

Distillations & Reactors



DESCRIPTION

Pilot plants to process water treatment and waste treatment techniques. Adapted to carry out practical workshops in chemical engineering, environmental and water specialized school.

Topics :

- ✓ Distillation of crude oil products
- ✓ Discontinuous distillation
- ✓ Batch distillation
- ✓ Controlled continuous distillation
- ✓ Batch & continuous distillation
- ✓ Continuous distillation unit for explosion proof area
- ✓ Multifunction distillation
- ✓ Controlled continuous distillation
- ✓ And More

DISTILLATION OF CRUDE OIL PRODUCTS

Educational goal :

- ✓ Discontinuous distillation of gas oil according to ASTM D 2892-95
- ✓ Fractional distillation under reduced pressure
- ✓ Measurement of parameters of the different fractions distilled
- ✓ Definition of T.B.P. curve

DISCONTINUOUS DISTILLATION

Educational goals :

- ✓ Laboratory technology
- ✓ Glass spherical boiler
- ✓ Glass perforated plate column
- ✓ Internal reflux
- ✓ Batch distillation
- ✓ Materials balance
- ✓ Monitoring of liquid-vapour equilibrium and temperatures
- ✓ Yield, productivity
- ✓ Influence of operating parameters
- ✓ Reflux ratio, boiler heating capacity, quality of mixture to be distilled

BATCH DISTILLATION

Educational goals

Controlled batch distillation in a vacuum and at atmospheric pressure, apply a single-fluid industrial heating process

- Hydrodynamic study of the column
- ✓ Determine over flooding conditions
- ✓ Determine packing factor
- Influence of operating parameters
- ✓ Reflux ratio, differential pressure of column
- ✓ Control of head temperature
- Operate a batch process
- ✓ Materials balances
- ✓ Thermal balance
- ✓ Yield, productivity