

## Gerhardt Soxtherm

### Automatic rapid extraction systems Controlling up to 4 units

For many years, Gerhardt has been a successful manufacturer of the automated rapid Soxhlet systems Soxtherm. Thanks to the close relationship with our customers and partners worldwide, this highly successful instrument has been improved further.

Depending on the size of the laboratory and the sample throughput, the customer now has the option of a 2, 4, or 6 place system. The controller, Multistat, can control and monitor up to 4 units individually. The savings in costs and space are tremendous. The fully automated process ensures highest precision for minimum input.

### Concept

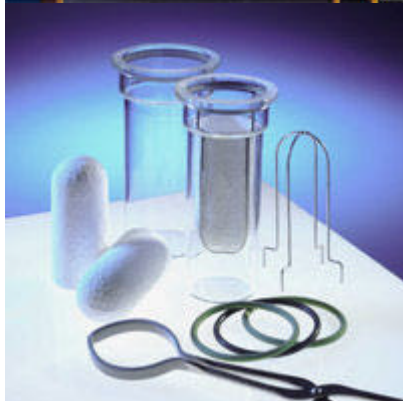
Gerhardt has been offering fully automatic systems under the brand name Soxtherm. The solid-liquid extraction according to Soxhlet and Twisselmann can be done much more efficiently by using these systems. Thus, the Soxtherm simplifies and accelerates the traditional Soxhlet method in key areas. The extraction has up to five programmable stages. The patented process is fully automatic and is especially useful for the determination of fat and for residue analysis.

### Convincing arguments

- 3 units available giving the widest range of options for all laboratories
- Solvent recovery reduces running costs
- Water and compressed air control give unattended operation and saves water making the system environmentally friendly
- Fast and accurate giving an increased sample throughput compared to the traditional Soxhlet
- Capable of being used with all solvents giving flexibility of applications
- Fully programmable with automatic start-up and shut down for unattended operation
- Low solvent usage reduces running costs
- Only 3 moving parts and no internal seals means no routine maintenance is required
- Large thimbles available for large sample sizes
- Single button operation for ease of use
- One Multistat controls up to 4 units which gives lower cost upgrades

### Safety features

- Cooling water and air monitoring
- Safety door protects the operator from hot surfaces
- Over temperature cut-out prevents flash point of the solvent being exceeded
- Optical sensor on solvent recovery tank prevents over filling
- Acoustic and visual warnings inform operator of system problems
- Spark proof heaters to DIN/VDE 0170 and 0171 meet the high standards required
- Illuminated glass beakers allow easy visual inspection of extraction progress



## Fat Determination with Soxtherm

Almost all food contains fat. When working with the Gerhardt Soxtherm, the determination of the fat content in food and feeds is simple, fast, and reliable.

- Cereals and cereal products
- Milk and dairy products
- Meat and meat products
- Chocolate and cacao products
- Oil and oilseeds
- Fruits
- Fat in feed
- Lipids in egg and egg products

## Sample Preparation with Soxtherm

Soxtherm is a very precise instrument when it comes to the determination of the pollution of e.g. soil or water. The data obtained can then be used to make fast environmental decisions.

- Mineral oil in rocks
- Oil and lubricants
- Pesticides
- Phenoles (PCB)
- Dioxine
- EOX - Extractable organic halides
- Plasticisers and additives in plastics and rubber
- Fibre and textile coatings
- Explosives in residual waste
- Coatings of fertilizers
- PAH - Poly aromatic hydrocarbons

According to EPA method 3541 and many more.