

DIST D-2892/5236 CC

Computer Controlled-Combined Distillation System according to
ASTM D-2892 (TBP)
ASTM D-5236 (Potstill)

The i-Fischer® Dist D-2892 / 5236 CC is a fully computer controlled unit of turn-key design, and ready for use after installation and commissioning. The system is fully housed and equipped with doors in the front and rear to satisfy safety requirements and to facilitate service aspects.

The automatic fraction collector (in the system section TBP: with 20 receivers) includes a built-in internal balance for the determination of the fraction weight, while the separate volume follower system is used for discharging the fractions into the final recei-

vers and the determination of the fraction volume as well as for the direct distillation rate control.

The automatic fraction collector (in the system section Potstill: with 12 receivers) includes a built-in internal balance and volume follower system, which is used for the simultaneous determination of the fraction weight, volume and for the direct distillation rate control.

The vacuum equipment and the control system are used for alternative operation of both distillation processes.





expect essentials

Technical Data

- ▀ Operation Temperature: IBP ... 575°C AET (depending on product)
- ▀ Operation Pressure: 0.1 ... 760 mmHg (Torr)
- ▀ Fraction collector: 20 receivers (TBP) 12 receivers, heated by IR-radiators (Potstill)

Design Essentials

- ▀ operation through PC and flow chart (process parameters are indicated digitally and are presented in coloured curves as a diagram "parameter vs. time") – easy unit management also by less experienced operators
- ▀ user-software application operated under WINDOWS™XP
- ▀ "log-book" with permanent data report and data storage
- ▀ reported history of distillation processes
- ▀ storage of distillation processes with parameters and data, limited by OS ("operator system") only
- ▀ pre-selectable heating modes, e.g. indirect/direct distillation rate control
- ▀ fully automatic fraction discharge into final receivers without any disturbance of the column equilibrium

- ▀ automatic closing of the final receivers (TBP section only)
- ▀ automatic fraction/receiver changes according to pre-selected cut temperatures and/or receiver volume
- ▀ determination of fraction volumes and weights by built-in volume follower system and internal balance
- ▀ "supervisory"-mode for manual overruling of automatic control mode – with indication of every manual intervention in the flow chart
- => manual/semi-automatic operation of the unit (in emergency cases or for maintenance etc.)
- => manual receiver change
- ▀ automatic debutanisation procedure
- ▀ automatic continuation of the TBP-process, e.g. with the next vacuum run to be effected
- ▀ automatic cooling down procedure after a distillation run
- ▀ programmable washing/cleaning runs for different solvents
- ▀ evaluation of final data and TBP-curve
- ▀ electrical lifts for heating jackets
- ▀ integrated UPS-system for PC, control system for data storage up to 10 minutes during a power failure

- ▀ sophisticated vacuum control with dynamic vacuum reduction procedure
- ▀ sophisticated safety and product cracking checks
- ▀ media supply check (nitrogen, instrumentation air, cooling water)
- ▀ all alarms & safety checks with attended/unattended mode
- ▀ various options available: e.g. "water removal/dehydration", "density measurement", "safety devices", "calibration devices", "high vacuum extension (final cut range up to 620°...650°C AET)", "software extension 2x 20 receivers for collecting narrow cuts"

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