

Lovibond® Water Testing Tintometer® Group



MD 100 Boiler Water

Precise Water Analysis in High-Quality Design



- Lightweight, rugged design for use in the field
- Single unit construction with no parts to lose or break
- Large, easy to read display
- Industry specific parameter combinations available

Part Number: 276230

The MD 100 has several key features that make it a favorite among users.

Waterproof Design

The IP 68 design of this instrument ensures that the MD 100 remains water tight for up to 1 hour at 0.1 meter. Don't worry about dropping the instrument into a body of water - it floats!

Accurate, Reproducible Results

The optical system of the MD 100 utilizes LEDs and interference filters which quickly gives you results that you can be confident in.

User Calibration Mode

A one-point calibration is possible. Additionally, all MD 100 instruments have the ability to display readings directly in ABS or %T units.

One-time-Zero Function

Don't waste time waiting for your instrument to Zero after each test. When testing a new sample, zero the instrument once and all subsequent tests of that sample do not require you to re-zero the instrument.

Automatic Data Storage with Transfer Capabilities

The MD 100 automatically stores the last 16 readings with time and date stamp. These results can be transferred to a spreadsheet using the IRiM accessory.

Ergonomic Design

Whether you're using the MD 100 out in the field or in the lab, the design of the instrument makes it easy to handle and view the display. If you're using the instrument in the lab, the rubber feet on

the bottom of the housing eliminates the need for two hand operation or to chase your instrument around the workbench.

Factory Programmed

All MD 100 instruments are supplied ready to use with up to 14 calibration curves. All you need to do is select the test you need, prepare your sample and test!

Scroll Driven Menu System

The simple interface allows you to quickly reach the test you need. When the instrument is turned on, it will automatically display the last test used.

2-Year Manufacturer's Warranty

Industry

Chemical Industry | Food and Beverage Industry | Industries Others | Marine Industry | Oil and Gas | Pharmaceutical Industry | Power and Energy

Application

Boiler Water | Cooling Water | Drinking Water Treatment | Galvanization | Pool Water Control | Raw Water Treatment | Waste Water Treatment

MD 100 Boiler Water

Most faults in steam production plants occur as a result of deficient monitoring and control of the boiler water. This includes, in particular, the formation of scale, corrosion and local overheating. Therefore, a regular treatment and testing protocol of the boiler water is critical. By using the MD 100 Boiler Water colorimeter system, you have an overview of the key parameters of your boiler water and can perform purposeful water treatment at all times.

Measuring Range

| Test Name | Measuring Range | Chemical Method |
|--------------------|---|------------------------------------|
| Aluminium PP | 0.01 - 0.25 mg/L Al | Eriochrom Cyanine R |
| Chloride L (B) | 0.5 - 20 mg/L Cl ⁻ | Mercury Thiocyanate / Iron Nitrate |
| Copper T | 0.05 - 5 mg/L Cu ²⁺ | Biquinoline |
| DEHA PP | 0.02 - 0.5 mg/L DEHA | PPST |
| Hydrazine P | 0.05 - 0.5 mg/L N ₂ H ₄ | Dimethylaminobenzaldehyde |
| Iron LR L (A) | 0.03 - 2 mg/L Fe | Ferrozine / Thioglycolate |
| Oxygen dissolved C | 10 - 800 µg/L O ₂ ^{g)} | Rhodazine D TM |
| Phosphate HR L | 5 - 80 mg/L PO ₄ | Vanadomolybdate |
| Polyacrylate L | 1 - 30 mg/L Polyacryl | Turbidity |
| Silicate HR PP | 1 - 90 mg/L SiO ₂ | Silicomolybdate |

Technical Data

| | |
|----------------------------|---|
| Optics | LEDs, interference filters (IF) and photo sensor in transparent sample chamber. Depending on the version, up to 3 different interference filters are used. Wavelength specifications of interference filters: 430 nm $\Delta\lambda = 5$ nm 530 nm $\Delta\lambda = 5$ nm 560 nm $\Delta\lambda = 5$ nm 580 nm $\Delta\lambda = 5$ nm 610 nm $\Delta\lambda = 6$ nm 660 nm $\Delta\lambda = 5$ nm |
| Wavelength Accuracy | ± 1 |
| Photometric Range | -2500 - 2500 mAbs |
| Display | backlit LCD (on keypress) |
| Interfaces | Infrared |
| Operation | Foil keypad |
| Calibration | factory calibration and user calibration. Reset to factory calibration possible |
| Internal Storage | internal ring memory for 16 data sets |
| Battery Life Time | approx. 17 hours |
| Clock | Real Time Clock and Date |
| Portability | Portable |
| Compliance | CE |
| Dimensions | 6.1 x 2.95 x 1.38" |

Delivery Scope

- Instrument in plastic case
- Adapter for \varnothing 16 mm cuvettes
- Adapter for \varnothing 13 mm cuvettes
- 4 micro batteries (AAA)
- 3 round cuvettes (glass) with lid
- 3 round cuvettes \varnothing 16 mm (glass) with lid
- Sealing rings
- Stirring rod
- Brush
- Syringe (20 ml)
- Measuring Beaker (100 ml)
- Plastic centrifuge tubes
- Instruction manual
- Quick Start Guide
- Certificate (COC)
- Warranty information

| Title | Part Number |
|---|-------------|
| Water sampler with bottle 250 mL and lid, AF 631 | 170500 |
| Micro batteries (AAA), set of 4 | 1950026 |
| Multy cuvette-2, set of 12 | 197600 |
| Round cuvette 24 mm \varnothing , set of 12 | 197620 |
| Sealing ring for round vials 24 mm \varnothing , set of 12 | 197626 |
| Round cuvette 24 mm \varnothing , set of 5 | 197629 |
| Cleaning cloth | 197635 |
| Round cuvette 16 mm \varnothing , set of 10 | 197665 |
| Adapter for round cuvettes 16 mm \varnothing | 19802190 |
| Adapter for round cuvettes 13 mm \varnothing | 19802192 |
| Mixing cylinder, 25 ml | 19802650 |
| Verification Standard Kit MD 100 / 200 | 215670 |
| Stirring rod, 13 cm length | 364100 |
| Stirring rod, 10 cm length | 364109 |
| Stirring rod, 13 cm length, set of 10 | 364120 |
| Stirring rod, 10 cm length, set of 10 | 364130 |
| Pipette Tips | 365032 |
| Pipette, 200 µl | 365042 |
| Pipette, 1000 µl | 365045 |
| Membrane filter set for use when preparing samples, 25 membrane filters 0.45 µm, 2 syringes 20 ml | 366150 |
| 250 mL bottle, AF 631 | 375072 |
| Brush, 11 cm length | 380230 |
| Measuring beaker, 100ml | 384801 |
| Measuring spoon, 1 g | 384930 |
| Cuvette stand for 6 round cuvettes \varnothing 24 mm | 418951 |
| Cuvette stand for 10 round cuvettes \varnothing 16 mm | 418957 |
| Pipette tips, 0,1-1 ml (blue), 1000 pc. | 419073 |
| Plastic funnel with handle (white) | 471007 |
| Stirring rod and spoon | 56A006601 |
| Additionally for each method | 999855 |

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