC  
COUPLING

PNEUMATIC  
MOTORS

R4 – R15

TAYLOR  
MADE

FREQUENCY  
CONVERTER

# POMPES GROSCLAUDE

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