behr
Labor-Technik

Distillation, extraction, thermoreaction

with the

behrotest® universal analytical system DET

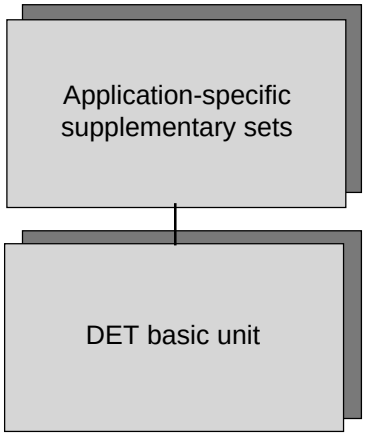
The behrotest® universal analytical system DET

The behrotest® universal analytical system DET is, for laboratories with frequently changing applications, a low-cost alternative for determining the following:

- cyanide
- extraction
- OH number
- COD
- water content
- heavy metal
- hydroxyprolin
- arsenic
- phosphate/nitrogen following Kjeldahl
- selenium

Modular design

The behrotest® DET programme is designed in modular system. The basic unit is made up of a heating block thermostat with 5 or 11 bores for reaction vessels with a diameter of 65 mm. The heating blocks have a temperature range of 20 ... 300 °C and 20 ... 399 °C respectively in the HT version. The basic unit also contains a cooling water



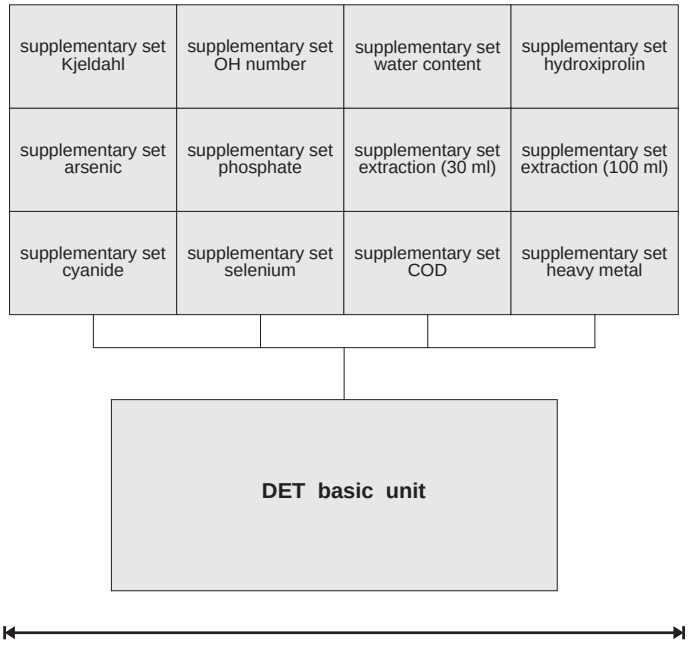
distribution system, as well as a temperature and time control device. Application-specific supplementary sets with the necessary glass apparatus, gas distribution systems etc. enable complete workstations to be put together for various applications on the basis of such a basic unit.

Versatility

The universal useability of the DET system is the result of a well thought-out and practice-orientated concept. Many components of the supplementary sets are used for several determinations. They must therefore not be purchased – and paid for – several times.

Cost saving

The DET programme saves valuable space in the laboratory



With the behrotest® DET programme, users who have to to carry out frequently changing tests save valuable space in the laboratory.

The behrotest® distillation apparatus for determining ammonium nitrogen and the phenol index is also based on the DET basic unit.

159907

behrotest® blow-out apparatus for determining the total cyanide content in accordance with ISO 6703

Complete workstation, consisting of the basic unit:

TRS 200	microprocessor-controlled time and temperature control device
DET 5	heating block thermostat for 5 reaction vessels
KV 5	basic frame with a cooling water distribution system and a cooler carrier
DES 5	stand for DET reaction vessels and glass apparatus

and the application-specific supplementary set:

GAV 5	gas distribution system
GFA 5	gas distribution system and flow controller
GW 250	gas-washing bottle with accessories for GAV 5
GW 100	gas-washing bottle with accessories for GFA 5 (safety condensate separator)
MVP 400	diaphragm vacuum pump

Glass apparatus for determining the cyanide content in accordance with ISO are additionally required.

DET workstations – exemplary

behrotest® temperature and time control device ET 1

Connection of consumers, up to 2000 W, via a built-in coupler socket; temperature 20 ... 399 °C via digitally adjustable coding switches; PID controller with anti-drift control.
Time setting via switch clock, 0 ... 120 min. or continuous heating.

behrotest® temperature and time control device TRS 200

Four digital displays enable easy setting of temperature and time values. The desired and actual temperature value, as well as the given time and residual time, can be read off simultaneously at any time.
Connection of consumers, up to 2200 W, via a built-in coupler socket; temperature control range 0 ... 400 °C and time setting range 1 ... 999 min., digitally adjustable.

behrotest® temperature and time control device TRS 200 PROG

Identical to TRS 200, however additionally up to 10 different variances in temperature and time (ramps) programmable. That prevents, e.g., the samples from foaming when heavy metals are disintegrated with aqua regia.

behrotest® workstation for fat extraction

Workstation in the DET system. Basic unit:

ET 1	time and temperature control device
DET 5	heating block thermostat for 5 reaction vessels
KV 5	basic frame with a cooling water distribution system and a cooler carrier
DES 5	stand for DET reaction vessels and glass apparatus

Supplementary set:

65/250	reaction vessels, 250 ml
STO 55	NS stopper for reaction vessels
PTFE 55	PTFE collar for M 2965
M 2965	transition piece
EZ 100/Hahn	extractor for 100 ml fat extractions
RFK 100	return cooler for extractor EZ 100
EX 100 HS	extraction thimbles, 25 items per pack

DET workstations – diversity due to their modular design

DET workstation for determining the selenium content and for heavy metal disintegration in liquids

Complete workstation, consisting of the DET basic unit:

ET 1	time and temperature control device
DET 5	heating block thermostat for 5 reaction vessels
KV 5	basic frame with a cooling water distribution system and a cooler carrier
DES 5	stand for DET reaction vessels and glass apparatus

and the supplementary set:

GAV 5	gas distribution system

Additionally, the user requires the application-specific glass apparatus for determining the selenium content or for heavy metal disintegration in liquids.

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