

FLUXANA

Your supplier for
XRF Application Solutions

HD

ELEKTRONIK
Fusion machines

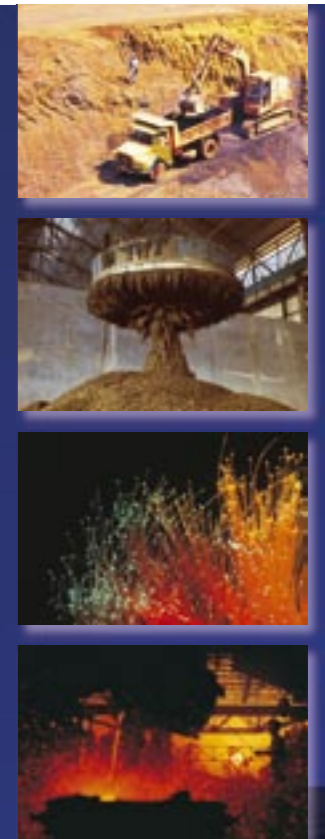
Application packages

We offer ready to go **calibration packages** for x-ray fluorescence analysis.

Our analytical team has developed special calibration packages for:

- Cement industry
- Raw materials
- Glass industry
- Steel industry

We install the **complete analytical method**, within a few days, on the XRF instrument in your laboratory.



FLUXANA GmbH & Co. KG
Sommerdeich 22, D-47533 Kleve, Germany
Tel.: +49 (0) 2821 97 38 75
Fax: +49 (0) 2821 97 38 76
E-mail: info@fluxana.de
Web: www.fluxana.com
Amtsgericht Kleve: HR-A 2935, HR-B 8211
Ust-IdNr.: DE 814692564, Steuer-Nr. 116/5707/0442
Finanzamt Kleve

In cooperation with:
HD Elektronik und Elektrotechnik GmbH
Sommerdeich 22, D-47533 Kleve, Germany
Tel.: +49 (0) 2821 148 10
Fax: +49 (0) 2821 148 09
E-mail: hde@hdelektronik.de
Web: www.hdelektronik.de
Amtsgericht Kleve: HR-B 2162
Ust-IdNr.: DE 812941185, Steuer-Nr. 116/5707/1869
Finanzamt Kleve

Official agent

Periodic Table of Fusion

Z		A		Symbol		Element		Ox>El		Oxid		El>Ox																	
1	1.008	2	4.003	H	He	Hydrogen	Helium																						
3	6.941	4	9.012	Li	Be	Lithium	Beryllium																						
11	22.990	12	24.305	Na	Mg	Sodium	Magnesium																						
19	39.098	20	40.078	K	Ca	Potassium	Calcium																						
21	44.956	22	47.88	Sc	Ti	Scandium	Titanium																						
23	50.996	24	51.996	V	Cr	Vanadium	Chromium																						
25	54.938	26	55.847	Mn	Fe	Manganese	Iron																						
27	58.933	28	58.69	Co	Ni	Cobalt	Nickel																						
29	63.546	30	65.39	Cu	Zn	Copper	Zinc																						
31	69.723	32	72.61	Ga	Ge	Gallium	Germanium																						
33	74.922	34	78.96	As	Se	Arsenic	Selenium																						
35	79.904	36	83.80	Br	Kr	Bromine	Krypton																						
37	85.468	38	87.62	Rb	Sr	Rubidium	Strontium																						
39	88.905	40	91.224	Y	Zr	Yttrium	Zirconium																						
41	92.906	42	95.940	Nb	Mo	Niobium	Molybdenum																						
43	98.906	44	101.07	Tc	Ru	Technetium	Ruthenium																						
45	101.07	46	106.42	Rh	Pd	Rhodium	Palladium																						
47	107.868	48	112.411	Ag	Cd	Silver	Cadmium																						
49	114.82	50	118.71	In	Sn	Indium	Tin																						
51	121.75	52	127.60	Sb	Te	Antimony	Tellurium																						
53	126.904	54	131.29	I	Xe	Iodine	Xenon																						
55	132.905	56	137.327	Cs	Ba	Cesium	Barium																						
72	178.49	73	180.948	Hf	Ta	Hafnium	Tantalum																						
74	183.85	75	186.207	W	Re	Tungsten	Rhenium																						
76	190.2	77	192.22	Os	Ir	Osmium	Iridium																						
78	195.08	79	196.967	Pt	Au	Platinum	Gold																						
80	200.59	81	204.383	Hg	Tl	Mercury	Thallium																						
82	207.19	83	208.980	Pb	Bi	Lead	Bismuth																						
84	208.980	85	209.987	Po	At	Polonium	Astatine																						
86	222.018	87	223.02	Rn	Fr	Radon	Francium																						
88	226.025	89	227.033	Ra	Ac	Radium	Actinium																						
57	138.906	58	140.115	59	140.908	60	144.24	61	146.915	62	150.36	63	151.965	64	157.25	65	158.925	66	162.50	67	164.930	68	167.26	69	168.934	70	173.04	71	174.967
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu															
Lanthanum	Cerium	Praseodymium	Neodymium	Promethium	Samarium	Europium	Gadolinium	Terbium	Dysprosium	Holmium	Erbium	Thulium	Ytterbium	Lutetium															
89	227.033	90	232.038	91	231.036	92	238.029	93	237.048	94	244.064	95	243.061	96	247.07	97	247.07	98	251.079	99	252.083	100	257.103	101	258.106	102	259.108	103	260.105
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr															
Actinium	Thorium	Protactinium	Uranium	Neptunium	Plutonium	Americium	Curium	Berkelium	Californium	Einsteinium	Fermium	Mendelevium	Nobelium	Lawrencium															

