

Precious Metal Alloy Analyser



• **CHEKMET SORTER**

Fast non-destructive precious metal determination using semiconductor detector based handheld XRF technology

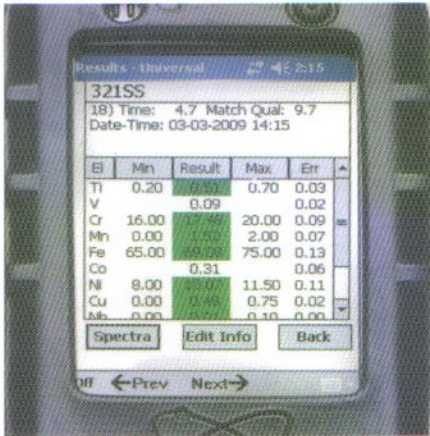
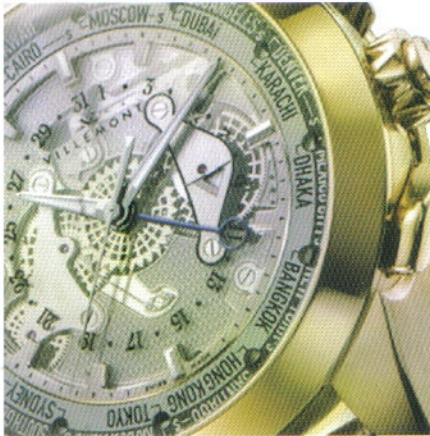
SORTER & TURBO, the handheld metal spectrometers are an important innovation in precious metals for fast, non-destructive and accurate measurements for Jewellery samples, bullion merchants, pawn shops and bank verification, large silver articles for hallmarking, precious scrap sorting and several other applications.

BRUKER, Germany breaks all the records in X-ray technology. The unique super speed components ensure breathtaking speed at high-sensitivity resolution – without sacrificing reliability and flexibility. These super speed solutions enable an unprecedented throughput in research and development. The highest performance can be achieved only with the most modern instruments. The superior count rates and highest resolution makes the unit five times faster than previous generations. The perfect beam homogeneity and highest spectral purity ensures unsurpassed accuracy. Such reliable results and error-free instrument operation is the key for success where only minimal training is required for operators for the best results. The best technology should be intuitive and instinctive to use. The bright display makes it easy to read in any lighting conditions. The touch screen means user can operate the unit with one finger.

The unit works under standard and universal Microsoft Windows. Built-in memory makes it possible to store thousands of spectra and millions of results safely with additional option for wireless Bluetooth connection as well as use of SD card.

The universal mode of operation automatically selects the appropriate alloy class and type of calibration. The standard calibration rapidly provides a traceable analysis of all precious metals and impurities. The unit comes pre-calibrated for all major Gold Alloys, Platinum Group Metals and other precious alloys.

For added flexibility and control, user can choose between numbers of calibration modes. In addition to the Empirical and FP (Fundamental Parameter) mode of calibrations, operator can also opt for Dual Mode, where assays are calculated from multiple sets of conditions to achieve the best possible detection limits. In Auto Mode, the analyzer is determines which calibration is the best for the sample in question. Quantum has winning combination for your entire precious needs.



CHEKMET

Precious Metal Alloy Analyser

Technical Specifications

Parameter	"SORTER"	"TURBO"
Excitation	High performance X-ray tube with Ag target	High performance X-ray tube with Ag target, optional other targets
High voltage	Max voltage 40kV, application optimized	Max voltage 40kV, application optimized
Detector	Peltier cooled, high performance SiPIN semiconductor detector	Peltier cooled, high energy resolution better than 145eV X-Flash silicon drift detector (SDD) with 10mm active area
Filter	Optional primary and secondary filters available depending upon application	Five position filter changer
Calibration	Pre-calibrated for standard precious alloys and related applications, upto 24 elements	Pre-calibrated for standard precious alloys and related applications, upto 24 elements
Display	Large wide display 240x320mm, 65,536 colors, backlit, touch screen	Large wide display 240x320mm, 65,536 colors, backlit, touch screen
Data Storage	256MB standard PDA memory, 512MB Memory Card allows for storage of thousands of spectra and millions of results, larger memory card are available	256MB standard PDA memory, 512MB Memory Card allows for storage of thousands of spectra and millions of results, larger memory card are available
Data Transfer	ActiveSync via USB interface or wireless Bluetooth connection, Memory Card	ActiveSync via USB interface or wireless Bluetooth connection, Memory Card
Power	2 rechargeable Li-on batteries with AC adaptor charger, 6-hours operating time per battery	2 rechargeable Li-on batteries with AC adaptor charger, 6-hours operating time per battery
Weight	2kg (4.49 lbs) with batteries, 1.77kg (3.9 lbs) base weight	2kg (4.49 lbs) with batteries, 1.77kg (3.9 lbs) base weight
Dimensions	30x10x28cm (LxWxH)	30x10x28cm (LxWxH)
Certification	CE, cTUVus, CSA	CE, cTUVus, CSA

Radiation Safety

SORTER & TURBO contains no radioactive material, which means much easier licensing requirements, safe transportation, no disposal restrictions with 100% safe for operator during handling and operations. The sample sensor checks that the sample is correctly placed for measurement before X-rays are generated and cover is applied to minimize X-ray exposure when measuring small part

All configurations and specifications are subject to change without notice

Manufactures

Bruker Elemental (Handheld XRF)

415 N.Qnay St., Suite 1
 Kennewick, WA 99336, USA.
 Tel : +1 (509) 1783 9850
 Fax : +1 (509) 1735 9696
 info@brukerhandheldxrf.com
 www.handheldxrf.com

Europe

Bruker Nano GmbH

Schwarzschildstraße 12
 12489 Berlin, Germany
 Tel : +49 (30) 67 09 90-0
 Fax +49 (30) 67 09 90-30
 info-ma@bruker-nano.de
 www.bruker-nano.de

Asian Business Partner

Quantum Equipment Co. Ltd.

301 , Rajshree Plaza, L.B.S. Marg,
 Ghatkopar (W), Mumbai-400 086, India
 Tel : +91 (22) 25005011/12
 Fax : +91 (22) 25005010
 quantum@karatmeter.com
 www.karatmeter.com