

## **Controlled distillation unit**

Référence : OTP-DC



# OTP pilots allows to work on industrial scale in various fields:chemical engineering, maintenance, supervision

Understand the continuous distillation process

#### GENERAL SPECIFICATIONS

- 1 glass tank 100 L.
- 3 gear pumps.
- Thermosiphon re-boiler made of a glass shell and a SS tube heat exchanger fed by steam.
- 2 product glass vessels.
- A SS pre-heat exchanger.
- Column with SS bubble cap trays.
- Condenser, glass shell and SS tube.
- Distillate circuit.
- Pneumatic pump and centrifugal pump for feeding and transfer.

• Scale and SS welded frame.

#### Instrumentation

- 17 temperature probes Pt100Ω.
- Vortex flow transmitter.
- 5 flow transmitter
- Differential pressure transmitter.
- 2 manometers.
- 2 rate control.
- 3 level transmitter.

**Dim** : 290 x 110 x 320cm – 1300 kg SS tubular framework 40 x 40mm

Categories: Chemical processing Distillation Educational Engineering Pilots +

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### DESCRIPTION

#### Continuous distillation water alcohol

This unit is design as a pilot scale plant. The column can be fed at several levels through the SS intermediate plates placed along the column.

The flow transmitters, the temperature sensors and the available pressure indicators, allow the user to monitor the processand

to study the influence of the different parameters and the operating conditions.

The DCS and the software application developed for this unit allow parameters variations, process automation and data acquisition in real time and/or historical (extra period).

#### Study of the transitional phases

Start the unit

Put equilibrium conditions

Stop the unit

#### Research of the optimum operating parameters

Feed rate, the preheating temperature, rate reflux, the pressure loss of column

#### Study of the adjustments of the parameter's control

#### Multivariable process implementation



Unités livrés avec un manuel pédagogique et dossier technique



Possibilité d'adapter les unités à vos besoins



Mise en service, formation des formateurs

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