

Pressure Vessels - Overview

Volumes	50 ml	250/400 ml
Material (Liner)	TFM	
Max. pressure	200 bar/2,900 psi	200 bar/2,900 psi
Max. temp.	250°C	250°C
Quantity	6 or 12	1, 2 or 4
Pressure vessel	DAB-2	DAB-3

Heating and Temperature Regulation

	Heating block systems*		Heating plate systems**	
	Heating block	No. of vessels	Insert	No. of vessels
DAB-2	DAH-406	6	-	-
	DAH-412	12	-	-
DAB-3	DAH-902	2	DAH-3	1
	DAH-904	4	-	-

* For use in conjunction with the BTC-3000 temperature controller.
** For use in conjunction with the BLH-800 and BTC-3000 laboratory heating plates

Accessories

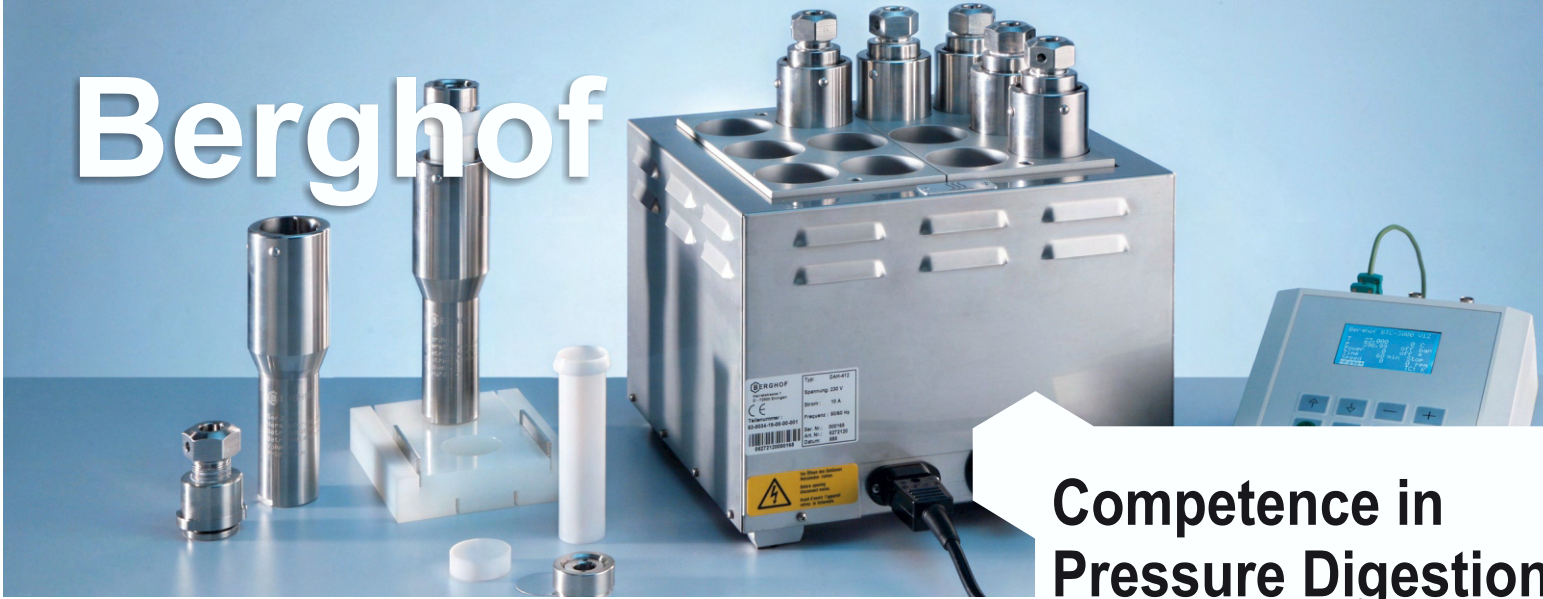
- Mounting tool and mounting station.
- A variety of heating blocks and heating plates.
- Temperature controllers.

The Faster Road to Success

We provide the necessary know-how through workshops and individual demonstrations. A network of qualified authorized dealers, together with our Technical Service Department can offer fast assistance for any questions.



Berghof
Products + Instruments GmbH
Harretstrasse 1 • 72800 Eningen • Germany
laboratorytechnology@berghof.com
www.berghof.com
Tel. +49 7121 894-202 • Fax +49 7121 894-300



Competence in Pressure Digestion

Safe, universal pressure digestion up to 200 bar

High-quality materials are the prerequisite for the long-lasting, robust, and safe pressure digestion systems from Berghof.

Simple filling without the need for special handling skills as well as the continuous digestion process with results which can be reproduced at any time due to uniform heating, represent the decisive advantages.



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Pressure Digestion “On the side”

Our customers have come to prize the advantages offered by the combination of stainless steel pressure vessel with Teflon liner and the operational and operator safety they provide. (All vessels undergo preliminary testing by the TÜV!)

Simple filling as well as the continuous digestion process achieved by uniform heating mean that pressure digestion systems from Berghof can be employed by laboratory personnel without the need for special handling skills.

They are quickly integrated into routine laboratory work or can even carry out their tasks “overnight”. This frees personnel and resources for other laboratory tasks.

The facts

- High operating pressure of 200 bar / 2,900 psi = Safe, universal digestion system.
- Extreme digestions up to 250 °C and requiring several days are easily possible.
- High sample throughput rate thanks to multiple heating systems.
- Permanently sealed vessels = No loss of volatile elements.
- Easy and simple vessel handling.
- A wide variety pressure vessels is available.
- Reproducible digestions.
- Solid, durable PTFE liners.

Safety

- High-quality, stainless steel pressure vessels.
- Each pressure vessel has been TÜV-tested.
- Rupture discs in every vessel.
- Controlled pressure release when the vessels are opened.



Reliable Sample Preparation

The precise determination of trace element content by means of AAS, AES, polarography, etc. requires negligible losses and blind values during the digestion process.

Berghof offers pressure digestion systems made of high-quality stainless steel with sample liners made of pure, isostatically pressure-molded PTFE or made of quartz glass. Depending on their design, the liners hold from 50 - 400 ml, so that, depending on the pressure digestion system, the type of sample matrix and, specifically, the carbon content, 2- 5 g samples can be measured.

Universal Pressure Digestion System

Matrix	Weigh-in	Acid	Temperature	Time
Cellulose/starch	1000 mg	HNO ₃	160°C	2 h
Flour/grain/leaves	1000 mg	HNO ₃ /HF	180°C	2 h
Tissue/liver	1000 mg	HNO ₃	170 - 190°C	2 h
Fat/oil	1000 mg	HNO ₃ (poss. H ₂ O ₂)	200°C	4h
Plastics	500 mg	HNO ₃ /H ₂ SO ₄	200°C	3 - 4h
Carbon/resin	500 mg	HNO ₃	220°C	6 h
Ceramics/oxides	500 mg	HF or HCl	230°C	2 - 8h
Steel	500 mg	HNO ₃ /HCl	200°C	4h



Cross-section of the DAB-3

