Specification for Handheld PMI based on X-ray fluoroscopy

1. Weight: Max. 1.6 kg with batteries. (+/-0.2 kg)

2.Dimensions: To be specified by the vendor

3. Power Source: Re-chargeable Battery packs with AC Adapter

4.Battery life: Min 16 hours (typical duty cycle) using bilt-in; optional multiple battery pack.

5.Excitation Source: SOLID STATE X-RAY

6.Safety of operation: An LED is illuminated on the probe whenever the X-ray tube is operable.

7. Detector: Silicon Drift detector with have high energy resolution and high count rate

And it shall have Peltier cooling.

8. Testing Environment: The PMI equipment shall be capable of giving reasonably accurate result

without any inert gas purging.

9. Operation: Trigger or start/ Stop Icon. With Optional control from external PC simple

push button operation to start the identification process / simple

touch -screen menus.

10.Operating Temperature: -10 C to + 50 C

11.Display Screen: Color, high resolution Backlit VGA touch screen LCD

12. Testing Modes: Alloy Grade Chemistry (Fundamental Parameters analysis) standard

Signature /Store/ Math Mode, Pass / Fail Sorting Mode Grade identification.

13. Analysis: Empirical chemistry libraries, Display of standard deviation,

14. Elements analyzed: Minimum 25 elements.

15. Operating System: Microsoft Windows others to be mentioned

16.Data Entry: Virtual touch screen keyboard, User programmable pull down lists

Integrated barcode reader

17. Data Transfer: RS-232 serial cable, Bluetooth wireless connection, wireless lan & USB

18.Data Handling: PC software utility easily exports data for use in common PC applications,

and provides data, Transfer of data to Spreadsheet QA/QC documentation

19.Data storage : Min.128 Mb standard memory. 20,000 test result with Spectra, upgrade to

>100,000 with optional 1GB flash card.

20.Enclosure Protection: Optical system Sealed against dust and contamination

21. Accessories to be Shielded belt holster, Locking shielded waterproof carrying case

Supplied with the unit: \} 110/220 VAC trickle charger/ adapter, Spare Li-ion battery pack with

holster, RS-232 PC data transfer cable, Integrated barcode reader, PC test stands. Bluetooth TM wireless communication. Wireless Printers and Portable GPS. Empirical chemistry libraries for Fe, Ni, Cu and Co alloys.

Rapid alloy identification, True multi-base capability. Rapid multi element analysis, Extensive library.

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