FLUXANA®

XRF Application Solutions

Product Catalogue

XRF Application & Sample Preparation

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www.fluxana.com/downloads/catalog

www.fluxana.com

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FLUXANA® XRF Application Solutions

About us
Our clients are X-ray fluorescence (XRF) users. This spectroscopic method is employed for elemental analysis as it enables the determination of the inorganic components in a substance/product. The method is applied throughout the entire quality assurance industry, as well as in institutions and authorities that monitor regulatory compliance.

Product Portfolio
We deliver a wide range of sample preparation equipment, including fusion equipment, mills, presses and grinding machines. Additionally, we offer all types of accessories, such as cups, foils, chemicals and calibration samples, to the users of XRF. To support our customers, we also provide commercial XRF analysis, the manufacture of new reference materials and the implementation of proficiency tests.

Apart from using our products in connection with X-ray fluorescence analysis, our customers require an increasing amount of support in the practical application of these methods. For this reason, we are using our many years of XRF analysis experience to offer customers the opportunity for complete application development, including the introduction to onsite methodology in the customer laboratory.

In the past, these services were mainly requested by the cement and extractive industries. However, we now offer these services to all users of XRF – worldwide. Training courses, including the theoretical fundamentals of XRF technology and practical applications, are also offered.

Analytical Laboratory, Sales, Support and Marketing
FLUXANA's Headquarters is located in Bedburg-Hau in the Lower Rhine area. The Research and Development of new testing methods for X-ray fluorescence analysis, within the framework of commercial analysis and external X-ray fluorescence services, is conducted here.

The central stock warehouse, together with rooms for customer training and seminars, can also be found in Bedburg-Hau. Service for the sample preparation equipment is organized from here as well.

Production of Sample Preparation Equipment
FLUXANA operates an additional facility for the production and development of sample preparation equipment for X-ray fluorescence analysis.

Production of Special Glassware
A further facility is located in Ilmenau, Thüringen. XRF glassware is produced there in accordance with the specifications and requirements of our customers. This glassware is used to monitor the stability of XRF instruments.

FLUXANA®
XRF Application Solutions

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History

2002
Founding of the company „FLUXANA“ by Dr. Rainer Schramm as a small business in Kleve, Germany.

2006
Moving to a first bigger location in Kleve, with the first laboratory, warehouse, bureau and production.

2008
Opening of the glass production branch in Ilmenau, a city in eastern Germany.

2009
Construction of the new main location in Bedburg-Hau, Germany.

2009
The city of Bedburg-Hau presents FLUXANA with the “Golden Spade 2009” business award

2010
Start of the production of sample preparation machines for XRF in Kleve

2010
The „Wirtschaftsforum Niederrhein“ honors Dr. Rainer Schramm with the Entrepreneur Award

2012
FLUXANA receives the University Award of the „Wirtschaftsförderung des Kreises Kleve“ for research and development

2014
The FLUXANA laboratory gets the DIN EN ISO/IEC 17025 accreditation

2016
Expanding of the main location buildings to twice the size.

2018
Introduction of the BORAMAT® Material Doser.

2020
FLUXANA gets the DIN EN ISO 17034 accreditation for the manufacturing of certified reference materials

2021
Construction of the new production building in Bedburg-Hau, Germany.

2023
FLUXANA receives the University Award of the „Wirtschaftsförderung des Kreises Kleve“ for research and development

2023
Introduction of the VANEOX® grinding machine models

2025
Relaunch of the new and improved sample cups

2026
Introduction of the VITRIOX® ELECTRIC 2Plus / 6Plus

FLUXANA®
XRF Application Solutions



Calibration Sets

In X-ray fluorescence analysis (XRF), the analytical system must be calibrated using calibration standards.

The usual procedure begins with the purchase of reference materials which are measured as calibration standards, and then calibration and validation are conducted.

Calibration sets are used to greatly reduce the development time and cost and guarantee 100% success in setting up a calibration.

Calibration Sets

Calibration sets are used to install applications on XRF spectrometers to ensure precise measurement. Our calibration sets cover all industries and can be highly customized.



Content of your calibration set

Calibration Samples

Depending on the requested calibration set, the calibration samples can be sent in different forms:



Powder:
You receive a bottle with certified reference material in powder form.
This can be used to prepare a calibration sample for XRF, e.g. pressed pellet or fused bead.

Advantage: You retain all flexibility in sample preparation.



Glass Powder:
You receive a glass powder that contains a sample and flux. By directly filling the powder into the platinum crucible, a glass bead can be melted as a calibration sample for XRF without having to perform additional accurate weighing.

Advantage: You can use any fusion machine.



Beads:
You receive a calibration sample already prepared as glass bead.

Advantage: You receive a complete calibration package, which includes more than 15 years of experience in sample preparation and XRF analysis.

Prerequisite: You own a FLUXANA® fusion machine.



Validation Samples

In addition to calibration samples, your set will contain control samples for validation.

These samples are preferably certified reference materials and come in powder form.



Drift Monitors

Drift monitors are used to ensure the long-term stability of your method.

Stable glass samples are preferably used.





Sample Preparation Kit

With every calibration set, we provide a sample preparation kit. It includes all necessary accessories to prepare the samples on your sample preparation machine in your laboratory.



Onsite/Online Calibration

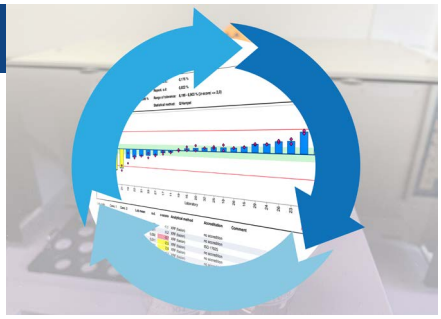
Our experienced service team will always be available for questions and will install the calibration and train your staff to work with the provided set.

Even after the calibration is done, our staff will always be at your service for questions and further support.



Participation in Round Robins

With your participation in our proficiency test, we offer you a way to control your installed application and anonymously compare your performance with other laboratories.



Ready-to-go Sets

Ready-to-go calibration sets have been developed based on many years of experience in setting up calibrations for various industries. Countless laboratories all around the world are using these sets successfully.

You can find calibration tables of the following sets on www.fluxearch.com.

Preferred sample preparation: fused beads



FLUXANA CEM (ISO 29581-2)

Cement Calibration Set
Item No.: CS-0001

Industry: Cement

Available as: Powder, Glass Bead or Glass Powder

FLUXANA ASH

Ash Calibration Set
Item No.: CS-0002

Industry: Power stations

Available as: Glass Bead





FLUXANA FERRO

Ferro Calibration Set
Item No.: CS-0003

Industry: Steel and metal industry, foundries

Available as: Glass Bead

FLUXANA RAW PROF

Oxidic Raw Material Calibration Set
Item No.: CS-0005

Industry: All oxidic materials like ores, minerals, ceramics, etc.

Available as: Glass Powder or Glass Bead





FLUXANA RAW

Raw Material Calibration Set
Item No.: CS-0007

Industry: Cement, glass and steel industry

Available as: Powder or Glass Bead



FLUXANA CC-POWDER

Continuous Casting Powder Calibration Set
Item No.: CS-0008

Industry: Steel

Available as: Powder or Glass Bead

FLUXANA SLAG

Slag Calibration Set
Item No.: CS-0017

Industry: Steel and metal industry, foundries

Available as: Glass Bead





FLUXANA RAW-GLASS

Glass Raw Material Calibration Set
Item No.: CS-0022

Industry: Raw materials in glass industry

Available as: Glass Bead

FLUXANA SiC

Silicon Carbide Calibration Set
Item No.: CS-0030

Industry: Refractories, ceramic

Available as: Glass Bead





FLUXANA RAW CC

Raw Materials for CC Powders Calibration Set
Item No.: CS-0032

Industry: Steel

Available as: Powder or Glass Bead

FLUXANA IRON ORE

Iron Ore Calibration Set
Item No.: CS-0033

Industry: Steel industry

Available as: Glass Powder or Glass Bead





FLUXANA REFRAC (ISO 12677)

Item No.: CS-0034 - Refractories: Alumina
CS-0035 - Refractories: Chrom-magnesite
CS-0036 - Refractories: Zirconia

Available as: Glass Bead

Preferred sample preparation: pressed pellets



FLUXANA FERRO

Ferro Calibration Set
Item No.: CS-0003m

Industry: Steel and metal industry, foundries

Available as: Powder

FLUXANA CEM (ISO 29581-2)

Cement Calibration Set
Item No.: CS-0031

Industry: Cement

Available as: Powder





FLUXANA BLAST FURNACE SLAG

Blast Furnace Slag Calibration Set
Item No.: CS-0040

Industry: Steel and metal industry, foundries

Available as: Powder

FLUXANA CLAY

Clay Calibration Set
Item No.: CS-0041

Industry: Refractories, ceramic

Available as: Powder





FLUXANA LIMESTONE

Limestone Calibration Set
Item No.: CS-0042

Industry: Raw materials

Available as: Powder

FLUXANA DOLOMITE

Dolomite Calibration Set
Item No.: CS-0043

Industry: Raw materials

Available as: Powder





FLUXANA QUARTZ SAND

Quartz Sand Calibration Set
Item No.: CS-0044

Industry: Raw materials

Available as: Powder

FLUXANA GYPSUM

Gypsum Calibration Set
Item No.: CS-0045

Industry: Raw materials

Available as: Powder





FLUXANA BAUXITE

Bauxite Calibration Set
Item No.: CS-0046

Industry: Raw materials

Available as: Powder

No sample preparation required:



FLUXANA GLASS

Glass Calibration Set
Item No.: CS-0016

Industry: Glass production

Available as: Discs

FLUXANA MULTIELEMENT PE

Polyethylene Calibration Set
Item No.: CS-0038-CD

Industry: Polymer processing industry

Available as: 40mm discs





FLUXANA RoHS Sets PE/ABS/PVC

Polymer Calibration Set
Item No.: CS-0039a/39b/39c
Industry: Electrical and electronical equipment (for checking RoHS specifications)

Available as: 40mm discs

FLUXANA METAL

Metal Calibration Set
Item No.: CS-0047

Industry: Metal

Available as: 40mm discs





FLUXANA JEWELRY ALLOY

Jewelry Alloy Calibration Samples according to ISO 23345
Item No.: FLX-PM XXX

Industry: Jewelry

Available as: 16mm circles, 0.5mm thick on 40mm disks

FLUXert® Calibration Training Set

WDXRF Training Set
Item No.: CS-0037

Industry: every

Contains: 3D printed samples



The training set consists of various 3D-printed samples. Together with the FLUXert® e-learning course on FLUXaminar®, it can be used to train how to set up calibrations on a WDXRF spectrometer.



