

## SPECIAL DIGESTION

### Block digestion units for Trace Metal and COD determination

C. Gerhardt has redeveloped the globally successful SMA and COD block digestion units.

#### Trace Metal (TM)

Heating block systems for digestion with aqua regia (nitrohydrochloric acid) in order to determine the acid-soluble proportion of metals in sewage sludges, sediments and soils, e.g. in accordance with DIN 38414 (German standard method).

#### Chemical Oxygen Demand (COD)

Heating block systems for determining the chemical oxygen demand.

C. Gerhardt offers TM and COD digestion units in two variants: with or without lift function.



#### PRECISE TEMPERATURE CONTROLLER

- + Control accuracy +/- 0.5%
- + 99 programs with max. 40 heating stages can be programmed
- + 30 predefined methods
- + Variable heating speeds...

#### HIGH QUALITY COMPONENTS

- + Aluminium digestion block with optimum energy utilisation and effective all-round insulation
- + Enamelled, acid-resistant surface
- + Sample tubes and condenser made of high quality Duran® glass
- + Insert racks with special coating
- + Housing is extra corrosion-protected...

#### SAFETY FEATURES

- + Thermally insulated handles
- + Drip tray for collecting acid residue
- + Safety temperatures can be set
- + Acoustic and visual error warnings
- + Exhaust equipment switches on automatically
- + Overheating protection...

#### CONVENIENCE FUNCTIONS

- + Pre-heating function for warming up the digestion block
- + Versions type CSB-L and SMA-L have programmable lift function
- + External cooling water valve (optional) for controlling the cooling water
- + Insert racks with numbered sample positions
- + Standardised conditions for digestion
- + USB port

#### ACCREDITED LABORATORIES

- + Password protection
- + User levels with access rights
- + Saves up to 30 digestion processes with temperatures, date and timestamp
- + Data export for LIMS
- + Supports the requirements of ISO 17025, GLP etc.



# TM and COD DETERMINATION

## RECOMMENDED ACCESSORIES

### TURBOSOĞ

Compact scrubber system for extraction and neutralisation of aggressive acid fumes.

### Cooling water valve

The optional cooling water valve makes it possible to automatically start and control the cooling water function (only version with lift function).



## OVERVIEW OF THE MODELS

### TM digestion units

Block digestion unit with programmable controller unit, including data management and pre-heat function. Delivered together with all glass parts, trace metal condensation traps and insert racks.

Type	SMA-L 8s	SMA-L 20s	SMA 8s
Hotplates	8	20	8
Tube sizes	250 ml	250 ml	250 ml
Max. T	240°C	240°C	240°C
Dimensions (W/D/H <sup>1)</sup> )	515/483/990 mm	515/483/990 mm	515/483/990 mm
Weight	approx. 48 kg	approx. 63 kg	approx. 33 kg
Order no.: <sup>2)</sup>	12-0752	12-0750	12-0754

1) Height in bottom lift position, in top lift position + 100 mm.

2) 230 V version, special voltages on request



SMA-L (with lift)

SMA (without lift)

### COD digestion units

Block digestion unit with programmable controller unit, including data management and pre-heat function. Delivered together with all glass parts and insert racks.

Type	CSB-L 8s	CSB-L 20s	CSB 8s
Hotplates	8	20	8
Tube sizes	250 ml	250 ml	250 ml
Max. T	240°C	240°C	240°C
Dimensions (W/D/H <sup>1)</sup> )	515/483/790 mm	515/483/790 mm	515/483/1140 mm
Weight	approx. 46.5 kg	approx. 61.5 kg	approx. 24 kg
Order no.: <sup>2)</sup>	12-0762	12-0760	12-0764

1) Height in bottom lift position, in top lift position + 100 mm.

2) 230 V version, special voltages on request



CSB-L (with lift)

CSB (without lift)

For detailed technical data and order information for the individual device types and for the accessories and consumables, please request our **TM or COD digestion unit product data sheet**.

Presented by:



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Last updated 02/2017 | rel. 17-002  
Later modifications possible



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