



Automatic vacuum distillation plants according to ASTM D5236, available in sizes from 5.5 to 50 litre.

Distillation line can be operated between -20°C and 150°C by internal thermostat.

Additional infrared heaters keep distillate liquid inside receiver bottle.

Unique design of autosampler allows to take off receiver bottles right after cut.

Autosampler includes automatic weighing scale, volume follower device and bottle sealing mechanics.

Conveyor belt contains 20 x 1 litre bottles or 28 x 500 ml bottles.

Bottles can be exchanged at any time.

Framework includes front doors, quick connectors for water, air and nitrogen supply.

Plant can be connected to laboratory ventilation lines.







Compact network control system exist of power box with automatic, resettable fuses, earth leakage circuit breaker and control board with easy exchangeable modules.

All devices can be pulled out of frame for easy service.





Options

- Infrared flask heater
- Fire extinguishing system
- External cooling for coldtrap



EuroDist-Control

EuroDist Control software runs on all Microsoft Windows operation systems. Windows XP professional is installed on all plants..

- easy to handle, compact design
- data recorder records all process data in second intervals
- PEED controllers for all heaters
- 2 stage vacuum controller with ramp evacuation
- password protected service and calibration area
- software based PL system
- permanent system diagnostic detects faulty sensors
- redundant safety control supervises process and handles shutdown conditions automatic
- available in English, German French, Italian, Russian (other languages on request)





- up to 60 cuts
- 5 stage distillation
- cut at temperature or volume
- auto detection of distillationend and fault condition

All parameters are stored in one file with unique name. Parameters can be changed at any time, including cuts and pressures. Cut weights are taken and calculated automatically.

- unattendent distillation including automatic vac uum reduction
- automatic IBP detection

| | :1 1.0 Cut | | | | Distillation | Sample Matorael | | P0 Ves | |
|-----------------------|---------------|--------|---------|--------|--------------|------------------------|----------|-----------------|---|
| | | | | | Parameter | Message Reco | inder ON |) <u>a cons</u> | |
| | TM | | Vac 2 | Vac 3 | | | | | |
| P-Flask | 00 | 5.00 | 5 80 | 5 00 | | | 240.00 | cec. | |
| I-Flask | | 3.00 | 3.00 | 3 80 | | maa, temp. flaskheater | 450.00 | Importuni | |
| D-Flask | 75 | 0.75 | 0.75 | 0.75 | | | 360.00 | Imperature | |
| rril/min 🔤 | 0.00 | 0.00 | 16.00 | 5 00 | | maxtemp flashhead | 200.00 | Imperature | |
| deta T 🚺 | .00 | 09.00 | 45:50 | 41.00 | dT | Initial heating | 120.00 | sec. | |
| Dist line delay | 00 | 10.00 | 5.00 | 10:00 | sec. | Temp evacuation | SCI. COL | temperature | |
| mak, pulse 🕻 | 0.00 | 60.00 | 60.00 | 60.00 | S | Pretieating step 1 | 120 00 | a 🛛 | |
| Thermostat | 0.00 | 10.00 | 50.00 | 68.00 | temperature | Preheating step 2 | 80.00 | a I | |
| reduction flaskheater | 0.00 | 70.00 | 70:00 | 70.00 | | Preheating flask | 150.00 | temperature | |
| Vac. bypass %+ | 00 | 1.00 | 5 10 | 3 00 | | | 150.00 | Importure. | |
| evacuation speed | 00 | 108.08 | 100.00 | 0.10 | pressureimin | Preheating thermostat | 50.00 | Importun | |
| | 00.00 | 300.00 | 790.000 | 700.00 | 980. | Outgassing | 130.00 | 385 | |
| au diary hester | 00 | 0.00 | 0.00 | 0.00 | temperature | Final cooling | | Importun | |
| delay light barriere | 00 | 5.00 | 5.00 | 10.00 | sec. | | | | |
| min incr. head | 80 | 0.00 | 0.00 | 0.00 | temperature | lamperature in | | | |
| min. incr. volume | 00 | 0.00 | 0.00 | 1.00 | milmin | | | | |
| | | | | | | | | Cancel | |
| | | | 100.0- | | | | 1 | | _ |
| Fiesk | | | 50.0- | | _ | | | _ | |

All distillation parameters are on one single page. Distillation can be controlled by delta T or ml/min rate. Software detects empty flask, over temperatures and cracking



- Shows temperaturs, pressures and volume •
 - Scalable axis

Online chart recorder allows to monitor complete process. All sensor data on harddisk.



External chart record viewer for analysing and printing of chart record. Add on software can also be installed on other computers.

