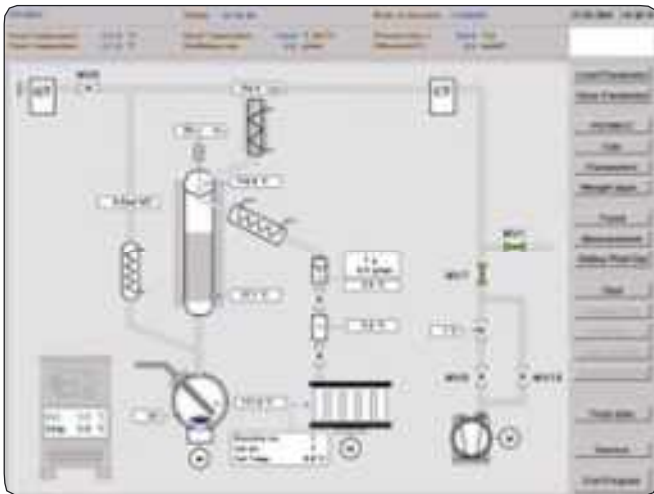

Fischer America

Laboratory & process technology

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Knowledge & Competence



Petrodist 100 CC

Fully Automatic Distillation System according to ASTM D-2892.

Processor controlled crude oil distillation system for fully automatic operation. Compact design with control system and safety items for unattended operation. No operator intervention and no intermediate stops are required.

The distillation ensues automatically from the gas cut (IBP) to the pre-selected end point without any interruptions and any interventions. The yield calculation refers to the weight of the flask charge. Data station for overriding parameter input as well as for display and print-out of all operation parameters, distillation results and TBP-curve.

Bocle 5001

Test equipment for measurement of lubricity of aviation turbine fuels by the ball-on-cylinder lubricity evaluator according to ASTM D-5001.

Technical Data

Fluid Volume:	50 ± 1.0 mL
Fluid Temperature:	$25 \pm 1^\circ\text{C}$
Conditioned Air:	$10 \pm 0.2\%$ RH at $25 \pm 1^\circ\text{C}$
Flow Rate:	0.5 L/min. through the fluid, 3.3 L/min. over the fluid
Pre-treatment time :	15 min.
Applied Load:	1000 g
Cylinder Rotational Speed:	240 ± 1 rpm
Test Duration:	30 ± 0.1 min



Petrodist 300 CC

Boiling analysis according to ASTM D-1160. Computer Controlled (CC) system with automatic distillation rate control.

No operator intervention is necessary after the start of the system.

The protocol is printed out simultaneously to the distillation and the distillation curves in actual boiling temperatures (ACT) and atmospheric equivalent temperatures (AET) as well as essential distillation parameters are shown on the monitor. The final data and the distillation curves are printed out and can be stored on data disc.





Curie Point Pyrolyser CPP

for GC/FTIR and GC/MS-Applications

The pyrolysis enables nonvolatile substances to be analysed gaschromatographically.

On the thermal fragmentation, plastics, colour liqueurs and other polymeric substances give characteristic pyrolysis products. The analysis is

both qualitative and quantitative.

- exactly reproducible temperature of pyrolysis
- “shock”-heating-up within milliseconds
- wide temperature range by means of ferromagnetic filaments or tubes from 300 to approx. 1000°C
- high durability because of minor wear and tear
- attachable to any gas-chromatograph

Cooling Water Safety Device

Model KW100

Cooling water safety KW100 with digital indication of throughput and supervision of cooling water flow combined with best safety

features, like solenoid stop valve, alarm output and switch off of the connected apparatus.



Audible alarm signal will be given and enable an immediately reaction of the operator.



Model 104

Versatile distillation apparatus with high separation efficiency. Suitable for solving difficult separation problems and for the production of pure substances, aromatic compounds of high molecular weight, fatty acids etc.

Gentle distillation by temperature controlled oil bath with product circulation.

Operation range from ATM up to vacuum.

Equipped with processor based distillation control device DCD 4001.

Charge Quantity: 100 - 4000 ml

Operation Temperature: 20° - 250° C

Operation Pressure: 1000 - 0.1 mbar

Separation Efficiency: Up to 100 theoretical plates



Model 107 Solvent Recovery Unit

The model 107 is a solvent recovery unit for extremely pure solvents. The system is equipped with a concentric-tube-column, i.e. highest separation efficiency and high load ranges.

Characteristics

Trouble-free operation
All-glass construction

Examples of Application

Recovery of solvents such as :
Xylenes, alcohols, acetonitriles, isooctane, hexane, methyl chloride and other HPLC-solvents

Separation Efficiency: Up to 60 theoretical plates

Separation Length: 500 mm

Load Range: approx.150 - 3000 ml/h

Operation Temperature: max 300° C

Operation Pressure: Atmospheric (optional vacuum)

Semi Micro-Distillation Apparatus

Model HRS 500 C

With concentric-tube-column HRS 500.

Especially versatile unit with highest separation efficiency and up-to-date processor control.

Charge Quantity: 10 - 150 ml
Operation Temperature: 20° - 250° C
Atmospheric Pressure or Vacuum
down to 0.001 mbar
Separation Efficiency approx. 90
theoretical plates



Micro-Distillation Apparatus

Model MRS 255

With concentric-tube-column MRS 255.
Apparatus for fractionation of small charge quantities.

Charge Quantity:	1 - 10 ml
Operation Temperature:	20° - 250° C
Operation Pressure:	100 - 1 mbar
Separation Efficiency:	approx. 40 theoretical plates



Ozone Generators

Ozone generators especially suited for reliable laboratory and pilot plant application; for oxygen and dried air as feedgas.

High ozone concentration in oxygen.

The ozone generating module is made of inert material and is built together with the power supply and the instrumentation into aluminium housing (protection class IP 42) with air cooling.



The gas flow is adjustable at the needle valve of the flowmeter. The electrical power consumption is shown at the LCD display. The ozone concentration can be regulated between 5 and 100% by means of an electrical controller or an external signal.

FilmDist SP 200 *Short Path Distillation*

Apparatus for universal application.

The short path distillation unit is a free stand assembly, and designed for distillation of thermally sensitive products under vacuum. The system is operated mainly on electronic control basis.

Operation Temperature: max. 250°C
Operation Pressure: 0.001 - 1000 mbar
Feed Range: 50 - 1000 ml/h
Evaporator Surface: 200 cm², short path



Vapour-Liquid-Equilibrium Apparatus

Model VLE 100 D

The vapour-liquid phase equilibria of mixtures with two or more components are an essential basis for determining the theoretical number of separation stages and other distillation conditions.

The model VLE 100 is designed for operation at high pressures; the necessary fittings, probes and safety devices for this purpose are integrated in the cased basic frame.

Build with a micro processor controlled regulation unit for precise and reliable work.

Operation Pressure: 3000 - 1.0 mbar
Operation Temperature : 180° C
(OPTION up to 250° C)

Charge Quantity
per Measurement: Approx. 100 ml





Glass Plant Components

The distillation systems are designed and produced according to the most modern technological aspects. The main components are manufactured of high-graded glass (Borosilicate glass, Duran – or quartz glass) at our own facilities.

Fischer America

Laboratory & process technology
also supplies single glass components.