METALSCAN
1650
Portable Metals Analyzer

ARUN TECHNOLOGY

The **Metalscan 1650** is a revolutionary Portable Metals Analyzer designed to give rapid semi-quantitative analysis and grade identification of metals on-site.

Its use of advanced CCD array detector technology makes the **Metalscan 1650** extremely flexible. The spectrometer is small and is mounted in the hand-held probe eliminating the need for an expensive and fragile optical fibre coupling between the probe and controller.

The **Metalscan 1650** can be supplied as a single base or multibase instrument using the same hardware. Extra bases can be added without any hardware changes, making upgrades easy and low cost.

As a tool for checking the identity of scrap, for incoming and outgoing quality control in production, and for checking material grades in plant maintenance and repair, the **Metalscan 1650** is the right choice.

TECHNICAL DATA

FEATURES

- Simple and easy to use
- No setting up or adjustments
- No user calibration required
- Portable – weighs just 20kgs/44lbs
- Stable and robust
- Multi-base capability – Fe, Ni, Al, Cu, Zn, Ti, Mg, Co, Zr all available in the same instrument
- Low capital and operating costs
- Semi-quantitative analysis and grade identification
- Pass/Fail rapid sorting
- Analysis of ferrous and non-ferrous metals
- CCD array detector with 2048 sensors
- Integral LCD screen and printer

OPTICAL SYSTEM

- Miniature optical system in probe
- No fibre optic coupling
- Completely sealed against dust contamination
- Dispersion by holographic diffraction grating
- Wavelength range 185 to 410nm
- Linear CCD detector with 2048 sensors
- Unlimited element channels selected by software
- Automatic profiling by software

SPECTROMETER CONTROL AND DATA PROCESSING

- 486 SLC CPU, 4MB RAM, 33 MHz
- Windows 3.11
- Floppy disk drive 3.5", 1.44 MB
- Min 500MB IDE Hard Drive
- Full computer PC AT keyboard
- Integral 16 column impact printer
- Integral $1/4$ VGA LCD display
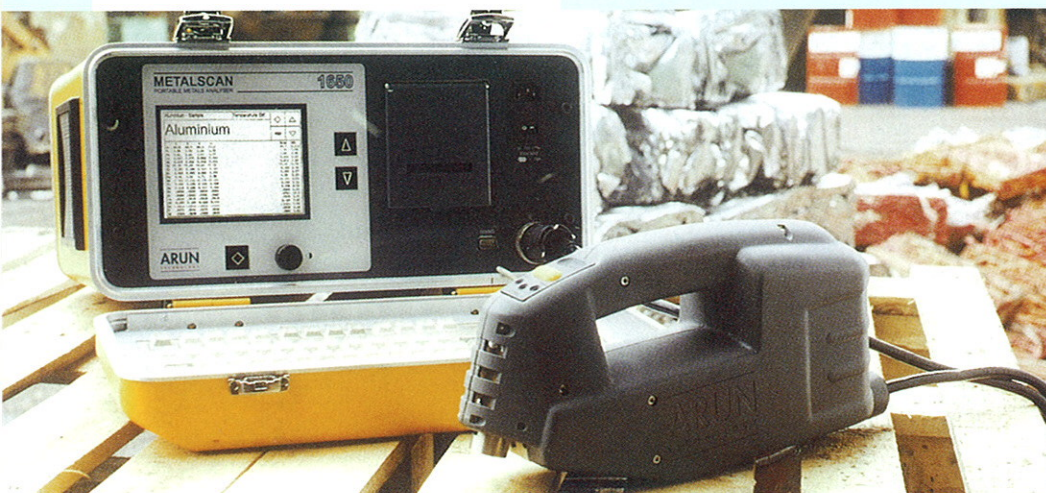- External printer port
- Optional mouse
- Optional full VGA monitor

SOFTWARE

OPERATION

- Simple multi-choice menu with only 3 buttons to operate

ANALYTICAL

- Factory calibrated
- Grade table factory installed
- Automatic selection of calibration
- Automatic line switching
- Automatic additive and multiplicative corrections
- Flagging of results beyond calibration range
- Pass/Fail mode with 100 programs
- User editable printout headers
- User editable Pass/Fail reports

SOURCE

- Regulated DC arc 1A to 3A under computer control
- Excitation parameters automatically selected according to analytical program
- Arc ignition by automatic spark
- Power only supplied while GO button is being pressed

PROBE

- Robust moulded resin housing
- GO and RESET/PRINT buttons
- LED indicators for POWER, PASS and FAIL
- Re-usable 7mm diameter silver electrode
- Stows in controller case

All specifications are subject to change without notice

QUALITY

- Retrieval of stored results (option)
- Logging of results to hard disk or floppy disk (option)

DIMENSIONS

- Instrument 460x480x210mm/18x19x8ins (W x H x D)
- Shipping case 625x664x387mm/25x26x15ins (W x H x D)

WEIGHT

- 20Kgs/44lbs approx.

ELECTRICAL REQUIREMENTS

- Universal line input 90 - 260 VAC, 50/60 Hz
- Automatic adjustment to voltage input (if in range above)