Fusion Technology

Fusion in XRF is the principle of fusing a powder sample and a lithium borate into a glass bead.

This complex process and high safety requirements place high demands on the machines for this type of sample preparation.

VITRIOX® fusion machines meet these standards and combine them with a high rate of automation.

VITRIOX®

VITRIOX® ELECTRIC 2Plus / 6Plus

Combining compact design, high throughput, and unmatched precision in XRF sample preparation, the VITRIOX® ELECTRIC Plus series delivers fully automatic cold-to-cold operation with the simultaneous fusion of 2 or 6 samples. With optional upgrades—such as the continuous operation feature for automatic handling of 4 to 12 samples—these models offer exceptional flexibility and reliability.

Highest precision:

- **Closed furnace with lift bottom:** Ensures precise temperature control across all samples for reproducible results
- **Unique high-speed 3D rotation:** Delivers superior agitation for homogeneous melt quality
- **Slow-turning oven bottom:** Guarantees uniform temperature distribution for all samples (up to 1,250°C).
- **Independently controlled heating chambers (6Plus):** Uniform temperature for all stations

Applications:

- **Complete XRF solutions:** Broad calibration range for all industries
- **Lid option for volatile elements:** Prevents loss of volatile constituents during fusion
- **Quartz crucible compatibility:** Ideal for difficult or unknown samples, minimizing contamination risks

Service:

- **Expert laboratory and global service team:** Dedicated support for installation and maintenance
- **Online training courses:** Flexible training for operation, maintenance, and workflow efficiency
- **Application support by XRF specialists:** Tailored guidance to maximize instrument performance

Flexibility & Throughput:

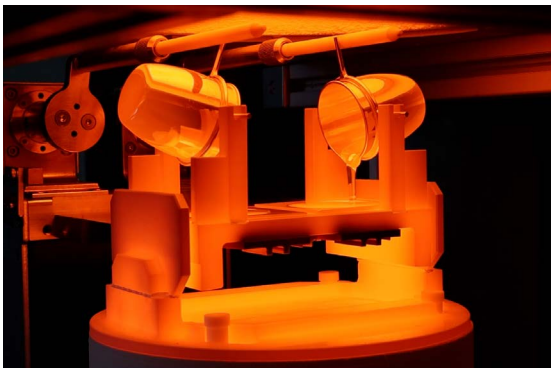
- **Simultaneous fusion:** Process 2 or 6 samples in cold-to-cold operation - time and energy efficient
- **Multi-functional:** Supports XRF, ICP, and peroxide fusion in a single instrument
- **Optional cooling station:** Enables continuous operation from 4 to 12 samples (depending on model)
- **Optional sample observation via mirror:** Visual monitoring during the fusion process for quality control

Comfort:

- **Autosampler:** Fully automated cold-to-cold operation for maximum efficiency
- **Touchscreen display with intuitive software:** User-friendly interface with pre-defined programs
- **USB port:** Save and load application profiles for quick reproducibility.
- **LIMS-ready:** Seamless integration with LIMS for data management and compliance.

Safety:

- **Casting dish monitoring:** Automatic detection of missing moulds to prevent accidents
- **Protective tubes for heating elements:** Extends component lifespan and reduces maintenance
- **FLUXinert® ceramics:** Flux-resistant materials minimize corrosion and wear
- **Safety housing with autolock:** Prevents accidents and unintended opening during operation





VITRIOX® ELECTRIC 2Plus



VITRIOX® ELECTRIC 6Plus

EU Patent: 2 901 131
US Patent: 9 651 463
JP Patent: 6 322 633
AU Patent: 2 013 322 930
CA Patent: 2 886 103

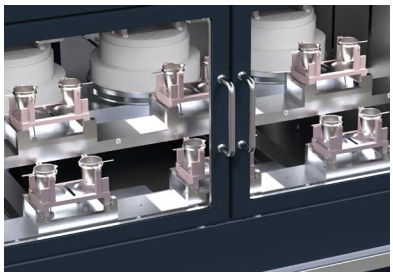
Highlights



Touch display with a wide range of calibrations



Optional stations for ICP sample preparation



Option: additional cooling stations for continuous operation



Special Application: Use of lids for volatile elements



Special Application: Use of quartz crucibles



Unique high-speed 3D rotation for agitation

Technical Data	VI-0040-2	VI-0040-6
Samples:	2 per fusion	6 per fusion
Sample holders:	2 / Option: 4	6 / Option: 12
Voltage:	230V/50-60Hz	400V/50-60Hz
Power:	3200W	8500 W
Power Supply:	1~AC/20A	3~AC/20A
Temperatures:	0 - 1,250 °C	0 - 1,250 °C
Permiss. Air pressure:	6 bar	6 bar
Air consumption:	max. 2 m3/hr	max. 6 m3/hr
Protection category:	IP 20	IP 20
Length:	620 mm	1120 mm
Width:	700 mm	700 mm
Height:	1100 mm	1100 mm
Weight:	160 kg	240 kg

Electrical Fusion

VITRIOX® ELECTRIC 4+

The VITRIOX® ELECTRIC 4 + is a fully automatic fusion machine with cold to cold operation for 4, 8, 12 or 16 samples (4 samples at a time). It has been designed to achieve the best possible results in day-to-day XRF laboratory routine while offering a high throughput.



EU Patent: 2 901 131
US Patent: 9 651 463
JP Patent: 6 322 633
AU Patent: 2 013 322 930
CA Patent: 2 886 103

Highest precision:
- closed oven with lift bottom for precise temperature control
- unique high speed 3D rotation for agitation
- equal temperature distribution

Applications:
- complete XRF solutions with a wide range of calibrations
- 100 applications possible
- volatile element anaylsis
- use of quartz crucibles
- use of lids

Service:
- expert laboratory and international service team support
- installation and maintenance online courses

Flexibility:
- 1-4 sample racks with 4 samples each
- different applications for each sample rack possible
- continuous operation

Comfort:
- autosampler handles samples automatically
- sample observation via mirror
- touch display with easy to use software and USB port
- ready for LIMS

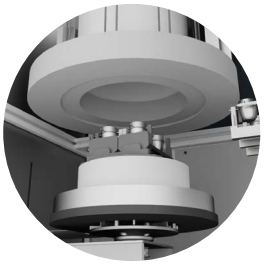
Safety:
- casting dish monitoring
- flux resistant **FLUX**inert® ceramics
- safety housing with autolock function



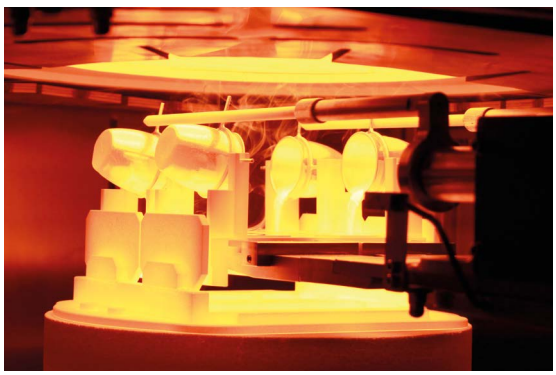
Equal temperature distribution on all 4 samples



Separate stations for continuous operation of up to 16



closed oven with lift bottom for precise temperature control



Technical Data	VI-0020
Samples:	4 per fusion
Sample holders:	1-4 (4 crucibles each)
Voltage:	400 V/50 Hz
Power:	7500 W
Power Supply:	3~ AC / 16 A
Temperatures:	0 - 1,250 °C
Permiss. Air pressure:	6 bar
Air consumption:	max. 2.1 m3/hr
Protection category:	IP 20
Weight:	~ 500 kg
Length:	1500 mm
Width:	750 mm
Height:	1800 mm

Gas Fusion

VITRIOX® GAS

The VITRIOX® GAS is a gas operated fusion machine with cold to cold automation and up to 6 positions that can operate simultaneously. Its technology is based on many years experience in XRF fusion and analysis.



