

## MetalScan A series

- Low cost, high performance versatile portable metals analysers
- Designed for on site analysis
- Robust construction, easy to carry and simple to use
- Windows based software
- From the world leader in CCD based Metals Analysis

### MetalScan ASSORT

- Arc excitation in Air
- Grade Identification
- Positive Material Identification (PMI)
- Semi Quantitative Analysis
- Go No Go sorting
- Single or multi base, multi-matrix

### MetalScan ASCERT

- Arc excitation in Air and spark excitation in Argon
- Grade Identification
- Positive Material Identification (PMI)
- Full Quantitative Analysis
- Go/No Go sorting
- Single or multi base, multi-matrix
- Low-level Carbon determination in spark mode
- Simple change from arc to spark
- Single or multi base multi-matrix

### Features

- Compact size, easily carried
- Portable complete weight 17Kg
- Integrated Panel PC with colour touch screen
- Integrated tally roll printer
- Integrated LED indicator display in probe
- 3-meter detachable umbilical to probe
- True multi base capability
- Rapid multi-element analysis
- CCD array detectors with wide spectrum coverage
- Holographic diffraction grating

### MetalScan A series

The MetalScan A series comprises a control unit and detachable probe at the end of a 3-meter umbilical.

The Assort with arc excitation in air and the Ascertain with spark excitation in an argon atmosphere and arc excitation in air are available.

For use either on site, in a plant or warehouse the MetalScan A series units have all the analytical and processing power of the larger desktop units supplied by ARUN Technology. A simple LED display at the rear

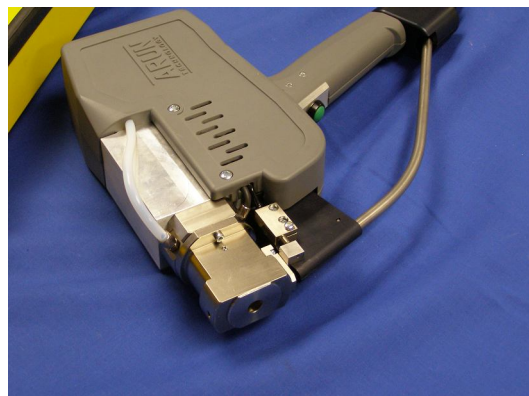


of the probe allows the operator a 'Go/No Go' indication without the need to look at the screen. This is particularly useful in a sorting application.

With the MetalScan A series it is a simple procedure to change the probe detector head and electrode from arc to spark operation. The software automatically provides the different calibrations available and controls the argon.



The MetalScan A series can be calibrated for the full range of commercial metals types, such as Cast Irons, Steels, Brasses, Bronzes, Aluminium Alloys, Nickel alloys etc. Additional bases, matrix calibrations and alloy types can be analysed without the additional hardware costs normally associated with classical spectrometers. Calibration is still required for each new material using certified reference materials.



## Specification

### Optical system

- Sealed against dust and contamination
- Holographic dispersion grating
- Wavelength range 190-435 nanometers
- Linear multi element CCD detector
- Unlimited number of software selected element channels
- Automatic electronic profiling

### Excitation Source

- Completely solid state with integral stabilisation
- DC arc excitation in air (Assort & Ascertain)
- High precision spark in argon (condensed arc) source (Ascertain)
- Software controlled frequency, energy level and timing
- Operated by trigger control
- High energy pre-spark
- Parameters automatically selected by each analytical program

### Probe

- Arc detector head and silver electrode (Assort & Ascertain)
- Spark detector head and argon flushed tungsten electrode (Ascertain)
- Standby and analytical flow levels optimised to minimise argon usage (if applicable)
- Pre-park shutter
- Easily removable detector heads and windows for cleaning
- Safety interlock



### ARUN Technology

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## Control and Data Processing

- Panel PC
- Colour 10.4" TFT LCD high luminance
- Fan less cooling system
- IP65 compliant front panel
- Windows XP operating system
- Integral tally roll printer
- USB- Port
- Simple multi-choice touch-screen menus.
- Foreign language menu capability

## Analysis

- Factory calibrated program traceable to CRMs
- Automatic inter element interference corrections
- Display of single or multiple analyses
- Display of mean, standard deviation or relative standard deviation
- Pass/Fail - Go/No Go sorting
- Grade identification
- User standardisation for each program in spark mode
- User configurable type standardisation in spark mode
- Storage and retrieval of data

## Quality and other features

- Log of all burn data
- Storage and retrieval of data
- Simple report generator
- Transfer of data to Excel spreadsheet
- Interface to commercially available quality and SPC software packages

## Weights and Dimensions

- Control unit size 565 x 535 x 270mm (22 x 21 x 10.5 inches)
- Control unit weight 15kg (33lbs)
- Probe weight: 2kg (4.5lbs)

## Electrical Requirements

- Universal line input 90-260 volts AC 50-60Hz
- Automatic voltage adjustment

## Environmental Requirements

- Operating temperature 5 to 40°C (40 to 104°F)
- Storage temperature -10 to 70°C (14 to 158°F)

## ARUN Technology

Since launching the world's first portable CCD-based metals analyser in the 1980's, ARUN Technology has been first in the field for portable and desktop metals spectrometers.

In the '90s the 1625 and 1650 MetalScan portable analysers became the industry standard for arc in air grade identification or Positive Material Identification. The MetalScan 2000 (introduced in 1995) and the MetalScan M2500 (1999) desktop units rapidly gained acceptance in foundries, die casters and metal finishers. Close links with industry ensure our on-going investment in research and development results in products that are relevant to the latest applications and that ARUN Technology remains at the forefront of Metals Analysis.



ARUN Technology  
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