PASSION PERFORM

CML4

ANY SYSTEM
ANY TIME
ANYWHERE

PORTABLE
CONTAMINATION
MONITOR

CML4

PASSION to PERFORM
CML4

A compact and portable contamination monitor that delivers a fast, accurate assessment of contamination in the field and is the perfect solution for the mobile, construction and plant hire sectors.

Easy to master, the new CML4 features cutting-edge contamination control technology to anyone wishing to protect their critical systems.

The CML4 features a metering pump which enables analysis of both ‘live’ and unpressurised systems, delivering comprehensive contamination checks on any machine in any condition.

FIVE KEY REASONS

CML4 WILL TRANSFORM YOUR CONTAMINATION CONTROL STRATEGY

PORTABILITY
Compact and light.
Work all day on a single battery charge.

SIMPLICITY
Straightforward enough for anyone to use.
On-screen prompts - no formal training required.

INTUITIVE
Full colour touchscreen interface.
Simple software for sophisticated results.

FLEXIBILITY
Measures pressurised and unpressurised systems.

ACCURACY
LED technology.
± 1/2 code for 4, 6, 14μm. ± 1 code for larger sizes.
Measure anywhere, any time! The built-in pump enables operators to work on both pressurised and unpressurised systems. Oil can be tested from samples, tanks, or system test points.

Integrated pump
For testing unpressurised oil samples.

High Pressure Sampling
Up to 420 bar / 6091 PSI.

Memory capacity
Store up to 4000 results.

Connectivity
Integrated USB C port.

High-resolution
7" full-colour touchscreen.

Bluetooth-enabled
Optional printer accessory available.

As tough as you need
IP65 rating for enhanced protection.

Compact and portable
Easy to store and carry at just 14" (35cm) wide.
EASY AS 1-2-3

Using the CML4 is as easy as 1-2-3 with just three stages required to take you from connecting up your portable contamination monitor to the oil sample and then accessing real-time results through to long-term trend analysis and proactive maintenance.

CONNECT YOUR OIL / HYDRAULIC FLUIDS

The first step is simply to connect the CML4 to an Online M16 test point (pressure range 2-420 bar / 29-6091 psi) or to the applications reservoir (zero pressure). The CML4 features a self-priming metering pump which enables analysis of unpressurised systems. Easy-fit standard hydraulic connections maintain high environmental protection ratings.

EASY TO USE INTERFACE

Simple yet sophisticated software with a highly-responsive touch-screen, designed to deliver bright visuals for outside working in sunny conditions, and an intuitive home screen enabling you to view all your key performance information at a glance. The CML4 can be mastered without the need for formal training and enables operators to begin measuring the condition of hydraulic oils in a matter of minutes. The 7” high-resolution touchscreen display delivers fast, accurate results in a wide variety of reporting standards. You can also set languages, alarms and tolerance limits at the tap of the screen.
The CML4 shows real time results on its high-resolution display. Designed for simplicity the software allows new users to get up and running in minutes without the need for formal training.

Created in-house especially for MP Filtri’s range of contamination monitors, the award-winning CMP View is the most advanced software of its type in the industry.

Results and analysis can be viewed at-a-glance on a single screen in a variety of different graphical formats, tracking not just trends in particle contamination but also relative humidity, as well as temperature levels.

Should you need to output a physical analysis report there is an option to use this hand-held printer as part of the analysis process for instant hard copy results. This lightweight and compact unit (just 185 x 120 x 50mm) can be easily connected to the CML4 via Bluetooth. It offers high-speed, low-noise, black and white printing using thermal printing technology with a print width of 48mm onto a 15mm core paper roll. This portable printer comes equipped with a large capacity rechargeable lithium battery to guarantee power for extended working in the field.

Results can be downloaded onto a USB Data Stick and transferred to a PC, or you can connect directly to the computer via a USB C connection. CMP View software enables operators to analyse data over time, opening up the potential for long-term trend monitoring and preventative monitoring strategies.
THE PERFECT PORTABLE CONTAMINATION MONITOR

Rugged and robust, the CML4 thrives in the most challenging working conditions. Compact and portable, it’s ideal in the field, while a long-life battery enables the operator to work all day without the need for recharging.

