

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 ¹⁾)	515/483/990 mm	515/483/990 mm	515/483/990 mm
Weight	approx. 48 kg	approx. 63 kg	approx. 33 kg
Order no.: ²⁾	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 ¹⁾)	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.: ²⁾	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:



Tecnilab AV

Tel.: 217 220 870 | geral@tecnilab.pt
www.tecnilab.pt

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



C.GERHARDT GMBH & CO. KG
Cäsariusstraße 97
53639 Königswinter
GERMANY

Tel.: +49 (0)2223 / 29 99 0
Fax: +49 (0)2223 / 29 99 99
E-Mail: info@gerhardt.de
www.gerhardt.de