Precision:
- great advantages over pressed pellets preparation
- high temperature control

Reliability:
- robust design and high quality parts for a long product life

Service:
- expert laboratory and international service team support
- installation and maintenance online courses

Flexibility:
- upgradeable
- ICP/AAS and peroxide option
- USB port for application exchange

Comfort:
- touch display for the storage of multiple application settings and fusion programs
- easy-to-use software

Safety:
- optional platinum mould sensors
- customer-specific safety housing and fume hood
- gas detector and safety pilot



High temperature control and robust design



ICP/AAS and peroxide option

Technical Data	VI-G0002	VI-G0004	VI-G0006
Stations:	2 XRF / ICP	4 XRF / ICP	6 XRF / ICP
Voltage:	110 V/60 Hz 230 V/50 Hz	110 V/60 Hz 230 V/50 Hz	110 V/60 Hz 230 V/50 Hz
Power:	150 W	200 W	200 W
Temperatures:	0 - 1,450 °C	0 - 1,450 °C	0 - 1,450 °C
Permiss. air pressure:	4 bar	4 bar	4 bar
Rec. Natural/propane gas pressure:	400-450 mbar	400-450 mbar	400-450 mbar
Rec. oxygen gas pressure:	2 bar	2 bar	2 bar
Air consumption:	max. 1 m3/hr	max. 2 m3/hr	max. 3 m3/hr
Oxygen consumption:	max. 0.3 m3/hr at 2 bar	max. 0.8 m3/hr at 2 bar	max. 1.2 m3/hr at 2 bar
Natural gas consumption:	max. 0.48 m3/hr	max. 0.98 m3/hr	max. 1.44 m3/hr
or: LPG* liquified petro. gas	max. 0.33 m3/hr	max. 0.48 m3/hr	max. 0.61 m3/hr
Depth:	500 mm	500 mm	500 mm
Width:	650 mm	650 mm	800 mm
Height:	300 mm	300 mm	300 mm
Weight:	~ 35 kg	~ 40 kg	~ 45 kg
Samples per h:	4-6	8-12	12-18

BORAMAT® Mono

The BORAMAT® Mono is an automatic dosing machine for flux. It is designed to improve the day-to-day laboratory routine, allowing the user to weigh with high precision and monitor every weighing. It is compatible with all common laboratory scales.



DE Patent: 10 2018 113 852.0

Precision:
- fast, precise dosage, free from contamination
- intelligent flow behavior optimization

Adaptability:
- compatible with scales from various manufacturers

Service:
- expert laboratory and international service team support
- installation and maintenance online courses

Flexibility:
- bottle for up to 3 kg of flux
- easy cleaning and refilling
- USB port for data exchange

Comfort:
- easy-to-use software
- weighing protocols
- ready for LIMS

Weighing Modes:
- sample/flux ratio
- catch weight
- absolute weight



Easy cleaning and refilling



Compatible with scales from various manufacturers



Technical Data:	BO-0001
Power connection:	100-240 V 50/60 Hz
Supply bottle:	Thread GL45
Maximum bottle size:	3 kg
Minimal balance precision:	0.0001 g
Uncertainty (P = 95%):	0.0020 g
Software:	Windows 11
Scale requirements:	Max. capacity: 220 g Readability: 0.1 mg Connection: RS232
Length:	390 mm
Width:	370 mm
Height (without bottle):	760 mm
Weight:	17 kg

BORAMAT® 18/30

Automatic dosing of up to 30 samples of flux. Greatly improve the efficiency and precision of your weighing routine and save time during sample preparation. The intelligent software and monitoring functions minimize error and increase security in the whole weighing process.



DE Patent: 10 2018 113 852.0

Precision:
- fast, precise dosage, free from contamination
- intelligent flow behavior optimization
- integrated high quality Mettler Toledo® weighing module

Adaptability:
- adapters for different crucibles and beakers
- dosing in snap lid jars for storage
- additional scale for sample weighing

Service:
- expert laboratory and international service team support
- installation and maintenance online courses

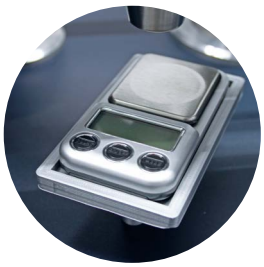
Flexibility:
- bottle for up to 3 kg of flux
- easy cleaning and refilling
- USB port for data exchange

Comfort:
- automatic weighing of 18 or 30 samples
- easy-to-use software
- weighing protocols
- ready for LIMS
- ISO 17025 calibration of weighing module available

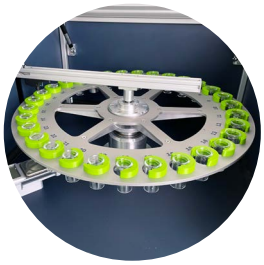
Weighing Modes:
- sample/flux ratio
- catch weight
- absolute weight



Adapters for different crucibles and beakers



Additional scale for sample weighing



Automatic weighing of up to 30 samples



Technical Data:	BO-0004 / BO-0007
Power connection:	100-240 V, 50/60 Hz
Supply bottle:	Thread GL45
Maximum positions:	18 / 30
Maximum bottle size:	3 kg
Minimal balance precision:	0.0001 g
Uncertainty (P = 95%):	0.0020 g
Software:	Windows 11
Scale requirements:	High precision weighing module integrated
Length:	860 mm
Width:	560 mm
Height (without bottle):	980 mm
Weight:	66 kg

Safety Setup

FLUXANA offers an additional safety setup and laboratory furniture that is tailored to our fusion machines. This includes tables, safety housing and the mandatory fume hoods for removing toxic gases that are generated during the fusion process of some samples.



Fume Hood with Ventilator

Fume hood made of high-grade steel.

• Motor (230 V/50 Hz/90 mA) continuously variable to 2760 r.p.m., 110 V version also available

• Height 300 mm, length 840 mm, width 640 mm

Tables

Tables with integrated drawer for all required accessories. Made of robust steel.

• Height 730 mm, length 910/1120 mm, width 760 mm

Safety Housing

Recommended safety housing to prevent hot surface contact by the user.

For **VITRIOX® GAS**, a fume hood is attached to the safety housing.

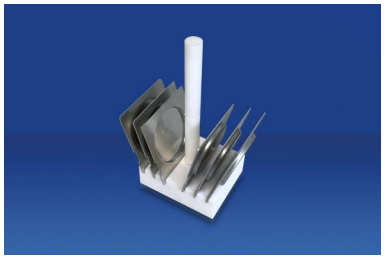
For **VITRIOX® ELECTRIC**, the safety housing is part of the machine. A separate table and fume hood on top are recommended.

Tools

Item No.	Description
FS-OZ327	Crucible tongs, platinum shoes, length 230 mm, ca. 5 g Pt
FS-US1.9kit	Ultrasonic bath with heating, Vol. ca. 1.9 l for cleaning
WZ-0004a	Handling tool for beads and pellets
FS-Tiegel_Al2O3	Aluminium oxide crucible for determination of LOI (loss on ignition). Inexpensive and very robust alternative to platinum
FS-0027	Holder for cleaning moulds in ultra sonic bath
WZ-0084	Crucible holder 206x126x54 mm ABS



FS-US1.9kit



FS-0027



WZ-0084

Lithium Borates

Anhydrous, homogeneous and pre-fused lithium borates (fluxes) with guaranteed purity. They have a low loss on ignition and defined granulometry. With these fluxes, the sample is totally dissolved in a borate glass with a perfect surface. You will receive a specification as a download with every delivery.



Description	2kg	25kg	Granular	Beads	LiBr, LiI or NH_4I
Lithium metaborate	√	√	√	√	√
Lithium tetraborate	√	√	√	√	√
Lithium tetraborate: Lithium metaborate*	√	√	√	√	√
examples: Lithium tetraborate: Lithium metaborate 35.3:64.7 1.2:2.2	√	√	√	√	√
Lithium tetraborate: Lithium metaborate 50:50	√	√	√	√	√
Lithium tetraborate: Lithium metaborate 66:34	√	√	√	√	√

* Customer-specific mixtures available

Granular or Beads?

Both shapes of flux - granular or beads - share the same chemical properties and will give the same result when used in fusion. Only in the process of weighing, the differences of these types come into play. Granular flux is used in manual weighing, whereas beads need to be used when using automatic weighing machines like the BORAMAT®.



Additives

In fusion, additives are used whenever a sample is not producing a stable fused bead. Our recipes for various applications contain instructions on how to use anti-wetting agents or oxidizing agents, for example, to prevent crystallization or breakage of the glass.



Item No.	Description
FX-ADD3	Single additive non wetting agent (lithium bromide)
FX-ADD3_bottle	Non wetting agent, lithium bromide solution in flask (water has to be added), 50ml
FX-ADD4	Single additive non wetting agent (ammonium iodide)
FX-ADD4_bottle	Non wetting agent, ammonium iodide solution in flask (water has to be added), 50ml
FX-CAT8	Single catalyst for ferroalloys FeTi, FeCr, FeV
FX-OXY6-500	Single oxidizer for ferroalloys and metals, UN 2862*
FX-OXY7	Single oxidizer for slags, ferro alloys, UN 2862*
FX-OXY8	Single oxidizer for sulfides, UN 1507*

* dangerous / hazardous goods

Platinum Ware

Platinum ware made from platinum/gold 95/5 for fusion machines and laboratory needs. Old platinum ware is accepted for recycling as credit against your next order. All deliveries are insured by FLUXANA®. We also offer all platinum ware in FKS. This surface finishing increases the lifetime of your crucibles and moulds.



