OCMA-500 to measure concentration of oil contained in drainage and environmental water. After injecting the water sample and solvent, all you have to do is press the start button, and the system will automatically conduct the monitoring operation from oil extraction to sample measurement and draining. With no more troublesome operations like opening/closing the drainage valve, monitoring is speeded up. In addition, the color graphic LCD and the backlit extraction tank have improved operability.

**Feature**

- **Backlit extraction tank**
  The extraction tank is equipped with LEDs. Illuminating the tank makes it easy to check the phase separation between sample and solvent and set the extraction time.

- **Reduction of environmental impact and running cost**
  The OCMA-500 cuts solvent consumption by 20% compared with our previous products, reducing environmental impact. It also reduces the running cost.

- **Measurement mode**
  Measurement can be switched automatically or manually.
  - **Auto mode**
    Stirring, measurement and draining are automatically conducted after injection of the sample.
  - **Manual mode**
    You can conduct measurement operation at any timing while checking the extraction state.

**Fully used in various applications**

- **Factory drainage**
  For monitoring final discharge water

- **Ballast water, bilge**
  For monitoring discharge from ships

- **Vehicle maintenance site and gas station**
  For monitoring water quality in surrounding areas

- **Others**
  *Water quality survey based on environmental standard. For monitoring final discharge from petroleum refinery plant. For oil dispersion research at time of an accident.*
OCMA-550 to measure residual oil on components and concentrations of oil adhered on solids such as soil. Measurement can be easily made only by injecting the extracted water sample into the attached cell and setting it to the equipment. This model features a simple design which allows opening/closing of the door to setting of cell with just one hand. This is best for measurement of extracted samples such as evaluation of residual oil on components and measurement of oil contained in food.

For measurement of Residual oil on components

**Oil Content Analyzer**

**OCMA-550**

### Feature

- **Cell is easily detachable with just one hand**
  
  Simple design which allows opening/closing of door and detachment of cell with just one hand. Measurement operation becomes smoother.

- **Timer function**
  
  A timer function to display a measurement value in a certain amount of time is equipped. This saves work and time required for measurement.

### Applications

- Residual oil on components
  - For quality control of components

- For piping of air conditioners and refrigerators
  - To prevent reduction of cooling function

- Semiconductor field
  - For evaluation of degreasing capacity

- Others
  - Useful for soil (environmental pollution), food (health hazard) and gas (quality deterioration)
Automatic operation with one switch
Compact oil content analyzer OCMA-500 series.
Operability is significantly improved while user-friendly features of the conventional products are maintained as they are.
This machine is easy for anyone to use because all you have to do is press a button.
This can be utilized across wide variety of applications such as drain monitoring and quality control for components.

Easy and speedy measurement for approx. 3 minutes\(^1\)
Measurement can be easily made in a short time only by pressing the start button. Measurement time can be significantly reduced in comparison with the n-hexane extraction method.
*Excluding time for warming and calibration.

- 1 minute
  Put sample and solvent into OCMA.\(^2\)
- 1 to 2 minutes
  Start measurement by the start button.
- In less than 1 minute
  Read the measured value.

*1 Shortest time. Measurement time depends on quality of sample.
*2 In case of OCMA-500. Put extracted sample into the cell to set in case of OCMA-550.

Any oil with low boiling point can be measured
The n-hexane extraction method needs to evaporate solvent and any oil with a low boiling point (toluene, gasoline, etc.) is evaporated along with solvent. The OCMA-500 series does not need to evaporate solvent, preventing evaporation of these kinds of oil.

■ Color graphic liquid crystal
It is easier to see menu and measurement results because a 3.5 inch color graphic (LCD) is employed.

■ Unit conversion function
Indication unit (mg/L, mg/kg, mg/g, mg/PC) can be changed according to the purpose by inputting the measurement conditions.

■ Multi-language function
Japanese, English and Russian languages are available. Each language can be selected from the screen menu.

How to measure by OCMA
The OCMA-500 series extracts the oil components contained in a measurement sample into solvent (S-316) to measure the oil content with an IR analyzer.
*Carry out pre-washing for correct measurement.
In order to measure oil content with OCMA-500 series, you need the following products. If you don’t have these products, please purchase from optional list.

<table>
<thead>
<tr>
<th>Must items for measurement</th>
<th>Recommended options (Not including maintenance parts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Set</td>
<td>Solvent</td>
</tr>
<tr>
<td>OCMA-500</td>
<td>S-316</td>
</tr>
<tr>
<td>+ Standard Accessory</td>
<td></td>
</tr>
<tr>
<td>OCMA-550</td>
<td></td>
</tr>
<tr>
<td>+ Standard Accessory</td>
<td></td>
</tr>
</tbody>
</table>

Designed especially for recycling S-316 solvent, it features a 2-layer column of activated carbon and aluminium.

For the first purchase customer

**Standard Accessory**
- Filter element: For water filter, diameter 40 mm, including 5 elements
- Dropper: Made of polyethylene, 2.5 mL
- Code set: Power supply cable (for domestic use)
- B heavy oil: 10 mL
- Instruction manual: OCMA-500
- Water absorptive sheet: Liquid tray from extraction tank

**Option**
- Oil extracted solvent: S-316
- Measuring Syringe set
  - Simple type: Micro Syringe 25 µL
  - Measuring Syringe (For Sample) 20 mL
  - Measuring Syringe (For Solvent) 10 mL
- Packing
  - For water filter
  - For extraction tank
- Solvent Reclaimer: SR-305

*Measuring is easy because with stopper.

