

PERIODIC TABLE OF ELEMENTS
(Characteristic X-Ray energy table)

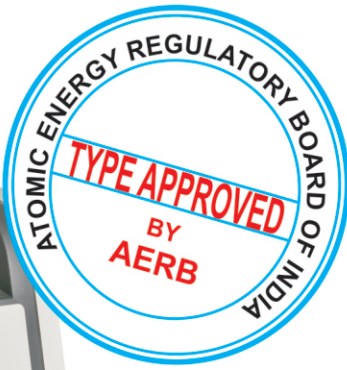
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18																																																						
IA		IIA		IIIB		IVB		VB		VIB		VIIB		VIII		VIII		VIII		VIII		VIII		IIIB		IIIA		IVA		VA		VIA		VIIA		VIIIA																																																				
Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen	Symbol	Name	Electronegativity	Hydrogen																																																					
1	2.1	1+	1+	2	1.0	1+	1+	3	1.0	1+	1+	4	1.0	1+	1+	5	1.0	1+	1+	6	1.0	1+	1+	7	1.0	1+	1+	8	1.0	1+	1+	9	1.0	1+	1+	10	1.0	1+	1+	11	1.0	1+	1+	12	1.0	1+	1+	13	1.0	1+	1+	14	1.0	1+	1+	15	1.0	1+	1+	16	1.0	1+	1+	17	1.0	1+	1+	18	1.0	1+	1+																	
H1	Li3	Be4	B5	C6	N7	O8	F9	Ne10	Na11	Mg12	Al13	Si14	P15	S16	Cl17	Ar18	K19	Ca20	Sc21	Ti22	V23	Cr24	Mn25	Fe26	Co27	Ni28	Cu29	Zn30	Ga31	Ge32	As33	Se34	Br35	Kr36	Rb37	Sr38	Y39	Zr40	Nb41	Mo42	Tc43	Ru44	Rh45	Pd46	Ag47	Cd48	In49	Sn50	Sb51	Te52	I53	Xe54	Cs55	Ba56	La57	Hf72	Ta73	W74	Re75	Os76	Ir77	Pt78	Au79	Hg80	Tl81	Pb82	Bi83	Po84	At85	Rn86	Fr87	Ra88	Ac89	Th90	Pa91	U92	Np93	Pu94	Am95	Cm96	Bk97	Cf98	Es99	Fm100	Md101	No102	Lr103	Uuo118

Legend

- Alkali Metals
- Alkaline Earth Metals
- Transition Metals
- Metals
- Nonmetals
- Halogenes
- Noble Gases
- Lanthanoids and actinoids

6	7
Lanthanoids Ce58, Pr59, Nd60, Pm61, Sm62, Eu63, Gd64, Tb65, Dy66, Ho67, Er68, Tm69, Yb70, Lu71	Actinoids Th90, Pa91, U92, Np93, Pu94, Am95, Cm96, Bk97, Cf98, Es99, Fm100, Md101, No102, Lr103

GOLD PURITY ANALYSER



EDX 3600
WITH AUTOMATIC MULTI COLLIMATORS

AFRA INTERNATIONAL FZC
 P.O.Box. 8742, Sharjah Airport Free Zone
 (SAIF Zone)Sharjah, United Arab Emirates.
 Dubai Office : P.O Box : 233473, Industrial Area 4, Dubai, UAE.
 Tel: 00971 4 267 6675, Fax : 00971 4 267 6674
 Mob: 0559021456, Email: xrf@afraprintequip.com
 Web: www.afraprintequip.com

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 SYRIA, JORDAN, INDIA, NEPAL, SRILANKA

Redlands
 JEWELLERY EQUIPMENTS

EDX 3600

WITH AUTOMATIC MULTI COLLIMATORS

GOLD PURITY ANALYSER



HV Generator



Made in USA

X-ray tube



Made in UK

Silicon Drift Detector



Made in USA

Applications and Features

Redlands offers you EDX 3600 With Automatic Multi Collimator Gold Purity Analyser for a variety of applications. High precision, repeatability, non destructive analysis and multi collimator are the highlights of EDX 3600. Its precision and ease of operation make it the most favoured purity analysis instrument in the jewellery Industry. The instrument is interfaced to a computer through LAN port and uses an extremely user friendly Windows based software which an operator can learn to operate the machine in a few hours for fast and easy analysis. No need of daily calibration for the machine.

Application Fields

- Retail Jewellery
- Hallmarking centres
- Buying old gold
- Quality control
- Gold refinery
- Iridium detection

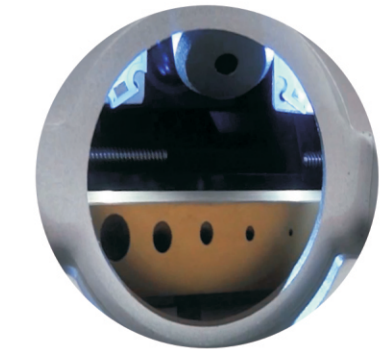
Configurations

- Mobile sample platform
- Signal - to - Noise Enhancer
- Silicon Drift Detector
- Digital multi - channel analysis system
- High power X-ray tube

Operation Method

- step1. Place the ornament
2. Close the door
3. Open EDXRF software
4. Wait for 30 seconds*
5. Exact Result

- No Daily machine calibration
- No Complicated sample focusing



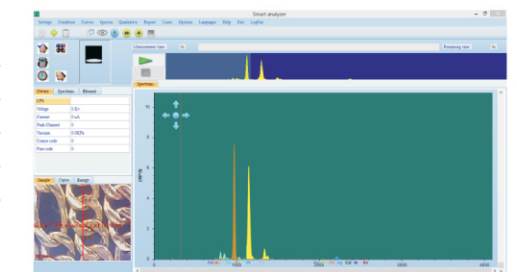
Multi Collimators (0.1- 8mm dia)



Scanning Area

Technical Specifications

X-ray Source	X-ray Tube Ti or W cathode
HV Generator	50kv adjustable in 200V steps Current adjustable in 1µA steps
Detector	SDD - Silicon Drift Detector
Detection Range	S(Z=16) to U(Z=92)
Measurement Range	0.1 - 99.99 %
Measurement Time	30 - 300 seconds
Measurement Precision	± 0.07% In homogeneously melted Sample (Accuracy levels in comparison with fire assay result only)
Collimators and Filters	8 Collimators (0.1- 8mm φ) and 5 Filters automatically switched as per requirement
Working Temperature	15 - 25°C
Relative Humidity	0 - 95%
System Requirement	External PC with Windows XP / Windows 7 (32bit)
Software	Windows Based
Power Requirement	230V - 50Hz
Power Consumption	100W
Instrument Dimension	550 mm x 410mm x 320mm
Sample Chamber	439mm x 300mm x 96mm
Weight	45Kg



spectrum

Name	Concentration(%)	#
Gold	91.734(%)	
Silver	3.312(%)	
Copper	3.402(%)	
Iridium	0.000(%)	
Rhodium	0.000(%)	
Iron	0.000(%)	
Zinc	1.020(%)	
Cobalt	0.000(%)	
Nickel	0.232(%)	
Palladium	0.000(%)	
Cadmium	0.000(%)	
Indium	0.000(%)	

Karat:22.017K

Result

* Minimum time of spectrometer to analyze the samples
Specifications and images are subject to change without notice