Platinum Ware for VITRIOX® ELECTRIC

Item No.	Description	Inner Diameter Bottom / Top in mm	Height mm	Bottom mm	Weight g
FS-VIT01	Crucible VIT.E	20 / 34	38	0.5	45
- FS-VID1	Lids for FS-VIT01	-	-	-	8
FS-VIT02	Crucible VIT.E Viscous	22.9 / 39.1	36	0.5	54
FS-VIT03	Crucible VIT.E Ferro	22.9 / 39.1	36	0.5	55
- FS-VID02	Lids for FS-VIT02/03	-	-	-	11
FS-VIA4012*	Mould VIT.E	29 / 31	3.8	0.8	30
FS-VIA4011*	Mould VIT.E	32 / 34	3.8	0.8	30
FS-VIA4010	Mould VIT.E	34 / 36	3.8	0.8	46
FS-VIA4009	Mould VIT.E	39 / 41	3.8	0.8	46
FS-VIA4015	Mould VIT.E	39 / 41	3.8	1.4	80

* Adapter plate VI-0144 required for 29mm and 32mm moulds

Platinum Ware for VITRIOX® GAS

Item No.	Description	Inner Diameter Bottom / Top in mm	Height mm	Bottom mm	Weight g
FS-OT866	Crucible VIT.GAS	20 / 34	38	0.5	45
FS-OT867	Crucible VIT.GAS	22.5 / 36	38	0.5	54
FS-OA434	Mould VIT.GAS	29 / 31	3.8	0.8	31
FS-OA877	Mould VIT.GAS	32 / 34	3.8	0.8	31
FS-OA438	Mould VIT.GAS	34 / 36	3.8	0.8	46
FS-OA439	Mould VIT.GAS	39 / 41	3.8	0.8	46

For your order in FKS platinum, just add "FKS" to the part number! Other sizes and thicknesses on request. Moulds with 1.4 mm bottom available.





Quartz Crucible

Item No.	Description
VI-0540	Quartz crucible for VITRIOX® ELECTRIC
FS-VIH01	Platinum holding ring for quartz crucible, ca. 13g Pt



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.

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

Transparent boxes with lockable lid.



BX-0004-XX:

Transparent boxes for individual samples (32-50 mm). See table on page 24.

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



BX-0004-46-F, BX-0004-47-F:

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



BX-0017:

Special case for five drift monitor beads



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.

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 mm 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-0004-36-5	Box for single sample H 5mm, set of 100 pcs.	max 36mm pellets
BX-0004-39	Box for single sample H 15 mm, set of 100 pcs.	max 34 mm pellets
BX-0004-46-F	Box for single sample H 16 mm, set of 100 pcs.	max 42 mm pellets
BX-0004-47-F	Box for single fusion beads H 6 mm, set of 100 pcs.	max 46 mm pellets
BX-0004-50	Box for single sample H 25 mm, set of 100 pcs.	max 50 mm pellets
BX-0006-P	Plastic Tweezer for beads	
BX-0007-2-S	Dry pearls for Dessiccator, 1kg	
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	
BX-0012	Box K2001 for up to 10 samples with maximum diameter of 50mm, to combine with our round sample boxes BX-0004-47	
BX-0017	Special case for five drift monitor beads	
BX-003X	PLA boxes for 3, 6, 12 or 30 samples in silver, black and blue	

Additional drawers to add to the cabinet are available in various colours. Other dimensions on request.

To ensure the shelf life of glass beads and calibration sets, we recommend storing them in a clean and dry place. See chapter Sample storage.



Pressing Technology

The pressing of a sample into a pressed pellet using a professional press is a common way to prepare a sample in XRF.

While it is less precise than fusion, it is a faster and cost-effective way to prepare a sample.

VANEOX® presses offer a large range of high-quality presses that are suitable for every area of application.

VANEOX®
Pressing Technology

VANEOX® 15 t manual

- Manual Operation
- Up to 15t maximum pressure
- Two lever positions
- Stroke: 16mm
- Entry-level model – ideal for benchtop ED-XRF



Technical Data	PR-15
Max pressure	15 t
Pressure display	0-15 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 (L x W x H)	310 x 400 x 560 mm
Weight	76 kg



VANEOX® 25 t manual

- Manual Operation
- Up to 25t maximum pressure
- Stroke: 16mm
- Basic model – suitable for most XRF pressing applications

Technical Data	PR-25N
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 (L x W x H)	310 x 400 x 560 mm
Weight	76 kg

VANEOX® 25 t electric

- **Automatic Operation**
- **Up to 25t maximum pressure**
- **Stroke: 30mm**
- **Touch display with 10 application programs**
- **High throughput model – ideal for WD-XRF**



Technical Data	PR-25A
Max pressure	25 t
Pressure display	Touch Display
Voltage	110 - 240 V;50/60 Hz
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
Dimensions (L x W x H)	340 x 475 x 840 mm
Weight	115 kg



VANEOX® 40 t

- Automatic Operation
- Up to 40t maximum pressure
- Stroke: 60mm
- Touch display with 10 application programs
- Programmable, high convenient all-rounder



Optional drawer sensor protects pressing dies from over-pressure

Technical Data	PR-40
Max pressure	40 t
Pressure display	Touch Display
Pressing programs	up to 10
Piston	100 mm
Stroke	60 mm
Voltage	110 - 240 V;50/60 Hz
Dimensions (L x W x H)	340 x 550 x 490 mm
Weight	120 kg

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.



Art.-No.	Description	Ø ID/OD
	Pressing dies for 15t - 25t VANEOX® Presses	
PR-CD-6032	Evacuable pressing die incl. pressing out tool WZ-0024	32 mm
PR-CD-6040	Evacuable pressing die incl. pressing out tool WZ-0024	40 mm
	Pressing dies for ring (and only for ring)	
PR-CD-6016R	Evacuable pressing die for 16mm rings excl. ring PR-CD-6016R-Ring	16/20 mm
PR-CD-6032R	Evacuable pressing die for 32mm rings incl. ring PR-CD-6032RingM	32/40 mm
PR-CD-6035R_a	Evacuable pressing die for 35mm rings incl. ring PR-WZ-0002	35/51.5 mm
PR-CD-6035R_b	Evacuable pressing die for 35mm rings incl. ring PR-CD-6035RingM	35/40 mm
	Pressing dies for 40t VANEOX® Presses	
PR-40-CD32	Pressing die for electrical 40t press incl. pressing out tool WZ-0024	32 mm
PR-40-CD40	Pressing die for electrical 40t press incl. pressing out tool WZ-0024	40 mm
	Pressing dies for ring (and only for ring)	
PR-40-CD32R	Pressing die with ring for 40t press for pellets 32mm incl. ring PR-CD-6032RingS	32/40 mm
PR-40-CD35R_a	Pressing die with ring for 40t press for pellets 35mm incl. ring PR-WZ-0002	35/51.5 mm
PR-40-CD35R_b	Pressing die with ring for 40t press for pellets 35mm incl. ring PR-CD-6035RingS	35/40 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.



PR-CD-6032RingM

Item No.	Description
PR-CD-6016R-Ring	Ring for pressing tool PR-CD-6016R (ID 16/ OD 20mm)
PR-CD-6032RingM	Ring brass 32/40mm
PR-CD-6032RingS	Ring stainless steel 32/40mm
PR-CD-6035RingM	Ring brass 35/40mm
PR-CD-6035RingS	Ring stainless steel 35/40mm
PR-WZ-0002	Steelring 35/51.5 for pellets



PR-WZ-0002

Mixer and Accessories

Mixer with variable speed control: 0-3000 rpm, powerful 30 watt motor, continuous or touch activation and shock-absorber feet

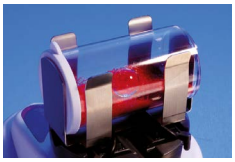
Dimensions:145 x 175 x 140 mm (W x D x H), Weight: 1.9 kg
Power AC 220/230 V, 50/60 Hz or 110/120 V, 50/60 Hz



Item No.	Description
MU-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)
	All parts are also available individually
MU-K-Mixer	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-K-MB-8mm*	Mixing balls, 8 mm (100 pcs.)
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-SContainer



MU-K-Holder

* also available in 5, 6, 7, 10 mm and 12.7 mm

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-T32	Alu cups tapered wall 31.85 mm x 7.9 mm for 32 mm	1,000 pcs
AC-T40	Alu cups tapered wall 39.85 mm x 9.2 mm for 40 mm	1,000 pcs
AC-S40	Alu cups tapered wall 39.8 mm x 7.5 mm for 40 mm	1,000 pcs

Pellet Films

Pellet films prevent contamination and sticking of the sample and facilitate cleaning of the pressing tool.



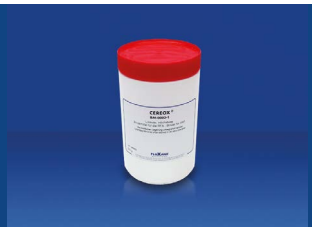
Item No.	Description	Diameter / mm
PR-PF-32	Pellet film 400 pieces	32
PR-PF-40	Pellet film 400 pieces	40

Binder

BOREOX® is a direct replacement for boric acid, which has been classified as harmful to health. 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. CELLEOX® is excellent at absorbing multiphase liquids or liquids with particles.



Item No.	Description	Packaging
Binders		
BM-0002	CEREOX® * (Licowax C, Hoechst wax) for XRF	0.25 / 5 / 20 kg
BM-0003	CELLEOX® Cellulose powder for XRF (>32µm, 469mesh)	0.25 / 5 / 20 kg
BM-0008	BOREOX® (replacement for boric acid) for XRF	0.25 / 5 / 20 kg
BM-0010	CELLEOX® Cellulose powder for XRF - Preparation of pressed pellets of metallic powders for 3D printing, (<32µm, 469mesh)	0.25 kg
Grinding aid tablets		
BM-0003-K	CELLEOX® grinding aid tablets 0.33 g each	1 / 5 / 20 kg

Powder Sample + **Binder CEREOX®** = **Pressed Pellet**



4.0 g **1.0 g**

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
MU-RMM400	Mixer Mill MM400 for 100-240 V, 50/60 Hz
MU-RMM400-MZr35	Zirconia grinding jar 35 ml
MU-RMM400-MK25ZRO	Zirconia grinding ball 25 mm
MU-RMM400-MWC25	Tungsten carbide grinding jar 25 ml
MU-RMM400-KWC15	Tungsten carbide grinding ball 15 mm

Other mills with accessories on request.

