



OBLF

## QSN 750-II

Optical Emission Spectrometer  
for Universal, High Precision  
Metal Analysis

Our QSN 750-II model is a spark emission spectrometer that can be used as a single- or multi-matrix system thanks to its 750 mm vacuum optics. This results in a broad field of application, which not only covers the entire range of metal producing and processing enterprises, but also includes a large spectrum of options for material testers and testing institutes. Both the integration system and the photomultipliers, which are arranged in accordance with customer specifications, are housed inside the optics and are therefore protected against external influences. The temperature-stabilised optics and the Gated Digital Source (GDS) technology guarantee a high degree of signal reproducibility and thus analytical constancy. The easy-to-reach self-cleaning and patented spark stand and aperture window enable problem-free maintenance by the user. An exhaust filter ensures the consumed argon is purged.

In contrast to the compact GS 1000-II, the QSN 750-II can also be used within automated production environments. In such cases, the spectrometer is combined with a sample-preparation device and a sample-handling robot to form a single unit, which naturally also ensures automatic cleaning of the counter-electrode. The analysis results are transferred online to the superordinate computer system using a network connection. In order to guarantee optimum quality control,

the spectrometer initiates any necessary control sample readings at certain time intervals, whereby the robot is again responsible for sample handling. With the help of previously defined limiting values, the spectrometer automatically monitors control samples. Key system functions are permanently monitored and if necessary this information is transmitted to other systems.

To comply with several customers demand for shorter analysis times, on our QSN 750-II we have the possibility to build-in a Double Electrode System instead of the standard one. Here two measurements are made almost simultaneously without the need of repositioning the sample. Additionally, the Ar consumption is drastically reduced.

A large number of analysis programs can arise especially when using multi-matrix systems to perform extensive analytical tasks. For this reason, the matching spectrometer software, OBLFwin, provides numerous individual programming options to perfectly suit user requirements. In addition, the automatic program selection option simplifies assignment of the right analysis program. Depending on the application, the measured values appear on screen approx. 16-30 seconds after the start of the measuring process and can then be printed out, transferred within the network or evaluated later.

### Technical Specifications

#### 1. Optical system

- Paschen-Runge line-up
- temperature stabilised

#### 2. Vacuum system

- automatic vacuum control
- pump duty cycle < 5%

#### 3. Spark stand

- optimized for low Ar consumption
- patented self cleaning
- spark frequency up to 1 kHz
- double electrode spark stand optional

#### 4. Spark generator

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

#### 5. Software functions

- Windows<sup>®</sup> Software
- automatic precision control
- automatic reprofiling
- automatic averaging
- type calibration
- charge control
- data module for statistic process control
- ...

#### 6. Applications

- all matrices

#### 7. Installation

- dimensions approx. 119 x 90 x 130 cm (l×w×h)
- weight approx. 460 kg
- permissible operating temp. +10 to +40°C
- argon supply: 3 bar, Ar 4.8 or better
- power connection 230V, 50/60Hz, 1.5 kVA

Contact:

OBLF

Ges. für Elektronik & Feinwerktechnik mbH

Salinger Feld 44 D-58454 Witten

Tel. +49 2302 9879-0 Fax: +49 2302 9879-80

Email: info@oblfd.de Internet: www.oblfd.eu