Advantages to developing your application with us:

1. **No development time** in your laboratory
2. **Cost saving**
3. Fast introduction of **new methods**
4. **Easy calculation** of costs
5. **Guarantee** on reproducibility and accuracy
6. Calibration with **highest quality**
7. Newcomers become **experts** quickly
8. Guaranteed **after sales support**



Vulcan 4MA

Typical content of a package:

- Sample **preparation tools**: fusion machine, mill, press
- **Chemicals**: flux, binder, grinding agent
- 1 set of **calibration standards** ready for measurement
- 1 set of **drift correction samples**
- 1 set of **validation samples**
- Installation of **measuring program** on the XRF instrument in your laboratory
- **Calibrating on site**
- **Validation** with your own samples
- **Training** of your laboratory staff
- **Customer acceptance**
- **After sales support** from our team of XRF experts
- Contribution to our **round robin tests**
- **Cross check** of routine results with our application laboratory



Press



Application packages

FLUXANA has developed fusion applications for the following products. We will be pleased to help you set up your own high precision fusion method.

Ready to go application packages:

Article-No.:	Application
CS- 0001-K	FLUXANA Calibration Cement, Clinker, Raw Meal
CS- 0001/7-K	FLUXANA Calibration Cement + Raw Materials etc.
CS- 0007-K	FLUXANA Calibration OXIDES Basic
CS- 0005-K	FLUXANA Calibration OXIDES Advanced
CS- 0016-K	FLUXANA Calibration Glass Industry
CS- 0003e/b/c/f-K	FLUXANA Calibration Ferro Alloys FeMo, FeMn, FeSi, FeSiMn
CS- 0003d-K	FLUXANA Calibration Ferro Alloys FeCr
CS- 0003e-K	FLUXANA Calibration Ferro Alloys FeCr, FeV,...
CS- 0009	FLUXANA Custom calibration to your specification
CS- 0017-K	FLUXANA Calibration Slags

All standard calibrations are developed in our own application laboratory. We will be pleased to accept your test samples for evaluation in our laboratory and can work together with you to develop new methods to transfer to install in your laboratory.

Ask for a free presentation in our lab whenever you like.

Drift monitors

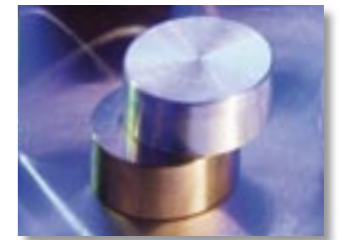
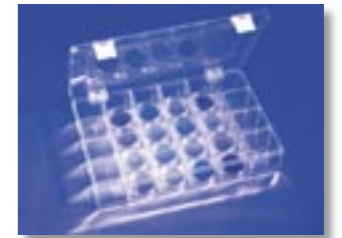
After establishing a calibration on an x-ray fluorescence instrument it is desirable to use it for as long as possible without adjustment. This wouldn't be a problem if the instrument did not change in sensitivity over time but this is not the case. The x-ray tube loses intensity and the detector loses sensitivity. Service work such as changing an x-ray tube or a crystal will effect the sensitivity also.

To use an existing calibration over a long time the change in sensitivity for an element has to be detected by a drift monitor and then used to correct for it. Such samples are called drift monitors, monitor samples, reference samples or monitor standards.

FLUXANA calibrations, installed in many customer laboratories contain a special selection of drift monitors to guarantee excellent long term stability.

These monitor samples have been designed specifically for use in our customer applications.

We develop and manufacture our own monitor samples, from customer feedback and to specific requirements.



Examples for FLUXANA monitor glasses:

FLX-C1, C3, Z1, Z2, Z3	Cement, raw materials cement industry, glass industry
FLX-S13	Multi - element X-ray calibration
FLX-S6M	X-ray calibration
FLX-SP1, SP2	Raw materials, ores

