

# CONTAMINATION CONTROL SOLUTIONS

## PRODUCT RANGE



PASSION  PERFORM



Increase Productivity & Reduce Costs

# HYDRAULIC FLUID

Contamination within a system will affect the performance characteristics of the fluid causing a decrease in lubricity and increase in friction. This in turn will result in temperature increases, reduced system efficiency, and increased wear on system components.

Contamination can in some cases lead to a complete system failure.

Common issues and problems associated with contamination:

- **Mechanical wear**
- **Clogging of nozzles, orifices & valves**
- **Corrosion**
- **Increase in fluid temperature**
- **Change in fluid compressibility**
- **Loss of protective coatings on components**
- **Internal leakage**

## FLUID CLEANLINESS

**Having clean fluid is essential in improving your system's performance and reliability!**

The latest hydraulic systems are defined by the system specification. These are typically reported in a specific reporting format: eg ISO 4406.



**Only 10 grams of test dust (MTD) is needed to turn 10,000 litres of perfectly clean fluid ISO (0/0/0) to ISO 19/17/14 - the level of contamination that could potentially cause breakdowns.**

...because contamination costs!

## BENEFITS

- **Cost savings**
- **Reduced downtime**
- **Fewer breakdowns**
- **Flexibility in supply**
- **Competitive prices**
- **Increased life of system components**
- **Local technical expertise**
- **Onsite analysis & full status report with a customised corrective/preventive action plan**

MP Filtri's proven track record for delivering complete contamination control solutions has established it as a global manufacturing leader in the hydraulic market. Specialising in Contamination monitors and Hydraulic filters, MP Filtri provides bespoke engineering solutions for your filtration applications. We have a proud track record of supporting customers in a wide variety of market sectors.

### HOW WE CAN HELP YOU

To facilitate a longer service life for your systems, you need to employ a programme of cleanliness control.

MP Filtri can advise and support you on the creation of a protective maintenance strategy for maximising system reliability.

### PREVENTATIVE MAINTENANCE

This includes inspecting breather caps and breather filters; checking all filter clogging indicators; and inspecting the hydraulic fluid inside the reservoir for signs of aeration, external contamination, and water ingress.

### PREDICTIVE MAINTENANCE

Our range of CCS products enables customers to implement a contamination control programme - safely monitoring the condition and performance of operating fluid online and gaining early warnings of potential mechanical problems.

### DON'T LEAVE IT UNTIL IT'S TOO LATE!

Visit our website or call one of our experts today. We've got over 60 years of experience and expertise in hydraulic systems cleanliness control and filtration!

# FEATURES & BENEFITS

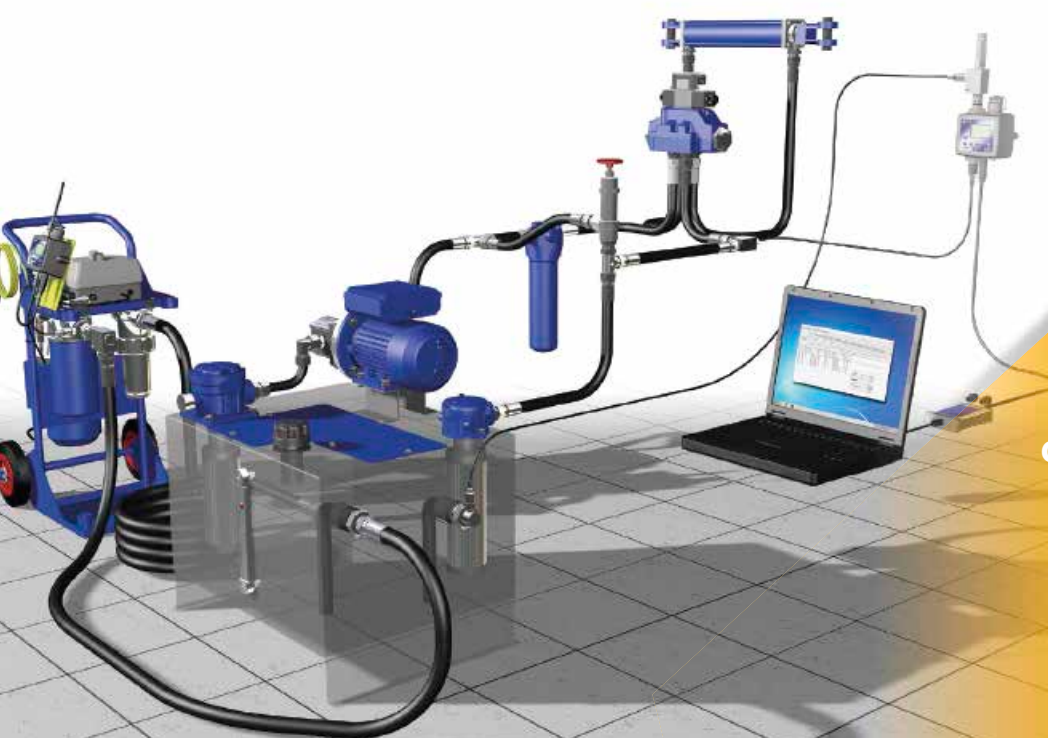
The introduction of a complete contamination control programme will not only alert you when the number of particles exceeds your targets, but will also flag up potential problems before they impact on performance. Our filters and elements will deliver clean systems that will not only maintain performance but also extend component and system longevity.

