

Questionnaire: Distillation Processes

To enable our engineers to work out a process-/plant proposal which will fit into your demands, please be so kind and complete the following list:

Company: _____ **Date:** _____

Contact: _____ **Phone:** _____

Email: _____

Should the plant be operated:

Batchwise

Throughput: _____

Requested capacity (boiling flask size)? _____ l

Is a fraction collector (changer) required? Yes No

If yes, for how many cuts? _____

Continuously

Feed rate: _____

The plant shall be operated at:

Atmospheric pressure

Reduced pressure, which is in an approx. range of _____ to _____ mbar abs.

Overpressure from _____ to _____ barg

What are the temperature values at operation pressure?

In the column head approx. _____ °C

In the sump/reboiler/kettle approx. _____ °C

Is the melting point of at least one process component above ambient temperature?

- Yes, at _____ °C
 No

Do you wish to have a particular column type?

- Plate column
 Column with random packing: _____
(*Pro-Pak*[®], *Raschig*, *wire-mesh rings*, *Wilson helices*, etc.)
 Column with structured packing: _____
 Open tube
 Concentric tube (*Spaltrrohr*[®])

Do you have information about the necessary:

Nominal internal diameter? Should be approx. _____ mm
Number of theoretical stages? Should have approx. _____ NTP
Reflux-/ withdrawal ratio? Should be approx. _____ : _____

Is the design according to ATEX required? _____

If yes: Zone _____ Group _____ Temperature class _____

What is the feed mixture and its composition (%wt or %vol)? _____

What is the aimed purity of the distillate? _____

What is the aimed purity of the bottom product? _____

Are admixtures existing with the crude? (Please specify content and, if applicable, particle size.)

Salt _____

Acids _____

Solids _____

Additional information about the separation process / crude mixture: _____

Additional requirements regarding the design of the desired plant: _____

We assume inhouse installation. Please specify in detail if intended otherwise: _____

Requested heating source:

- Electrical at _____ volts AC _____ Hz _____ Phase
- By steam
via on-site supply, pressure: _____ barg, temperature: _____ °C
- By thermal oil
via on-site supply, pressure: _____ barg, temperature: _____ °C
- By delivery of a thermostatic circulator requested

Cooling source available on site:

- Tap water
- Via on-site cooling brine supply: _____ °C
Feed line pressure: _____ barg
Reverse line pressure: _____ barg
- Delivery of a cooling circulator requested

Preferred construction material:

Reboiler:

- Borosilicate glass 3.3
- Stainless steel
- Other, so as: _____

Column, Condenser, etc.:

- Borosilicate glass 3.3
- Stainless steel
- Other, so as: _____

Maximum available height on-site: _____ mm

Other requirements (surface roughness, FDA, etc.): _____

