

## OS.5

Family of  
Optical Emission Spectrometer  
for High Precision Metal Analysis



The OS.5 product line from OBLF forms the common basis for spark emission spectrometers using a fully stabilized 500 mm vacuum optics. The resulting accuracy of the analyses predestines the OS.5 for quality-conscious production companies.

Thus, the OS.5 continues the successful history, which started in 1992 with the RS 1000 and then continued with the thousandfold manufactured GS 1000. In addition, the OS.5 also forms the platform for the successors to the sensor line based spectrometer VeOS and MVS 1000.

During development, particular attention was paid to integrating the broad experience of OBLF with various technologies in a uniform, ergonomic product line. Therefore, the unique bandwidth is available to even more users and is used even more purposefully.

Different detector configurations allow customer requirements to be fulfilled even more accurately than ever before. Three basic configurations cover the entire

spectrum of marketable sensors.

Thus, an OS.5p with the exclusive use of photomultipliers of the latest generation is aimed at customers who place high demands on the analysis speed and low detection limits even for short-wave elements (carbon, phosphorus, sulfur and nitrogen). If a consideration of inclusions is required, the OS.5p can be extended with the mini-GISS option (single spark evaluation). The OBLF-typical short analysis time of PMT devices can be significantly reduced in the OS.5p with the DESS option (two electrodes for two simultaneous measurements) with increased comfort.

For more flexibility in the line selection, the OS.5cp pursues a hybrid approach. Here, the photomultiplier optics is complemented by a sensor line optics.

For multi-matrix applications that require the analysis of a very large number of elements, the OS.5c is the right choice. Also, with regard to a later element expansion, the complete assembly with sensor lines is a future-proof investment.

### 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
- 4. Spark generator**
  - Gated Digital Source (GDS)
  - completely maintenance free
  - fully semiconductor-based & digital control
- 5. GISS-Functions**
  - mini-GISS for OS.5p
- 6. Software Functions**
  - Windows<sup>®</sup> Software
  - automatic precision control & averaging
  - automatic reprofiling
  - type calibration
  - charge control
  - data module for statistic process control
  - ...
- 7. Applications**
  - all standard matrices
- 8. Installation**
  - dimensions 70 x 116 x 100 cm (w x h x 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