

VANEOX® Pressing Technology









VANEOX® - 15 t manual

	45.17
Max pressure	15 t*
Pressure display	0-20 t
Piston	100 mm
Stroke	16 mm
Bolster screw diameter	40 mm
Bolster screw travel	200 mm
Min. distance between pressing faces	95 mm
Max. distance between pressing faces	165 mm
Dimensions (W x H x D)	310 x 560 x 400 mm
Weight	76 kg

^{*} There are two lever positions that can be used to exert the pressure in two different ways.

NEW: VANEOX® - 25 t manual

Max pressure	25 t
Pressure display	0-25 t
Piston	100 mm
Stroke	16 mm
Bolster screw diameter	40 mm
Bolster screw travel	200 mm
Min. distance between pressing faces	95 mm
Max. distance between pressing faces	165 mm
Dimensions (W x H x D)	310 x 560 x 400 mm
Weight	76 kg



PR-15

FLUXANA

VANEOX® - 25 t automatic

Max pressure	25 t
Pressure display	0-25 t
Piston	115 mm
Stroke	30 mm
Bolster screw diameter	40 mm
Bolster screw travel	200 mm
Min. distance between pressing faces	70 mm
Max. distance between pressing faces	170 mm
Voltage	110 - 240 V; 50/60 Hz
Dimensions (W x H x D)	340 x 840 x 475 mm
Weight	115 kg



VANEOX® - 40 t automatic

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VANEOX[®]

touch displaywebserver connection

multilingual

removeable drawer for easy cleaning

 NEW: drawer sensor to avoid over-pressure • 10 different application programs

Dies for all common preparation techniques

 customer specific diameters with or without ring possible

bench top unit

Max. pressure	40 t
Pressure display	Touch Display
Piston	100 mm
Stroke	60 mm
Voltage	110 - 240 V; 50/60 Hz
Dimensions (W x H x D)	340 x 490 x 550 mm
Weight	120 kg



NEW: Optional drawer sensor protects pressing dies from over-pressure

Pressing Dies

The pressing dies with 32 and 40 mm are commonly used in pressing samples for XRF and XRD analysis and many other industrial applications. In addition, FLUXANA can produce dies with diameters between 8 and 55 mm. All dies are equipped with nitrile O-ring seals and 2 pellets between which the sample is pressed.



Item No.	Description	Diameter Inner/Outer
PR-CD-60XX	VANEOX® 15 - 25 t - Pressing Die, XX = diameter in mm	8 - 40 mm
PR-CD-60XXR	VANEOX® 15 - 25 t - Pressing Die for rings, XX = diameter in mm	16 - 25 / 20 - 51,5 mm
PR-40-CDXX	VANEOX® 40 t - Pressing Die, XX = diameter in mm	8 - 40 mm
PR-40-CDXXR	VANEOX® 40 t - Pressing Die for rings, XX = diameter in mm	32 - 35 / 40 / 51,5 mm

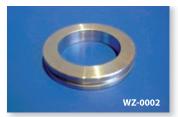
Other diameters and dies for special applications on request.

Rings for Pellets

Rings are used in automatic as well as manual sample processing. They are suitable for stabilizing the sample.

Item No.	Description	Quantity
PR-CD-6032RingM	Outer diameter 40 mm, inner diameter 32 mm, height 14 mm	1
PR-CD-6035RingM	Outer diameter 40 mm, inner diameter 35 mm, height 14 mm	1
WZ-0002	Outer diameter 51.5 mm, inner diameter 35.1+0,05 mm, height 8.7 mm, external 2.5 mm groove	1





XRF – Mixer and Accessories

- Variable speed control: 0-3000 rpm
- Powerful 30 watt motor
- Continuous or touch activation
- Shock-absorber feet
- 145 x 175 x 140 mm (W x D x H), Weight: 1.9 kg
- Power AC 230 V/50 Hz or 110 V/60 Hz

