

PolySpek Junior specification

Calibration

All calibrations are complete originals made wherever possible using internationally recognised Certified Reference Materials. Calibrations are completely traceable.

Control and Data Processing

- Fanless Panel PC
- Colour 10.4" TFT LCD high luminance
- IP65 compliant front panel
- Windows XP operating system
- 5 x USB- Port
- Simple multi-choice touch-screen menus
- Foreign language menu capability

Optical system

- Sealed against dust and contamination
- Holographic dispersion grating
- Linear multi-element CCD detector
- Unlimited number of software selected element channels
- Automatic electronic peak searching

Excitation Source

- Completely solid state with integral stabilisation
- High precision spark in argon atmosphere (Condensed arc) source
- Software controlled energy level and timing
- High-energy pre-spark
- Optimal parameters automatically selected for each analytical program

Analysis

- Standard Factory calibrated programs
- Automatic inter-element interference corrections
- Display of single or multiple analyses
- Display of mean, standard deviation and relative standard deviation
- Grade identification
- User standardisation for each program
- Setting-up samples provided
- User configurable type standardisation
- Storage and retrieval of data

Quality and other features

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

Weight and Dimensions

- 560mm W x 395mm H x 537mm D (approximately 22 x 15.5 x 21 ins)
- Weight 30kg (66lbs)

Electrical Requirements

- Universal line input 90-260V AC 50-60Hz
- Automatic voltage adjustment and stabilisation

Environmental Requirements

- Operating temperature 15 to 30°C (59 to 86°F)
- Storage temperature -10 to 70°C (14 to 158°F)

Other requirements

- Argon: 99.999% purity (*Argon gas purifier can be used*)
- Sample taking equipment relevant to metal type
- Sample preparation equipment relevant to metal type

ARUN Technology:

a track record of success

Since ARUN technology launched the world's first portable metals analyser based on CCD technology in the 1980's, the company has led the field in the fast growing market for portable and desktop metals analysis spectrometers.

In the 1990s the MetalScan 1625 and MetalScan 1650 portable metals analysers established themselves as the industry standard for 'arc in air' grade identification or Positive Material Identification.

The MetalScan 2000 desktop unit with a high-precision spark source, was introduced in the early 1990s and rapidly gained acceptance in foundries, die casters and metal finishers and this was followed by the MetalScan M2500 desktop unit in 1999.

Since 2006 under the control of MetalScan Limited and a management buy out team, the new PolySpek and PolySpek Junior desktop models as well as the Assort and Ascort series of portables and mobiles have been introduced.



ARUN Technology is a privately owned independent company dedicated to the design, development and manufacture of optical emission spectrometers for metals analysis. Sustained and extensive investment in research and development continues to ensure that the ARUN Technology products remain at the forefront of metals analysis. Close links with industry, development centres and trade groups are used to keep applications of the technology relevant and up to date.



All our products carry the mark, showing that they are fully compatible with EC Directive 89/336/EEC

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MetalScan spectrometers are continually being improved and MetalScan Limited reserves the right to change specifications without notice

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ARUN
TECHNOLOGY

PolySpek Junior



PolySpek Junior



PolySpek Jnr: the new CCD desktop spectrometer form ARUN technology, the originators of CCD based metals analysis.

PolySpek Junior

The PolySpek Junior from ARUN Technology benefits from over 25 years of experience in the application of CCD technology to spectroscopy, more than any other supplier of optical emission spectrometers for metals analysis.

Designed, sourced, manufactured and calibrated in the UK, spectrometers from ARUN Technology represent the state of the art in CCD based metals analysers and a wide range of models, both stationary/desktop and mobile/portable is available.

Features

- Compact size, fits on a desk
- Low cost, high performance desktop unit
- Integrated Panel PC with touch screen
- Keyboard, mouse, touch screen operation
- Windows XP operating system
- MetalScan A-PLUS or SPARCS software
- High-resolution argon flushed optical system
- No vacuum pump
- Holographic Diffraction Grating
- High-resolution CCD with 100,000 iPixels
- Solid-state spark source
- 16-bit Digitisation
- USB Connectivity
- Integrated CD DVD RW drive



Easy-clean open spark stand for large samples. Also accepts small sample adapters for rods and wires



Model Variants

PolySpek Junior

- PS-J with wavelength coverage 170-410nm
- Flushed or non-flushed optics depending on matrices
- Built in Panel PC

PolySpek Junior L

- PS-JL with extended wavelength 170-780nm
- Flushed or non-flushed depending on matrices
- Built in Panel PC

PolySpek Junior X

- PS-JX with wavelength coverage 170-410nm
- Flushed or non-flushed depending on matrices
- For use with an external PC and LCD

PolySpek Junior XL

- PS-XL with extended wavelength 170-780nm
- Flushed or non-flushed depending on matrices
- For use with an external PC and LCD

ARUN Technology

The original MetalScan 2000 introduced in the early 1990s was the world's first desktop spectrometer for metals analysis based on Charge Coupled Device detectors. The MetalScan 2500 introduced in 1999 with argon-flushed optic brought the possibility of ferrous analysis including Carbon, Phosphorous and Sulphur. A non-flushed version, the MetalScan 2500N, was also introduced for the non-ferrous applications.

ARUN, the originator of this technology now offers its 5th generation of CCD based units and current models in the range are the MetalScan PolySpek and PolySpek Junior. The PolySpek Junior, aimed at the entry end of the market, is equipped with Windows XP, a large CCD chip, integrated fast panel PC with a backlit colour LCD display complete with enhanced analytical software, all operated from a touch screen. The MetalScan PolySpek Junior is also available as a stand-alone spectrometer for use with an external PC. The higher performance PolySpek is aimed at the user replacing an out dated photomultiplier based instrument or one with more complex applications.

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