Table

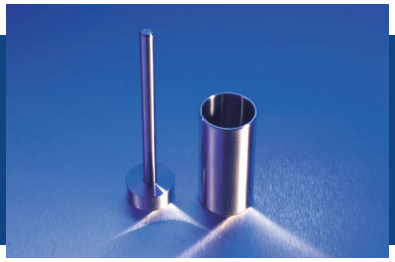
Every VANEOX® press can be mounted on the table, The table has an integrated drawer for all required accessories, Made of robust steel, Height 730 mm, width 910 mm, depth 760 mm

Item No.: VI-0004



Filling Tool

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

Sample Storage

It is important to keep pressed 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 an assortment of sample storage option, see page 23/24.



Grease Caps

Grease caps are used to safely and effectively analyze high viscosity samples in XRF. They are made of BOREOX® and have a 1 mm depression. High viscosity oil and fat samples, such as grease or creams, can be filled into the depression and are then analyzed in a sample cup.

Item No.	Description	Quantity
BM-0008-pellet_34mm	Boreox pellet, diameter 34mm for fat analysis according to DIN51829	100 pcs
BM-0008-pellet_36,5mm	Boreox pellet, diameter 36.5mm for fat analysis according to DIN51829	100 pcs
BM-0008-pellet_40mm	Boreox pellet, diameter 40 mm for fat analysis according to DIN51829	100 pcs



Grinders

In order to analyze cast iron and steel samples by spark emission spectrometry and X-ray fluorescence analysis, the surface of the sample must be even and homogeneous.

With high-quality and robust grinding machines in different variants, FLUXANA® now offers you the ideal solution for demanding metal sample preparation.

VANEOX®
Grinding Technology

Grinder MBG01

The MBG01 is a grinding machine with automatic metal sample input and output. This makes it very easy to operate and enables reproducible flat surfaces to be produced. It is PLC controlled and has selectable grinding programs.



Features:

- PLC-controlled grinding process produces reproducible flat surfaces
- Easy to operate with automatic sample input and output (manual grinding possible)
- Three selectable grinding programs (1x, 2x or 3x grinding)
- Connection for an external exhaust, e.g. MDE01
- Specially hardened material of the grinding belt base
- Easy Lock belt adjustment device for quick grinding belt change
- Options for the use of a Cobot

Technical Data	GR-0001-MBG01
Electrical data:	3x 400V (-15%/+10%), + N + PE, 50/60 Hz
	5,0 kVA power supply
Compressed air:	input: compressed air min. 5bar (residue-free)
	2,7 l/min consumption
Dimensions:	length 1000 mm
	depth 750 mm
	height 1200 mm
Weight:	170 Kg (net)
Accessories:	grinding belt 200 x 1750 mm
Sample dimensions:	height 7 mm - 50 mm
	diameter 30 mm - 60 mm



Grinder MDG02

The MDG02 is a double disc grinding machine for parallel grinding of two metal samples. For high working safety it has a foot control and brakes for quick stopping of the discs. The dust collector is integrated.

Technical Data	GR-0002-MDG02
Electrical data:	230 V, AC 50/60 Hz
	2,6 KW
RPM:	1400 / 1680 1/min
Dimensions:	length - 760 mm
	depth - 430 mm
	height - 915 mm
Weight:	170 kg (net)
Accessories:	grinding disc, diameter 300 mm
	integrated exhaust system

Features:

- Produces reproducible grinding results on two grinding wheels
- Features an integrated, powerful dust collector
- Additional safety is provided by a foot-operated control switch that prevents the disc from rotating without operation
- Both drives have brakes that stop the discs in less than 1 revolution
- Optimal height for operation while standing

Grinder MLG11

The MLG11 is a compact grinder for easy preparation of metal samples and surfaces for chemical or spectrographic analysis by hand. The robust design and high quality parts make the MLG11 a reliable machine for any environment.



Features:

- Manual dry grinding of samples up to 60 mm (2.36 in.) in diameter
- Coarse and fine grinding wheels available with different pitches
- Grinding dust removal on the rear side
- Connection for external dust extraction
- Optional safety cover GR-0301



Technical Data	GR-0003-MLG11
Electrical data:	230 V, 1 phase +N + PE, 50Hz / (60Hz)
	1 kVA power supply
RPM:	2850 / (3420) 1/min
Dimensions:	length 350 mm
	depth 340 mm
	height 295 mm
Weight:	23 kg (net)
Grinding wheel diameter:	250 mm
Accessories:	grinding discs diameter 250 mm grid 60



Exhaust MDE01

The MDE01 is a powerful unit specially designed for use with the MBG01. It can also be used independently.

Technical Data	GR-0004-MDE01
Electrical data:	3x400V AC 50/60Hz
	0,55 KW power supply
RPM:	1000 m^3/h
Dimensions:	length - 450 mm
	depth - 540 mm
	height - 810 mm
Weight:	35 kg (net)
Equipment:	Corrugated tube, aluminum Ø 100 mm
	Dust filter bag

Features:

- Powerful dust extraction for use with MBG01
- Consists of an integrated spark deflector and a dust bag
- Low maintenance
- The dust bag is easily removable; the spark deflector is accessible via a removable panel
- Independent use possible

Grinding Material

Abrasive belts and discs made of aluminum oxide (normal corundum) or zirconium oxide (zirconia alumina) are the most common types of abrasives. Generally, these abrasives have grit sizes K40 or K60.



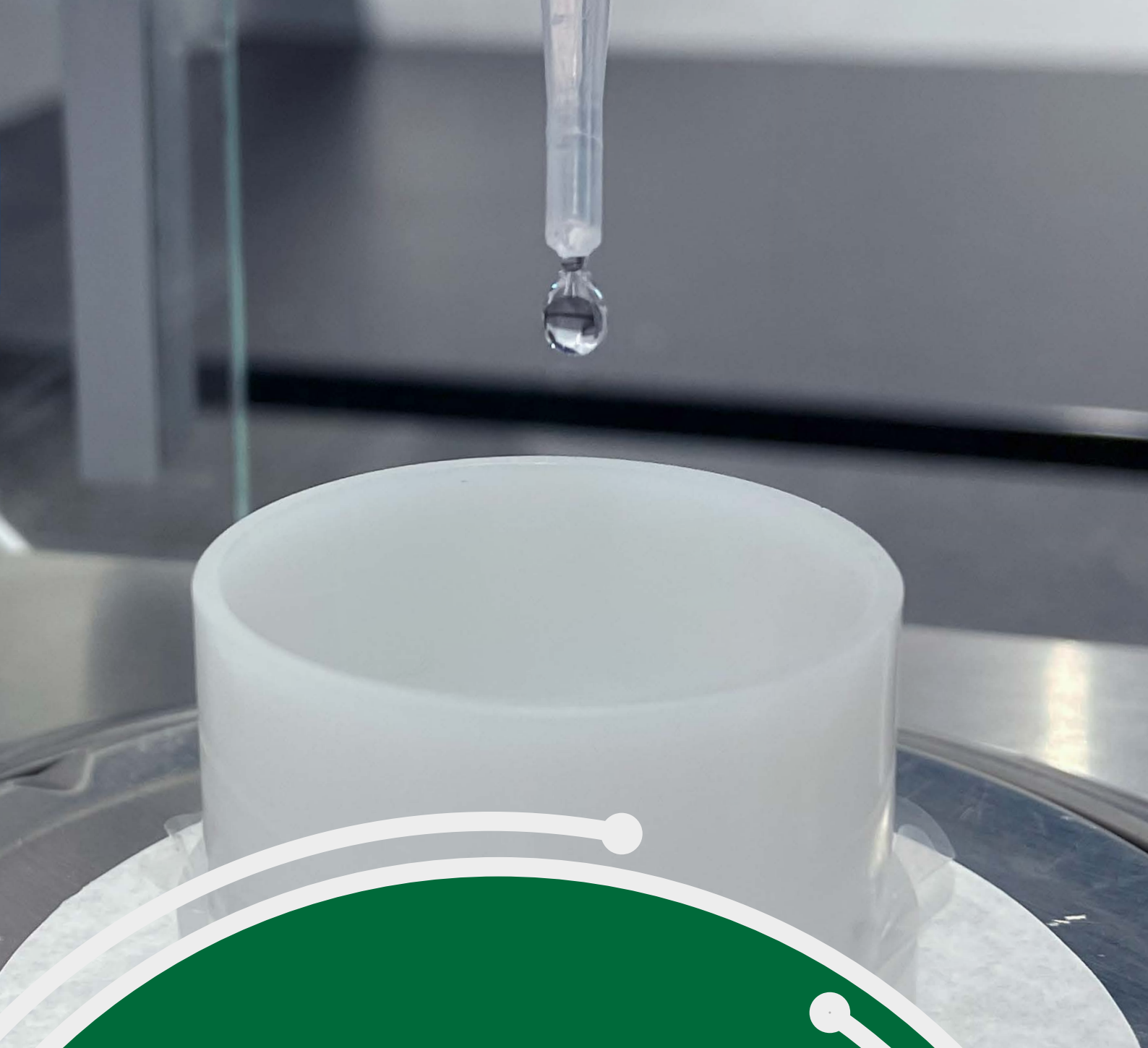
Item No.	Description	Diameter	Packaging
Grinding Belt for MBG01			
GR-0193	Grinding Belt 200x1750 Cubitron (Al2O3) K60	Belt	1 pcs.
GR-0194	Grinding Belt 200x1750 Zirconia K60	Belt	1 pcs.
GR-0283	Grinding Belt 200x1750 Cubitron (Al2O3) K36	Belt	1 pcs.
GR-0284	Grinding Belt 200x1750 Zirconia K40	Belt	1 pcs.
Grinding Discs for MDG02			
GR-0259	Grinding Disc Al2O3 K40	300 mm	50 pcs.
GR-0218	Grinding Disc Al2O3 K60	300 mm	50 pcs.
GR-0262	Grinding Disc Zirconia K40	300 mm	50 pcs.
GR-0263	Grinding Disc Zirconia K60	300 mm	50 pcs.
GR-0281	Grinding Disc Silicon carbide K40	300 mm	50 pcs.
GR-0282	Grinding Disc Silicon carbide K60	300 mm	50 pcs.
Grinding Discs for MLG11			
GR-0258	Grinding Disc Al2O3 K40	250 mm	50 pcs.
GR-0237	Grinding Disc Al2O3 K60	250 mm	50 pcs.
GR-0261	Grinding Disc Zirconia K40	250 mm	50 pcs.
GR-0260	Grinding Disc Zirconia K60	250 mm	50 pcs.
GR-0279	Grinding Disc Silicon carbide K40	250 mm	50 pcs.
GR-0280	Grinding Disc Silicon carbide K60	250 mm	50 pcs.