Item No.	Description
MU-K-Mixer_50Hz	Mixer to mix sample with wax (does not include holding clip for mixing containers)*
MU-K-Holder	Holding clip for mixing container for use with XRF-Mixer
MU-SContainer	Mixing container 40 ml (100 pcs.)
MU-MB-380-1	Mixing balls, 9 mm** (100 pcs.)
BM-0002-1	CEREOX (Licowax C Micropowder) wax binder for XRF, 250 g
MU-K-Ring	O-ring to fix the holding clip on the XRF-Mixer (5 pcs.)
MU-K-Mat	Anti-slip mat
BX-0006-P	Plastic Tweezer for mixing balls
MU-XRF-Mixing Set	XRF Mixing Starter Kit (XRF-Mixer, holding clip, 5 O-rings, 100 containers, 100 balls, 1 bottle wax (250 g), 1 anti-slip mat, 1 plastic forcep)
v 1 1111 1116	OLI- (MILIK Misser COLI-)







- * also available with 60 Hz (MU-K-Mixer_60Hz)
- ** also available in 5 mm and 12.7 mm, please ask for a quote

Filling Tool for Backing with BOREOX®

This tool allows to create a thin layer of sample onto the top of a pellet made of BOREOX® binder. Especially suitable for low sample quantities.

Item No.	Description
PR-CD-BA32	Filling tool BOREOX® backing for 32 mm die
PR-CD-BA40	Filling tool BOREOX® backing for 40 mm die



Mills and Grinding

- Quick, efficient pulverization and homogenization
- High sample throughput due to short grinding times and two grinding stations
- Reproducible results with digital pre-selection of grinding time and vibrational frequency
- Large range of grinding jars



Item No.	Description	Quantity
MU-RMM400	Mixer Mill MM400 for 100-240 V, 50/60 Hz	1
MU-RMM400-MZr35	Zirconia grinding jar 35 ml	1
MU-RMM400-MK25ZRO	Zirconia grinding ball 25 mm	1
MU-RMM400-MWC25	Tungsten carbide grinding jar 25 ml	1
MU-RMM400-KWC15	Tungsten carbide grinding ball 15 mm	1

Other mills with accessories on request.

Alu Cups

Alu cups are used to stabilize your sample from 2 sides. However, for successful use, the sample must show at least some binding properties. Other advantages of this method include the possibilities for labeling and intake with autosamplers.



Item No.	Description	Quantity
AC-530-1	Alu cups straight wall 30 mm x 8 mm for 32 mm pellets	1,000 pcs
AC-538-6	Alu cups straight wall 38.5 mm x 9.5 mm for 40 mm pellets	600 pcs
AC-550-6	Alu cups straight wall 39.8 mm x 7.5 mm for 40 mm pellets	600 pcs
AC-532-1	Alu cups taper wall 31 mm x 7.9 mm for 32 mm pellets	1,000 pcs
AC-540-6	Alu cups taper wall 39.8 mm x 9.2mm for 40 mm pellets	600 pcs

Pellet Films

Pellet films are used to allow polymers to be pressed using a standard die and press.

Additionally, the pellet film makes extra cleaning of the die unnecessary and prevents contamination of your sample. Please ask for more details.





Binder

In most cases, a binder is required for the preparation of pressed pellets for XRF. Boric acid is one of the traditional materials used as a binder or backing material. However, this is classified by REACH as being toxic. Based on this health issue, boric acid is no longer considered to be an appropriate material for this application. FLUXANA now offers **BOREOX**°; a direct replacement. This is a harmless organic material that shows excellent binding properties and high resistance to x-rays. It is particularly good when used as a backing material.

Alternatively, **CEREOX**® can be used. CEREOX® is comprised of a wax, previously known as Hoechst wax. This material is clean and very resistant to x-rays. Mixed with a sample (1 part wax to 4 parts sample), CEREOX® forms a perfect pellet with any material.

CELLEOX® is a cellulose based binder. The binding properties are not as good as BOREOX® and CEREOX®. Therefore, it is mainly used as a grinding aid but it is also available as grinding aid tablets. A particular property is the adsorption of liquids so it can be used, mixed with aggressive liquids, for analysis in a sample cup.

