

SPECTROPORT

Portable Metal Analyzer- A New Generation for On-Site Metal Identification



The SPECTROPORT™ provides the portability, flexibility and performance required for modern on-site, metal testing. When true portability is a must, the SPECTROPORT meets the challenge by providing multi-matrix analysis capability in a lightweight and easy to use instrument. The SPECTROPORT can be taken anywhere positive metal identification (PMI) or sorting is required.

The SPECTROPORT is arc and spark source capable. In the arc mode, 100 % quality control is possible with the rapid pass/fail sorting mode. For routine PMI applications, the arc mode also provides alloy identification in just a couple of seconds, without having to prepare the sample surface. When precise and accurate chemical analysis is required, the spark discharge provides the results with near laboratory accuracy.

Should your metal testing requirements change, the SPECTROPORT easily adapts to meet increasing demands. Expanding analytical capabilities to test new metal types is simply a matter of updating the software.

The CCD optic captures the complete wavelength range from 280-560 nm, allowing the determination of all alloying elements required. The proprietary optical design, using multiple CCD detectors, provides comprehensive wavelength coverage as well as exceptional optical resolution. This translates to superior performance and the ability to separate and identify close but distinct alloys reliably and accurately.

With the SPECTROPORT you will save time and money testing metal.



Technical Data

Testing Probe

- Durable light-weight design
- 3 m (10') fiber protection cable
- Argon flushed spark stand
- Easily exchangeable adapters for different tasks
- Safety interlock for operator protection

Optical System

- 150 mm focal length
- Wavelength range 278-560 nm
- High resolution multi-detector CCD array
- Holographic diffraction grating

Source

Spark

- Low voltage, solid state, spark source
- Utilizes HEPS, High Energy Pre-Spark
- 150-450 Hz spark Frequency

Arc

- D.C. arc source, 2.7 A
- Single spark ignition
- Automatic re-trigger

Computer

- Industrial grade modern PC
- RS232 serial port for printer
- External keyboard connection
- External monitor connection
- 32 MByte RAM
- 3.5" 1.44 MByte disk drive
- Hard disk

Video Display

- Backlit TFT color LCD display
- Designed for industrial environments
- High impact resistant protective covering
- Ultra-wide viewing angle, high contrast

Software

General

- Fully automated optical alignment profiling
- Language switchable between English, Spanish, French and German
- Data storage for later retrieval and printing
- Data export to printer or to file in MS-DOS ASCII format

Analysis Mode

- Data output in percent concentration, raw intensities, intensity ratios, standardized intensity ratios
- Automatic averaging mode
- Automatic line switching
- Single point or dual point standardization
- Automatic standardization control
- Calculation of average, standard deviation, relative standard deviation

Grade Identification Mode

- Grade identification of unknown material based on stored specifications and chemical analysis

- Grade verification of material based on selected grade specification and chemical analysis
- User definable grade names and specifications
- Large display of grade found for easy viewing

Sorting, Pass/Fail Mode

- Pass/Fail operation based on comparison to known material
- Asymmetric/symmetric tolerances allowed
- Three different test modes for different applications

Spectrometer Data

- 230 or 110 Volts +/- 10 %, 50/60 Hz
- 800 W max, 50 W standby mode
- Depth: 375 mm/14 inch
- With: 450 mm/18 inch
- Height: 180 mm/7 inch
- Weight: 15 kg/33 lbs

Options

- Printer
- Sample adapters
- Rugged transport cart for instrument and Argon transport
- Custom fit molded plastic, carry and shipping case
- 5 m umbilical cord

Further information

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