



OBLF

MVS 1000

Versatile and reliable
optical emission spectrometer
at the lowest possible price

The MVS 1000 is a stationary high precision and reliable spark emission spectrometer for all standard applications. Thanks to its compact and solid construction as well as its simple operation, it is ideal for use in production environments like foundries, but also for the purpose of incoming goods and materials control. The instrument is a cost-effective single or multi matrix spectrometer.

In order to guarantee independence from the external conditions surrounding the spectrometer, the solid state detectors and the integration system are housed in the temperature and pressure stabilised optics. The optical system of our MVS 1000 is operated in a filled argon atmosphere with automatic transparency control and conditioning. The analytic capability covers the precise analysis of short-wavelength elements like carbon, phosphorous, sulphur in steel or cast iron and phosphorous in aluminium.

Like with all OBLF spectrometers, the electrical spark is generated with the help of a Gated Digital Source (GDS), which enables simple determination of the best possible

excitation parameters combined with short analysis times. The maintenance needs are low thanks to the easily accessible, self-cleaning spark stand. Our special, patented gas-supply system was optimised to keep argon consumption to a minimum, which results in very low operating costs.

Apart from on-screen display and output via a printer, the analysis results can also be made available to superordinate systems via a network connection. Our spectrometer software, OBLFwin, whose parameters can be set to suit the tasks of the individual customer, contains materials control, automatic program selection and machine monitoring options using control samples. The customer-specific calibration of the spectrometer is usually performed at OBLF's premises, whereby we can also take samples provided by our customers into account.

Precise instructions on how to operate the spectrometer and use the software are naturally given during installation. The customer only has to ensure availability of a power and an argon supply.

Technical Specifications

1. Optical system

- Paschen-Runge line-up
- temperature stabilised
- argon filled system
- automatic status control and conditioning

2. Spark stand

- optimized for low Ar consumption
- patented self-cleaning
- spark frequency up to 1 kHz

3. Spark generator

- Gated Digital Source (GDS)
- completely maintenance free
- fully semiconductor-based & digital control

4. Software Functions

- Windows[®] Software
- automatic precision control & averaging
- automatic reprofiling
- type calibration
- charge control
- data module for statistic process control
- ...

5. Applications

- all standard matrices

8. Installation

- dimensions approx. 60×110×108 cm (w×h×d)
- weight approx. 300 kg
- permissible operating temp. +10 to +40°C
- argon supply: 3 bar, Ar 4.8 or better
- power connection 230V, 50/60Hz, 1.0 kVA