**Effective hydraulic healthcheck**
Quickly identify levels of contamination in systems, the CML4 is an ideal tool for operators who need to ensure their hydraulic systems are always functional.

**Any system, anytime, anywhere**
The inclusion of an in-built, self-priming pump means it can analyse particle contamination in both pressurised and unpressurised systems, making it an ideal tool for service engineers.

**Boosting your business**
Featuring predictive maintenance technology, the CML4 flags up potential problems before they impact on performance. This delivers such key benefits to your business as: reduced downtime, lower operating and service costs, and longer lifespans of machinery.

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**KEY INDUSTRY SECTORS**

**Mobile**
Portable and precise, the CML4 is ideal for applications where accuracy is vital even in challenging and variable conditions.

**Construction**
Keeps your fleet and key operational machines at peak performance without the risk of unplanned downtime.

**Industrial**
Keeps production lines working at full capacity – ensuring the best in performance and productivity.

**Renewable energy**
Minimises unplanned downtime, dramatically reducing operational and maintenance costs.

**Plant hire**
Delivers peace of mind after servicing and after the vehicle is rented to customers.

**Injection moulding**
Ideal for precision tooling, injection moulding, presses and power packs - supports a wide range of industries.
## CML4 SPECIFICATION

<table>
<thead>
<tr>
<th>Technology</th>
<th>High precision LED light extinction automatic optical contamination monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particle Sizing</td>
<td>&gt;4, &gt;6, &gt;14, &gt;21, &gt;25, &gt;38, &gt;50, &gt;70 μm_{c}</td>
</tr>
</tbody>
</table>
| Reporting Standards | ISO 4406, ISO 11218  
NAS 1638  
AS4059 Rev G, Table 1  
AS4059 Rev G, Table 2  
GBT 14039  
GJB 420 B  
GOST 17216 |
| Accuracy | ± 1/2 code for 4, 6, 14 μm_{c} ± 1 code for larger sizes |
| Calibration | Calibrated with ISO/MTD in accordance with ISO 21018 - Part 1 and Part 4 |
| Viscosity Range | Up to 400cSt |
| Fluid Temperature | Minimum: +5°C / +41°F  
Maximum: +80°C / +176°F |
| Ambient Temperature | Minimum: -10°C / +14°F  
Maximum: +60°C / +140°F |
| Operating Pressure | Offline: Maximum 2 bar / 29 PSI  
Online: Maximum 420 bar / 6091 PSI |
| Moisture Sensing | % RH (Relative Humidity) ±3% |
| Temperature Measurement | ±3% |
| Data Storage | Up to 4000 tests |
| Environmental Protection | IP65 (Lid closed)  
IP54 (Lid open) |
| Power | Lithium-Ion rechargeable battery |
| Battery Life | 8 hrs approx |
| Weight (unit only) | 8.5 kg / 18.5 lbs |
| Product Dimensions | Width: 352 mm / 13.8”  
Height: 149 mm / 5.8” (not including handle)  
Depth: 297 mm / 11.7” |

### COMPACT PORTABLE CONTAMINATION MONITOR

#### Designation & Ordering code

<table>
<thead>
<tr>
<th>Series</th>
<th>Configuration example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CML4</td>
<td>CML4 W 0 M 00 1</td>
</tr>
<tr>
<td>Moisture Sensor</td>
<td>With moisture and temperature sensor</td>
</tr>
<tr>
<td>Design Reference</td>
<td>Standard option</td>
</tr>
<tr>
<td>Fluid Compatibility</td>
<td>Mineral oil and synthetic fluids</td>
</tr>
<tr>
<td>Design Reference</td>
<td>Standard option with full accessory kit and carry bag</td>
</tr>
<tr>
<td>Country Plug Type</td>
<td></td>
</tr>
</tbody>
</table>
1 UK  
2 US  
3 EU  
4 CN/AUS |