- shows all sensors
- select sensors for to display
- scalable axis select and print cer

tain



| | | | | - | / | | AS | 14 | | | initia inpiciali anegle initialia initialia finalia | | | in Tee | | |
|-------|------------|-------|-------------|---------|--------|-----------|--------|-------|-----------|------------|---|----------------|-----------|----------------------------|--|--|
| 40. | 2 | - | | | | 18 | | | | leys. | -10 | 40 | 0.0 | 180.8 | | |
| | 31 | | | | | | 1724 | | | numy | 38.27.1 | 100.0 | 0.0 | 0.0 | | |
| - | 2 | | | | | | | | 1 | maid.m | 753.3 | 37.0 | 0.0 | 0.0 | | |
| 530 | | | | | | | - | | 1 | | 0.0 | 0.8 | 0.0 | 0.0 | | |
| 530 | 10 miles | | | - | | | | - | 1000 | | 00 | 0.0 | 0.0 | 0.0 | | |
| | - | - | - | - | - | - | | - | - | 1.01 161 | 1303.9 | 益1 | 0.0 | 0.0 | | |
| _ | - | _ | - | - | - | - | _ | - | - | | 2836.4 | 108.0 | 0.0 | 100.0 | | |
| - | - | - | - | - | - | - | | - | - | and pr | 1 | | | | | |
| | | | - | | | | | | | sharp with | 1 | - and a second | | | | |
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| - | | | | | | | | | | | en 24 | 04.20E | . to | 24/04/2006 | | |
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| - | - | - | - | - | - | - | | - | | coaling (| 00 | 10 ID 6 | 0 real | 287.5 flack | | |
| _ | - | - | - | - | - | - | | - | - | vic li | OF: | 53 01 | 13 min - | 287.5 flack 381.6 flack | | |
| - | | - | 1110 | | 1.1.1 | | | | | Vet 2 | 00 | | 0 mile | 384 3 fiere | | |
| 1 | GOR O | 256 | 162.3 | 7.6 | 10.1 | 1.8 | | 308.9 | 63 | soaling | 1 | 11 14 | | Sec. 1 | | |
| | 508.0 | 275.0 | 139.3 | 6.6 | 153.1 | 7.5 | | 298.8 | 11 | Vec 1 | | | | | | |
| | 498.0 | 198.1 | 145.8 | 7.3 | 100.1 | 8.1 | | 202.5 | 1.1 | cosing | - | | | | | |
| | 100 | 2014 | 162.4 | 80 | 062 | 2.5 | - | 36.9 | 14 | A'M | | | | | | |
| - | 440.0 | 224.6 | 249.1 | 12.2 | 386.1 | 13.1 | | 258.5 | 10 | Debatables | | | | 10.00 0000 | | |
| - | 428.0 | 28.6 | 280.8 | 12.8 | 302.7 | 14.9 | | 294.8 | 11 | | 00 | | 11 mirs | 370.5 head | | |
| - | 398.0 | 107.0 | 131.4 | 10 | 10.0 | 71 | | 211.0 | <u>u</u> | and time | -6 | | 25 mm | 28.4 head 210.5 head | | |
| at ML | ACT preset | 107.0 | veight 18.5 | vegta % | velane | -salume % | sensey | 211.0 | positions | stat line | 04 | | and the | bertpoteture | | |

Automatic generation of distillation reports. Report software can also be installed on other computers.



EuroDist System data report

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Software generates table, table/curve and curve. Interrupted distillations can be merged to a single distillation report.

EuroDitt System data report

Curves can be shown as temperature (ABET) versus:

- mass % (weigh)
- volume % (by internal volume follower data)
- volume % (by manual cut density input)

TBP (ATM D 2893) and Potstill (ATM D 5236) distillations can be merged to one single distillation report.

Selected yields from Potstill distillation can be corrected automatically.

Technical Data

| Max. temperature flask | °C | 400 | | | | |
|--------------------------------|---------------|--|--|--|--|--|
| Max. temperature AET | ٥C | 600 | | | | |
| Minimum operation pressure | Torr | 0,1 | | | | |
| Receiver size | ml | 500 or 1000 | | | | |
| Max receivers on Conveyor Belt | all south for | 20 | | | | |
| Max. cuts | S. Howers | 99 | | | | |
| Utility requirements | 108 N | | | | | |
| Electrical (3P+N+PE) | V | 400 | | | | |
| | Hz | 50 | | | | |
| | A | 16 | | | | |
| Compressed air | bar | 6 (dry, not oiled, particle filter)2 (dry, technical quality)4 (particle filter) | | | | |
| Nitrogen | bar | | | | | |
| Water | bar | | | | | |
| Ambient conditions | 1 | E TEK Fit | | | | |
| Temperature | °C | 10 - 35 | | | | |
| Rel. Humidity | % | 80 | | | | |
| Dimensions | | | | | | |
| Width | mm | 1600 | | | | |
| Depth | mm | 700 | | | | |
| Heigth | mm | 2100 | | | | |



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