

CE 600

Rectification in detail compact – multifunctional – remote

Rectification is an important thermal separation method in industry for separating homogeneous liquid mixtures, e.g. to fractionate crude oil. Using CE 600, students get to know the process in all its details.

- **different operating modes** (continuous, discontinuous, vacuum) and variation of a **large number of parameters**
- **usable anywhere** due to
 - ▶ compact wheeled design
 - ▶ electrically operated heater
 - ▶ closed cooling water circuit
- **remote learning:** access to ongoing experiments on different end devices



Interchangeable columns

Bubble cap tray column
with 8 bubble cap trays, each separately removable

Sieve tray column
with 8 bubble cap trays, each separately removable

Packed column
filled with Raschig rings soda-lime glass 4 x 4 mm

- 3 interchangeable columns each equipped with**
- 3 different inlet heights for the feed flow
 - 8 temperature sensors to record the temperature profile

Extensive experimental range

- continuous or discontinuous mode
- vacuum mode possible
- with or without feed preheating
- different columns
 - ▶ tray columns with variable number of trays
 - ▶ different feed heights
- practice-oriented temperature controls
 - ▶ reflux ratio / heating power as actuator

Integrated PLC with touch screen

- Process schematic with display of all the latest measured values
- component operation
- settings of the controls
- Representation of time curves
 - temperatures
 - pressures
 - flow rate
 - speeds
 - characteristics of controls
- Basic information and settings e.g. error messages
- User administration

Remote learning

- tracking experiments on different end devices via screen mirroring
- menu navigation independent of the user interface shown on the touch screen of the trainer
- data acquisition via network for evaluating the experiments