Sample and binder must be mixed homogeneously. FLUXANA recommends their automatic mixer (MU-K-Mixer)



Customer feedback for the use of the new BOREOX® backing material:

"...it gives very good pressed pellets. Earlier with Boric acid, we used Al-cups, but that is no longer necessary anymore due to the very good and strong pellet that we get with Boreox. I can also inform you that Boreox is much better as a background for our XRD samples than boric acid. As you may know, boric acid results in big peaks using XRD and, as we run XRD in vacuum, we must use a pressed sample for powders."

DEGERFORS LABORATORIUM AB, Ingvar Bernhardsson, Sweden

Item No.	Description	Quantity
Binders		
BM-0002	CEREOX® * (Licowax C, Hoechst wax) for XRF	0.25 / 5 / 20 kg
BM-0003	CELLEOX® Cellulose powder for XRF	0.25 / 20 kg
BM-0008	BOREOX® (replacement for boric acid) for XRF	0.25 / 5 / 20 kg

Grinding aid tablets

BM-0003-1K	CELLEOX® grinding aid tablets 0.33 g each	1 kg
BM-0003-5K	CELLEOX® grinding aid tablets 0.33 g each	5 kg
BM-0003-20K	CELLEOX® grinding aid tablets 0.33 g each	20 kg



Table

- Every VANEOX® press can be mounted on the table
- The table has an integrated drawer for all required accessories
- Made of robust steel
- Height 730 mm, width 910 mm, depth 760 mm



Sample Storage

It is important to keep samples prepared as beads or pellets in a dust free and dry environment.

There is a wide range of boxes and containers for single or multiple samples and standards for XRF.

For storing your beads and pellets, we would recommend:

BX-0001-18, BX-0001-24:

Transparent boxes with lockable lid.



BX-0004-XX:

Transparent boxes for individual samples (34-50 mm). See table below.

Tip: Use our **WZ-0004a** tool to avoid finger contact with the sample.



NEW! BX-0004-47:

Boxes with bead protection at the inner edge of the box. It prevents damage to the bead by avoiding contact of the bead surface to the box.



BX-0002-5, BX-0003-5:

Cabinets with drawers suitable for storage of non-hygroscopic samples.



BX-0010, BX-0011:

Desiccators to store your sensible calibration and monitor samples. Ideal combination with BX-0002-5,BX-0003-5 or BX-0001-24.



Item No.	Description	Compartments
BX-0001-18	Box 210x120x35 mm with lid	18x max 32 mm Ø pellets
BX-0001-24	Box 330x220x53 mm with lid	24x max 52 mm Ø pellets
BX-0002-5	Drawer cabinet with 5 drawers, each with 42 partitions for max 34mm Ø, Height 17 mm (ideal for pellets max 34 mm Ø)	210x max 34 Ø pellets
BX-0003-5	Drawer cabinet with 5 drawers, each with 25 partitions for max 34mm Ø, Height 17 mm (ideal for pellets max 42 mm Ø)	125x max 42 mm Ø pellets
BX-0004-39	Box for single pellet H 15 mm, set of 100 pcs.	max 34 mm pellets
BX-0004-46	Box for single pellet H 16 mm, set of 100 pcs.	max 42 mm pellets
BX-0004-47	Box for single pellet H 6 mm, set of 100 pcs.	max 46 mm pellets
BX-0004-50	Box for single pellet H 25 mm, set of 100 pcs.	max 50 mm pellets
BX-0006-P	Plastic Tweezer for beads	
BX-0010	Desiccator W350 x H334 x D410 mm incl. dry pearls, tray for dry pearls and hygrometer to combine with storage case 1x BX-0002-5 or 1x BX-0003-5 or 3x BX-0001-24	
BX-0011	Desiccator W640 x H550 x D410 mm incl. dry pearls, tray for dry pearls and hygrometer to combine with storage case 4x BX-0002-5or 4x BX-0003-5 or 12x BX-0001-24	

















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