**Dimensional Outline (Unit: mm)**

[Diagram of dimensional outline for OCMA-500 and OCMA-550]
<table>
<thead>
<tr>
<th>Specifications</th>
<th>OCMA-500</th>
<th>OCMA-500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement method</td>
<td>Solvent extraction - non-dispersive infrared absorption analysis method</td>
<td>Solvent extraction - non-dispersive infrared absorption analysis method</td>
</tr>
<tr>
<td>Measured objects</td>
<td>Substances extracted from sample water into solvent and having infrared absorption near a wavelength from 3.4 μm to 3.5 μm</td>
<td>Substances extracted from sample water into solvent and having infrared absorption near a wavelength from 3.4 μm to 3.5 μm</td>
</tr>
<tr>
<td>Measurement range</td>
<td>0 mg/L to 200 mg/L</td>
<td>0 mg/L to 299 mg/L</td>
</tr>
<tr>
<td>Resolution</td>
<td>For mg/L 0 to 99.9: 0.1, 10 to 200: 1</td>
<td>For mg/L 0 to 99.9: 0.1, 10 to 200: 1</td>
</tr>
<tr>
<td>Repeatability</td>
<td>0 mg/L to 9.9 mg/L: ±0.2 mg/L ±1 dig.</td>
<td>0 mg/L to 9.9 mg/L: ±0.4 mg/L ±1 dig.</td>
</tr>
<tr>
<td></td>
<td>10.0 mg/L to 99.9 mg/L: ±2.0 mg/L ±1 dig.</td>
<td>10.0 mg/L to 99.9 mg/L: ±2.0 mg/L ±1 dig.</td>
</tr>
<tr>
<td></td>
<td>100.0 mg/L to 200 mg/L: ±4 mg/L ±1 dig.   *For standard liquids</td>
<td>100.0 mg/L to 200 mg/L: ±4 mg/L ±1 dig.   *For standard liquids</td>
</tr>
<tr>
<td>Display method</td>
<td>3.5 inches 320×240 dots Backlight color graphic LCD</td>
<td>—</td>
</tr>
<tr>
<td>Calibration method</td>
<td>Select each optionally zero calibration and span calibration.</td>
<td>—</td>
</tr>
<tr>
<td>Amount of test sample required</td>
<td>2:1 (Sample water : Solvent)</td>
<td>—</td>
</tr>
<tr>
<td>Extraction solvent</td>
<td>S-316 *Do not use any other solvent than S-316.</td>
<td>—</td>
</tr>
<tr>
<td>Amount of extraction solvent required</td>
<td>8 mL (possible to measure even at 10mL)</td>
<td>Approx. 6.5 mL (Amount of extraction solvent required)</td>
</tr>
<tr>
<td>Extraction method</td>
<td>Built-in extractor</td>
<td>Using the extraction solvent, and extracted manually outside the product</td>
</tr>
<tr>
<td>Ambient operating temperature</td>
<td>0°C to 40°C (no condensation)</td>
<td>—</td>
</tr>
<tr>
<td>Power supply</td>
<td>AC 100 V to 240 V ±10%, 50/60 Hz</td>
<td>AC 100 V - 240 V</td>
</tr>
<tr>
<td>Power consumption</td>
<td>AC 100 V: Approx. 60 VA, AC 240 V: Approx. 90 VA</td>
<td>AC 100 V - 240 V: Approx. 60 VA</td>
</tr>
<tr>
<td>External dimensions</td>
<td>342 (H) x 200 (W) x 313 (D) mm</td>
<td>195 (H) x 253 (W) x 293 (D) mm</td>
</tr>
<tr>
<td>Mass</td>
<td>Approx. 7 kg</td>
<td>Approx. 5 kg</td>
</tr>
<tr>
<td>External output</td>
<td>Output to an USB memory stick</td>
<td>—</td>
</tr>
<tr>
<td>Measurement flow</td>
<td>Automatic measurement (automatic switching sequence) and manual measurement after injection of liquid</td>
<td>—</td>
</tr>
<tr>
<td>Cell length</td>
<td>—</td>
<td>20 mm</td>
</tr>
<tr>
<td>Cell material</td>
<td>—</td>
<td>Quartz</td>
</tr>
<tr>
<td>Functions</td>
<td>300-item data memory (measurement history)</td>
<td>300-item data memory (measurement history)</td>
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<tr>
<td></td>
<td>Self-error determination</td>
<td>Self-error determination</td>
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<tr>
<td></td>
<td>Stabilized measurement value display</td>
<td>Stabilized measurement value display</td>
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<tr>
<td></td>
<td>Clock function</td>
<td>Clock function</td>
</tr>
<tr>
<td></td>
<td>With backlight for stirred batch tank</td>
<td>Unit conversion function</td>
</tr>
<tr>
<td></td>
<td>Unit conversion function</td>
<td>—</td>
</tr>
</tbody>
</table>

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