



Non contractual photo

**SERVICE : 400 V / 50 HZ / THREE PHASE +
N: 1 KW. COLD WATER 20 ° C / 3 BAR: 1 M3
/ H. EMPTY 20 MBAR: 60 NM3 / H STEAM 6
BAR: 30 KG / H. SEWER FOR HEATING
CONDENSATES.
DIMENSIONS : 2, 50 M X 1, 04 M X 3, 65 M**

WEIGHT : ~ 600 KG

REFERENCE : MP1075

Principle of operation

The reaction is a fundamental operation of the chemical industry, making it possible to produce, from simple molecules (reagents), more and more complex compounds intended for a growing number of industries (chemistry, pharmacy, etc.).

Educational Objectives :

- Study of simple reactions.
- Study of evaporation.
- Crystallization by evaporation, chemical reaction or cooling.
- Total reflux reactions.
- Discontinuous distillation.
- Discontinuous heteroazeotrope distillation.
- Discontinuous distillation under reduced pressure.
- Material balance.
- Yields.
- Thermal balance.

Technical specifications :

Equipment

- Storage reagent recipe in borosilicate glass, graduated with "juice elevator" system for filling reagents.
- Frustoconical reactor: 316L stainless steel tank, double steam heating jacket, flush drain valve, operator protection panel, 316L stainless steel cover.
- Fixed speed stirring set in 316L stainless steel with "V" anchor.
- 316L stainless steel column, DN100, in a 1200 mm element with "MULTIKNIT" type 316L stainless steel lining.
- Inclined multitubular condenser.
- Decanter in borosilicate glass, cooled, with manual adjustment of the level of the interface.
- Recipes of borosilicate glass distillate, graduated.
- Circuit for relaxing and adjusting the heating steam with operator protection panel.
- 316L stainless steel piping.
- 316L stainless steel piping for reduced pressurization of the different subassemblies on the main manifold.
- Borosilicate glass vacuum trap
- 316L stainless steel vent lines for the different sub-assemblies on the main manifold towards the central suction.
- Support frame in 304L stainless steel tubes and aluminum nuts.

Instrumentation

- Condenser cooling water supply equipped with a float flowmeter.
- Reactor cooling water supply equipped with a float flowmeter with its control valve.
- Measurement of the pressure drop of the column by differential pressure gauge in "U".
- Measurements of the supply pressure of the heating steam by manometers.
- Flow rate measurement by float flowmeter.
- Flow rate measurement by float flowmeter.
- Measurement of distillate flow by float flowmeter.
- Measurements of reactor pressure by manometers
- Control and control cabinet, IP55, equipped with emergency stop, operating buttons and the following interfaces:
- Digital temperature indicator of six probes type Pt100 ?.

OPTIONS :

316L stainless steel reduced pressure bag filter capacity 20 liters (cake) + 20 liters (filtrate)