Metal Sample Holder

Metal sample holders enable easy and safe grinding of samples on manual grinding machines. Depending on the material of the samples, magnetic or mechanical holders can be used.



Item No.	Description
GR-0288	Magnetic sample holder for VANEOX ® grinders
GR-0289	Mechanical sample holder for VANEOX ® grinders
GR-0290	Round rod sample holder for VANEOX ® grinders



Liquid Analysis

To safely measure liquids and loose powders using X-ray fluorescence analysis (XRF), special sample cups and films have to be used.

The size and shape of the sample cups are determined by the analytical spectrometer, whereas the film has to fit the sample and elements that need to be analysed.

FLUXANA offers a large portfolio of cups and films for most applications and spectrometers.

Sample Cups

FLUXANA's newly optimized sample cups are designed for use in various XRF spectrometers. All cups have been optimized using latest production techniques to guarantee easy sample preparation, high repeatability and improved sustainability.



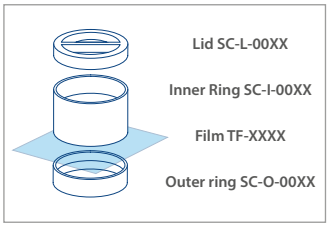
Features of the new SC-I-00XX sample cups:



- Each part of the cup can be ordered and are packed separately

- Guaranteed highest FLUXANA® quality „Made in Germany"

MADE IN GERMANY

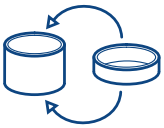


Easy to prepare



- Lid with two ventilation holes, also suitable for automatic grippers

- The ring can also be used at the top (instead of the lid)





- Special injection production saves approx. 20% material and prevents sharp edges



Guaranteed FLUXANA® quality with the blue lid

Inner ring	Description	Old Item No.	Outer ring	Lid	OD (mm)	ID (mm)	H (mm)
SC-I-0001	32mm e.g. for Spectro®, Bruker®, Rigaku®, Thermo®, Hitachi®, Universal	SC-3332	SC-O-0001	SC-L-0001	31	24	21,5
SC-I-0002	32mm especially for Spectro® XEPOS und X-LAB	SC-4332 (ring + lid) SC-4232 (two rings)	SC-O-0002	SC-L-0002	31,8	26,4	21
SC-I-0003	31mm e.g. for Spectro®, Bruker®, Rigaku®, Thermo®, Hitachi®, Universal	SC-4331 (ring + lid) SC-4231 (two rings) SC-4131 (ring + fixed lid)	SC-O-0001	SC-L-0001	31	24	23,1
SC-I-0011	40mm e.g. for Spectro®, Bruker®, Rigaku®, Thermo®, Hitachi®, Universal	SC-3340T	SC-O-0011	SC-L-0011	39,9	34,2	29,2
SC-I-0012	40mm e.g. for Thermo® Optimix, Spectro®, Bruker®, Rigaku®, Hitachi®, Universal	SC-3340	SC-O-0011	SC-L-0011	39,9	34,2	20,5
SC-I-0013	40mm e.g. for Spectro®, Bruker®, Rigaku®, Thermo®, Hitachi®, Universal	SC-4340 (ring + lid) SC-4240 (two rings) SC-4140 (ring + fixed lid)	SC-O-0011	SC-L-0011	39,9	34,2	24,4
SC-I-0021	35mm especially for Malvern Panalytical®	SC-3335 SC-4335	SC-O-0021	SC-L-0021	34,2	28,3	28,7
SC-I-0031	45mm especially for Malvern Panalytical®	SC-3345/SC-3345-H SC-4345	SC-O-0031	SC-L-0031	44,9	37,8	32,5

Other models available:

Item No.	Description	OD (mm)	ID (mm)	H (mm)
SC-138	for Rigaku®	36	33	26
SC-3351	51 mm universal	51	44	41
SC-7332cap	Cap for Hitachi®/Oxford®	32	28	36
SC-7332inner	Inner for Hitachi®/Oxford®	-	-	-
SC-8047	for Horiba® single open ended	42	36	19

Thin Films

Our thin films are available in different thicknesses and materials to enable safe analysis of different liquids in XRF. The flexible selection of film shapes allows our customers to find the perfect way to prepare their sample.





- Save time and reduce waste with perfectly fitting circle cutouts

- Available as rolls, squares or circles in different diameters





- Ask us to find out the fitting material and thickness for your application

- Guaranteed highest FLUXANA® quality „Made in Germany“

MADE IN GERMANY



Guaranteed FLUXANA® quality
„Made in Germany“

Item No.	Material / Thickness	Application	Commonly used for
TF-MY25 (formerly TF-125)	Mylar® 2,5µm	Petrol, diesel, solvents (unsuitable for acids/bases)	ED XRF
TF-MY35 (formerly TF-135)	Mylar® 3,5µm	Petrol, diesel, solvents (unsuitable for acids/bases)	ED/WD XRF
TF-MY60 (formerly TF-160)	Mylar® 6,0µm	Petrol, diesel, solvents (unsuitable for acids/bases)	ED/WD XRF
TF-PP40 (formerly TF-240)	Polypropylene 4,0µm	Loose powders, diluted acids (unsuitable for gasoline/diesel)	ED XRF
TF-PP60 (formerly TF-260)	Polypropylene 6,0µm	Loose powders, diluted acids (unsuitable for gasoline/diesel)	ED/WD XRF
TF-PP12 (formerly TF-212)	Polypropylene 12,0µm	Loose powders, diluted acids (unsuitable for gasoline/diesel)	ED/WD XRF
TF-KP75 (formerly TF-475)	Kapton® 7,5µm*	Aromatic hydrocarbons	ED/WD XRF
TF-PX30 (formerly TF-630)	PETREOX® 3,0µm	Petrol, diesel, solvents (unsuitable for acids/bases)	ED/WD XRF

Form	Diameter	Addition to article number
Roll	76 mm x 91 m	-roll (e.g. TF-PP40-roll)
Circle for 32 mm cups	54 mm x 400 pcs.	-215 (e.g. TF-PP40-215)
Circle for 35/40 mm cups	64 mm x 400 pcs.	-255 (e.g. TF-PP40-255)
Circle for 45 mm cups	76 mm x 400 pcs.	-300 (e.g. TF-PP40-300)
Square	82 mm x 400 pcs.	-345 (e.g. TF-PP40-345)

*Please note that export regulations apply to Kapton® films. Please contact us for further information.

Sample Cup Preparation Tool

The WZ-0001 tool is a simple solution for the preparation of sample cups with films. It reduces the probability of errors and makes the preparation a lot easier.



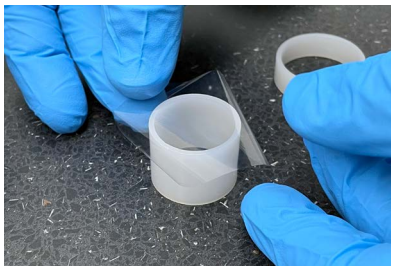
Prepared Cups

If you want to save time in sample preparation, use ready-to-use cups with film. Before delivery, the cups undergo strict quality control.



Your advantages:

- no time-consuming preparation
- no loss of material through error
- assured quality
- high repeatability



Professionally prepared cups offer high quality and repeatability

How to combine the article numbers:

1. Pick your cup, e.g. **SC-I-0001**
2. Pick your film e.g. Polypropylen 6,0µm **PP60**
3. Combine the numbers: **SC-I-0001-PP60**
4. Select a **matching lid** if necessary

Don‘t hesitate to ask us for a quotation or our recommendation for suitable cup and film combinations.

Special sample holder for gemstones

The SC-FX-1002 sample holder was designed for the analysis of gemstones. It can be used to mount gemstones in 20mm, 32 mm and 40 mm cups for analysis with X-ray fluorescence analysis.





Reference Materials

Reference materials are used for the calibration and quality control of XRF spectrometers.

Finding the right standards for an application is a difficult task due to the wide range of internationally available materials.

FLUXANA® produces its own reference materials and with FLUXearch® - the fastest search database for standards - we offer a great solution for easy findings.

FLUXearch® CRM Database

FLUXearch® is a comprehensive database with over 28,000 reference materials for XRF, OES, ICP and combustion analyses. It is updated and extended daily to provide you with reliable information and current products.

FLUXearch
www.fluxearch.com

Step 1: Login

Visit **www.fluxearch.com** and register free-of-charge with the **"Register here"** button. You can use the database immediately after successful registration with your E-mail address and password.

