**Technical Details**

- **Measurement technology:** Full gas chromatographic analysis using TCD and FID detector and methanizer
- **Gas in oil measurement range:** 0.1 – 100,000 ppm
- **Applicable for new and used oils**
- **Accuracy/Resolution:** ±1.0% / 0.1 ppm
- **Calibration:** With traceable calibration gas or gas in oil standard
- **Sampling:** 10 ml oil sample
- **Gas tight glass syringe to ensure no gas loss or contamination with ambient air**
- **Power supply:** 100-240VAC, 50/60Hz
- **Outer power supply of 12 V is usable and can be operated for 6 hours**
- **Gas requirements:**
  - 99.999% purity Argon
  - 99.999% purity Hydrogen
- **Operating temperature:** 0 - 50°C
- **Relative Humidity:** 0 - 95% RH non-condensing
- **Width/Height/Depth:** 460 x 500 x 310mm
- **Weight:** 19 kg
- **Housing:** Pellicase black, waterproof, IP 67

**Scope of delivery:**

- **Basic instrument**
- Accessories set:
  - Mains Cable, communication cable, CD with software and Expert System,
  - Calibration gas, 2 x 10ml glass syringe incl. 2-way valves, 5 aerosol filters,
  - Glass tube for FID, instruction manual

- **Consumables:**
  - Calibration gas traceable
  - Aerosol filters (oil traps)
  - Glass syringe 10ml with 2-way valve
  - 2-way valves

**MOBILE GC Portable Gas Chromatograph**

- State of the Art Technology - Portable Gas Chromatograph
- Available in different versions
- Fully automatic measurement procedure
- Fully compliant with ASTM D3612 and IEC 60567
- Automatic sample injection
- High Sensitivity through Vacuum Degassing
- High Selectivity through Gas Chromatography
- Highly sensitive detection of up to 11 gases
- Suitable for Acceptance- Service- and Routine tests
- Ideal for on-site measurements and also for laboratories
- Direct analysis of Buchholz gases
- Rugged case-waterproof for extreme environmental conditions
- Expert System for quick and easy conclusions

Evaluation according to: IEC 60599, Roger ratios, Duval etc.

The MOBILE GC’s unique characteristic is its ability to function both under on-site conditions and also in the laboratory. The Dissolved Gas Analysis allows early recognition of transformer defects and possible failures. By observing the manufacturers’ established service intervals and through use of the MOBILE GC unnecessary and substantial breakdown costs are minimized dramatically.

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**Integrated Microprocessor-Controlled Degassing Procedure**

After fixing a syringe with 10ml oil the degassing procedure is started automatically. The user interface provides step-by-step guidance. After degassing the oil, the gas sample is automatically injected into the sample loop and the gas chromatographic analysis is started. During the degassing procedure the total gas content is measured.

**Detection ranges (Sensitivity):**

- H₂: 1 ppm, C₂H₆: 0.1 ppm
- CO: 0.2 ppm, C₃H₈: 0.2 ppm
- CO₂: 0.2 ppm, C₄H₁₀: 0.2 ppm
- CH₄: 0.1 ppm, O₂: 30 ppm
- C₂H₂: 0.1 ppm, N₂: 30 ppm
- C₃H₈: 0.1 ppm

The MDIBLE GC is equipped with an Expert System Software. Automatic fault diagnosis of the sampled oil based on the various concentrations, reference values, and ratios of certain gases is performed.

You no longer need to be an expert to analyse the gas content in oil.

The configuration of the Gas Chromatograph can be adjusted to fit specific applications. The instrument can also be used in laboratories or on site.
Integrated Microprocessor-Controlled Degassing Procedure

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Detection ranges (Sensitivity):

<table>
<thead>
<tr>
<th>Gas</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂</td>
<td>1 ppm</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>CO</td>
<td>0.2 ppm</td>
<td>0.5 ppm</td>
</tr>
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</tr>
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</tr>
<tr>
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