

- On-line analyzer
- Suitable for power-plants and ultra-pure water generation plant

Applications

Silica in boiler water

The Monitor 90 S Silikometer was specially designed for automatic water analysis in power generation and ultra-pure water generation plants.

Monitor 90 S measures the concentration of silica continuously, for example in boiler feed water, allowing a constant water supply at optimum quality to be guaranteed. The compact housing accommodates up to six on-line sample streams and a seventh measuring point for manual samples, thus providing particularly economical and space-saving operation.

SPX Process Equipment

Monitor 90 S Silikometer



*Microprocessor-controlled on-line analyzer with up to 6 sample streams and additional manual sampling point for the fully automatic measurement of silica in boiler water. Measuring ranges from 0-5 ppb SiO*₂.

The Monitor 90 S Silikometer combines high precision with proven reliability and economy.

Advantages

- Fully automatic operated
- Minimal operating costs through small reagent consumption
- Precise measurement
- High sensitivity
- Easy operation
- Long term stability by regular automatic calibrations
- Microprocessor engineering
- Automatic selfcheck



Example for silica determination

Measuring principle

Photometric Measurement

The sample is mixed with one or more reagents to adjust the pH, mask possible interferences and form a colored complex with the substance being measured. When the reaction is complete the light absorbance of the complex is measured at a specific wavelength and this value is used to calculate the concentration.

Technical Data

Measuring cycle Typ. 15 min. Range 0-5 to 0-1000 ppb

Other ranges on request

Precision typ. < 1.5% of range

Drift typ. < 0.2% of range

Reagent supply at least 9 weeks

No. of sample streams 1-6, plus 1

Output signal 0/4-20 mA, load 400 Ohm linear response

galvanically separated

Option RS 232, RS 485 bus interface

Limit signal

1 floating contact per sample stream max. load 25 VAC, 60 V DC, max. 3 A

Status/Alarm signal 1 floating contact

max. load 25 VAC, 60 V DC, max. 3 A

Sample

Pressure max 0.1 bar Temperature 2 - 35°C Volume 2 - 10 l/h free of solids and oil Connection Swagelok: pipe 6 x 1 mm

Waste connection

pressure-free, tubing 10 x 2 mm

Power supply

Voltage 115/230 V AC Tolerance ±10% Frequency 50 or 60 Hz *Power consumption* approx. 150 VA

Environmental temperature 15 - 35°C

Colour grey/white (RAL 9002)

Mounting wall mounting

Protection class IP 54 / NEMA 13 IP 65 / NEMA 4 (Electronics)

Weight

at least 60 kg *Dimensions* (HxWxD) 900x600x310 mm *Optional junction box* 1200x600x310 mm * *multi-channel models*