Step 2: Search

The FLUXearch® search mask offers many possibilities for searching for reference materials. The following points can be found from the **"Search by Composition"** menu item:

Search by element: Select the desired elements and concentrations in percentage or ppm; the database shows a list of the available reference materials.

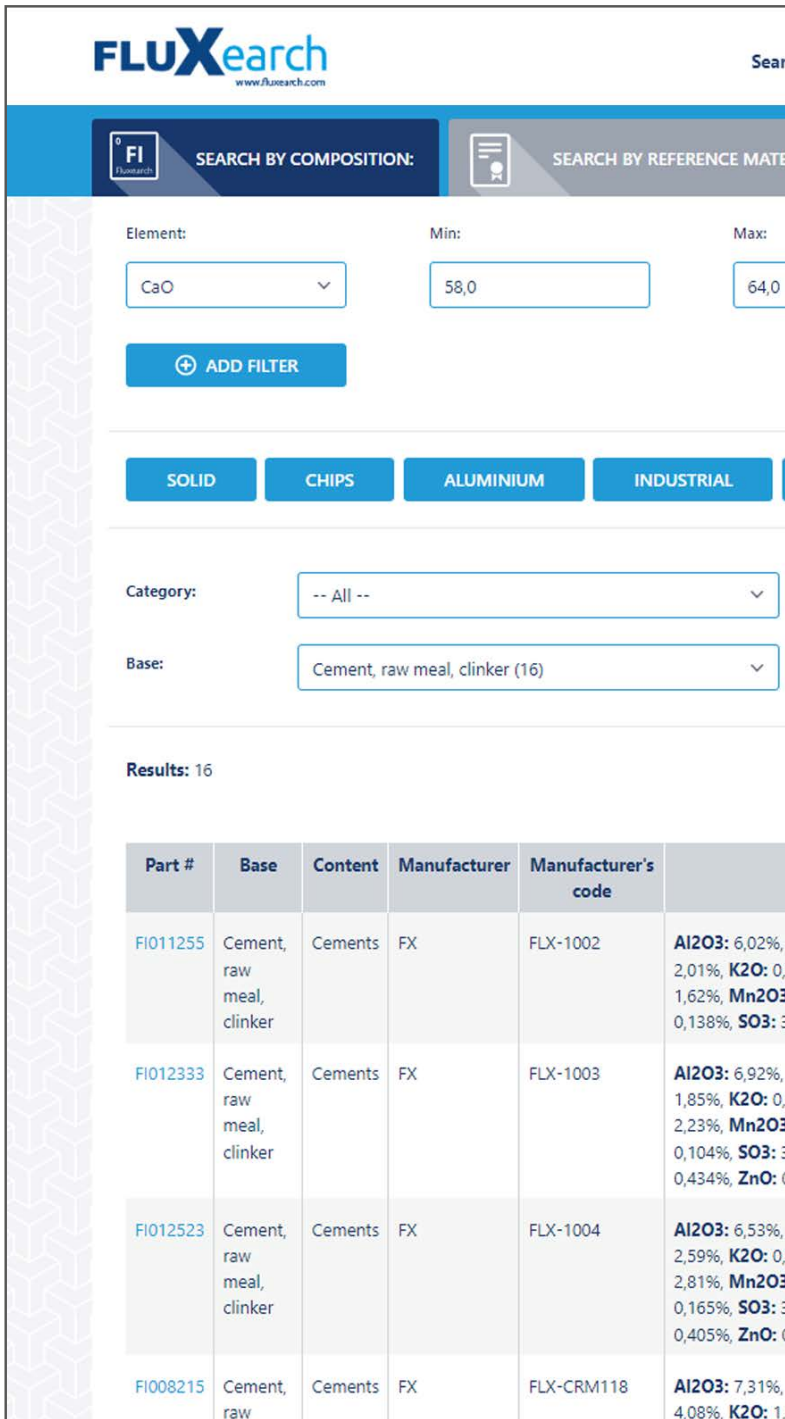
Category: classification into different categories, e.g. calibration set, aluminium, chips, solids and more

Base: filtered according to the base material, e.g., ores, cements, slags and many more.

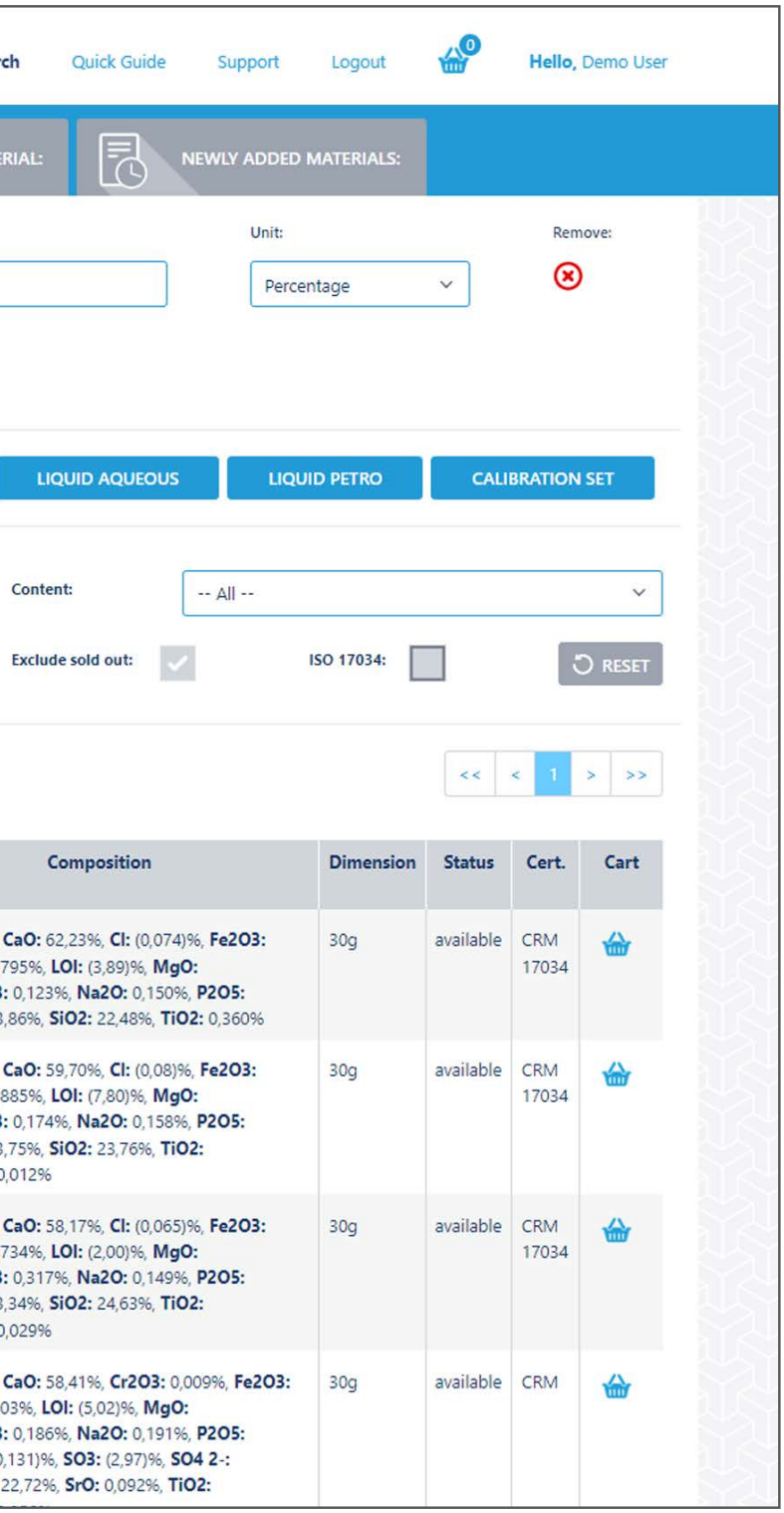
Content: filtered according to the content of the materials, e.g., iron ores, aluminium ores, lithium ores, etc.

As an alternative, it is possible to use the **"Search by Reference Material"** menu item to search for a given product directly. Here, it is also possible to search for a product number, the manufacturer code or by using a full-text search.

You can also search for reference materials that are **ISO 17034 accredited** or **sold out** by clicking on the corresponding buttons.



The Fastest Database for Reference Materials



Step 3: Choose

Click on the shopping cart icon next to the desired product, and it is added to your shopping cart list.

You can now continue to searching for and adding other products or complete the search and view the items in your shopping cart.

Step 4: Request

In your shopping cart, which can be found in the upper right corner of the page, it is possible to view the products that have been added. If necessary, change the **"Quantity"** of an item or remove it from the shopping cart by clicking on the red cross under **"Remove."**

An non-binding offer can be requested by clicking on **"Request for Quote."** In some cases, you will be asked to enter further contact data that we require to fulfil the request.

After this, you will receive a confirmation of your request. The FLUXANA® team will then reply with a non-binding offer as soon as possible.

Do you need support?

Our experienced team is pleased to help in your search for reference materials and to competently answer your questions. Please let us know if you have any problems with the search or with the data in FLUXearch®.

Contact us by clicking on **"Support"** on the top.

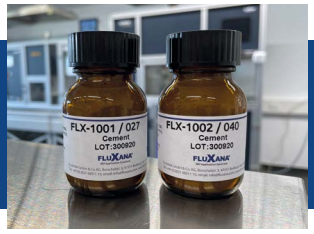
FLUXANA® Accreditation 17034

FLUXANA® is an accredited manufacturer of reference materials according to DIN EN ISO 17034:2017.

Find more information under: **www.fluxana.com/17034**

FLUXANA® Reference Materials

FLUXANA® has many years of experience in producing certified reference materials of the highest quality for the calibration and validation of your X-ray fluorescence spectrometer. Our product range includes cements, limestones, refractories and more.



On our homepage **www.fluxana.de** you can recognize the reference materials produced under accredited conditions by this symbol: . Here you can also download documents such as safety data sheets, proficiency test reports and certificates.

List reference materials

Cements: = Accredited according to DIN EN ISO 17034: 2017

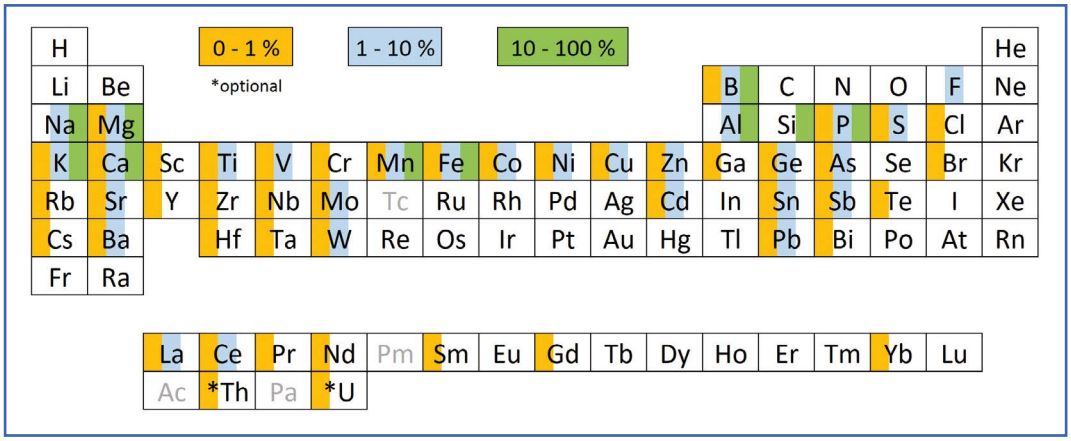
Article	Content	Accreditation	MSDS	Report	Certificate
FLX-1001 Cement	Al_2O_3, BaO, CaO, Cr_2O_3, Fe_2O_3, K_2O, MgO, Mn_2O_3, Na_2O, P_2O_5, SiO_2, SO_3, SrO, TiO_2, V_2O_5, ZnO		MSDS	PT-REPORT	CERTIFICATE
FLX-1002 Cement	Al_2O_3, CaO, Cr_2O_3, Fe_2O_3, K_2O, MgO, Mn_2O_3, Na_2O, P_2O_5, Si_2, SO_3, TiO_2		MSDS	PT-REPORT	CERTIFICATE

All certified reference materials by FLUXANA® can also be found in our database at **www.fluxearch.com**.

XRFMON® Drift monitors

FLUXANA is a manufacturer of drift monitors. To simplify drift monitoring and correction, FLUXANA has developed the universal drift monitor set XRFMON® FLX-DC. It consists of 6 samples that cover almost the entire periodic table.





This table shows which elements are covered as low and high samples. With this set, you are able to set up drift monitoring for 99% of all common applications. Further details on the set can be found at **www.fluxearch.com** under the manufacturer code: **FLX-DC**.

Over 150 additional monitor glasses available on request.

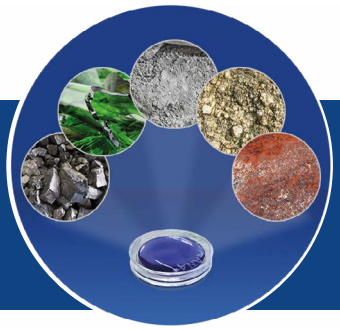


Laboratory Services

The constant expansion and improvement of our services is a decisive success factor for FLUXANA®.

Thanks to our extensive analysis laboratory and our own production of sample preparation machines, we are well equipped for all problem solutions and can support our customers in all areas.

XRF Commercial Analysis



FLUXANA® can draw on a wealth of experience in terms of XRF analysis. Utilisation of both energy dispersive XRF (EDXRF) and wavelength dispersive XRF (WDXRF) ensures full coverage of all of the possibilities provided by this technology. The laboratory work of FLUXANA® is in accordance with DIN EN ISO/IEC 17025:2018.

A list of all accredited and non-accredited analyses that we offer can be found at **www.fluxana.com/products/commercial-analysis/test-methods**

List test methods

Further information on accreditation and our accreditation certificate can be found at: **www.fluxana.com/17025**

List of chemical analysis by FLUXANA®

Accredited chemical analysis

Norm	Material	Description	FLUXANA Art.-No.
ISO 29581-2:2010-03	cement, raw meal, clinker	Accredited chemical analysis according to DIN EN ISO/IEC 17025 of cement, raw meal, clinker (XRF) in accordance with ISO 29581-2, FLUXANA specification AA-0001 incl. sample preparation with analysis report	DL-0003-AA-0001
DIN 51001:2003-08	oxidic raw materials	Accredited chemical analysis according to DIN EN ISO/IEC 17025 of oxidic raw materials (XRF) in accordance with DIN 51001, FLUXANA specification AA-0002 incl. sample preparation with analysis report	DL-0003-AA-0002
FXHS-0001:2024-07	slags	Accredited chemical analysis according DIN EN ISO/IEC 17025 of slags (XRF) in accordance with in-house-process FXHS-0001, FLUXANA specification AA-0003 incl. sample	DL-0003-AA-0003

Proficiency Tests



FLUXANA® is an international provider of proficiency testing. Based on DIN EN ISO/IEC 17043, we regularly offer proficiency testing for X-ray fluorescence analysis.

By participating in proficiency testing, it is possible to compare your analytical methods and test procedures with other international laboratories. To do this, we regularly have various proficiency tests for typical X-ray fluorescence analyses (XRF) in our program. In keeping with state-of-the-art technology, we apply „robust statistics“ for our evaluation method.

Professional Proficiency Test Evaluation

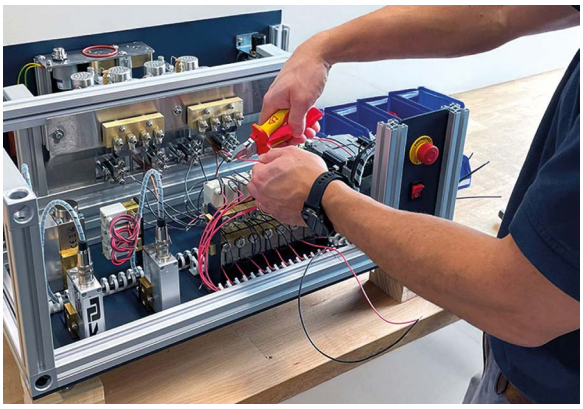
We offer professional evaluatations to customers who perform proficiency tests. Our evaluations come with „robust statistics“ in compliance with DIN 38402-45 and ISO/TS 20612.

Please visit our website under Products/Proficiency Tests for information on current proficiency tests.

Technical Service

Customers service is our top priority. All customers receive a comprehensive installation, maintenance and repair service. Especially the use of sample preparation in the customer laboratory repeatedly raises questions. The FLUXANA® team of experts is here to give you advice and support either per mail, telephone, online or in person on site.

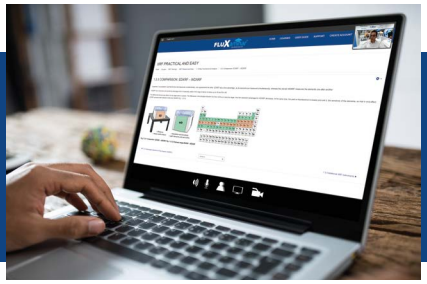
Maintenance
To ensure the proper functioning and optimal operation of our machines, FLUXANA® offers maintenance and maintenance contracts. The maintenance is performed by qualified service technicians.



FLUXaminar® E-Learning

FLUXaminar® is an extensive XRF e-learning platform by FLUXANA®. It allows users worldwide to access information on XRF related topics at any time.

www.fluxaminar.com



Item Nr.	Description	Language
	XRF Training Courses	
DL-FXEL-0012	XRF Training course "XRF PRACTICAL AND EASY"	EN
DL-FXEL-0013	XRF Training course "RFA in der Praxis"	DE
DL-FXEL-0023	Statistics in XRF	EN
DL-FXEL-0024	Statistik in der RFA	DE
DL-FXEL-0025	XRF Training course "XRF - Theory and Practice 2024"	EN
DL-FXEL-0026	XRF Training course "RFA - Theorie und Praxis 2024"	DE
	FLUXert Calibration Courses	
DL-FXEL-0015	FLUXert Calibration Course	EN
DL-FXEL-0014	FLUXert Kalibrierkurs	DE
	XRF Software Training Courses	
DL-FXEL-0016	Supermini 200 Calibration Course	EN
DL-FXEL-0019	Supermini 200 Kalibrierkurs	DE
DL-FXEL-0008	OXSAS Calibration Course	EN
DL-FXEL-0018	OXSAS Kalibrierkurs	DE
DL-FXEL-0021	Cours d'étalonnage OXSAS	FR
DL-FXEL-0009	UniQuant integrated in OXSAS Calibration Course	EN
DL-FXEL-0017	UniQuant integrated in OXSAS Kalibrierkurs	DE
DL-FXEL-0022	Cours d'étalonnage UniQuant intégré dans OXSAS	FR
DL-FXEL-0011	UniQuant 5.0 Calibration Course	EN
DL-FXEL-0010	UniQuantED 6.0 Calibration Course	EN

FLUXANA®

XRF Application Solutions

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Ust-IdNr.: DE 814692564, Steuer-Nr. 116/5755/0442
Finanzamt Kleve

Official agent