- **Increases productivity**
- **Lowers repair costs**
- **Reduces system downtime**
- **Optimises handling of spare parts**
- **Cuts costs associated with downtime**
- **Boosts reliability**
- **Easy to use**

## HYDRAULIC SYSTEM

### FLUID CARE & MAINTENANCE

Hydraulic systems are designed to transmit power/force from one point to another by pressuring an incompressible fluid. Hydraulic fluid is used for the purposes of lubrication, power transmission, surface protection, heat transfer and surface cleaning. **Hydraulic fluid is the lifeblood of hydraulic systems.**



**To maintain the cleanliness of fluid, the use of filters is critical to remove any contaminant still left in the system**

### LPA3

Portable light extinction particle analyser

- Programmable, full-color, high-resolution, 10" (25 cm) touchscreen display
- Simple yet sophisticated software that is easy to master in minutes
- Live trend analysis
- Preventive maintenance technology identifies risks before they impact performance
- Portable and durable, enabling users to bring the lab into the field
- Super-fast sample times
- Long-life Lithium ion battery



### LPA2 - Aviation Edition

Portable twin-laser particle analyser

- Airbus-approved for aviation industry
- Portable and lightweight
- Full size QWERTY keyboard and onboard thermal printer
- Calibrated to relevant international ISO standards
- Features specialised Airbus adapter and robust travel case
- Free windows-based software included

### CML3

Compact Portable Contamination Monitor

- Compact, light and durable: ideal for working in the field
- Fast, Accurate, real-time hydraulic health check
- 7" (18cm) touch-screen technology
- Suitable for online pressurised systems



### CML4

Compact Portable Contamination Monitor

- Intuitive and easy to master
- 7" (18 cm) touch-screen technology
- Suitable for both pressurised and unpressurised systems
- A full day's work on a single charge

### ICM 2.0

In-line Contamination Monitor

- Live real-time monitoring
- Calibrated to relevant international ISO standards
- Manual, automatic and remote control flexibility
- Various communication protocols as standard
- Stores 4000 tests in memory



### ICM 4.0

Wifi-enabled In-line Contamination Monitor

- Utilises the latest WiFi technology
- Outstanding connectivity
- Live real-time monitoring
- Calibrated to relevant international ISO standards
- Predictive maintenance technology



## ICM K 2.0 AZ2

In line Contamination Monitor suitable for hazardous areas

- Live real-time monitoring
- Calibrated to relevant international ISO standards
- Manual, automatic and remote control flexibility
- A variety of communication protocols as standard
- Atex Zone II 3G

## ICS

In-line Contamination Monitoring Sensors

- In-situ contamination sensor
- Industrial and mobile specific models
- Robust construction
- 3-channel contamination monitoring
- Ideal for ongoing analysis where installation space is limited
- 4-20mA analogue output (industrial); CANbus (Mobile) and Modbus



## ICU

In-line Contamination Monitoring Unit

- In-situ contamination sensor
- Manifold or inline base plate mounting
- Robust hard-wearing construction
- 3-channel contamination monitoring
- Ideal for ongoing analysis where installation space is limited
- 4-20mA analogue output as standard

## ACMU

Auxiliary Contamination Monitoring Unit

- Self-priming particle counting via an integrated pump and aeration suppression manifold circuit
- Variants for non pressurised/pressurised systems of lube oil/gearbox applications
- Aeration suppression, allows for improved contamination monitoring
- Live real-time monitoring



## BS110 & BS500

Bottle Samplers

- Fluid de-aeration capability
- Compatible with LPA3 and CML4 Contamination Monitoring Products
- BS110: designed specifically for portable onsite testing
- BS500: designed for laboratory applications



## UFM

Mobile Filtration Units

- Wide range of high-performance offline filtration and fluid transfer units
- ICM 2.0 options available
- A variety of flow rates available
- Various filtration options



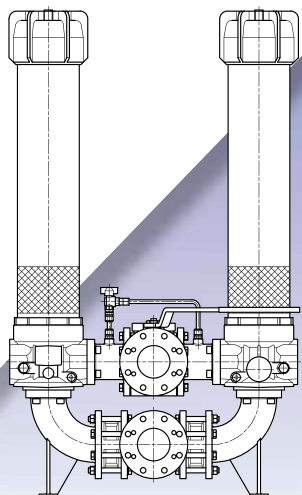
## Patch Imaging Kit

Patch sampling and digital imaging kit

- Comprehensive sample testing of fluids
- Full digital analysis of contaminants
- Recording and storage of results direct to a PC via digital microscope

# APPLICATION EXAMPLES

## MOBILE CRUSHING & SCREENING MAINTENANCE AREA



LMD 951 series installed on the entry to the bulk oil tank - oil deliveries from the supplier are filtered with a single pass through the duplex filter



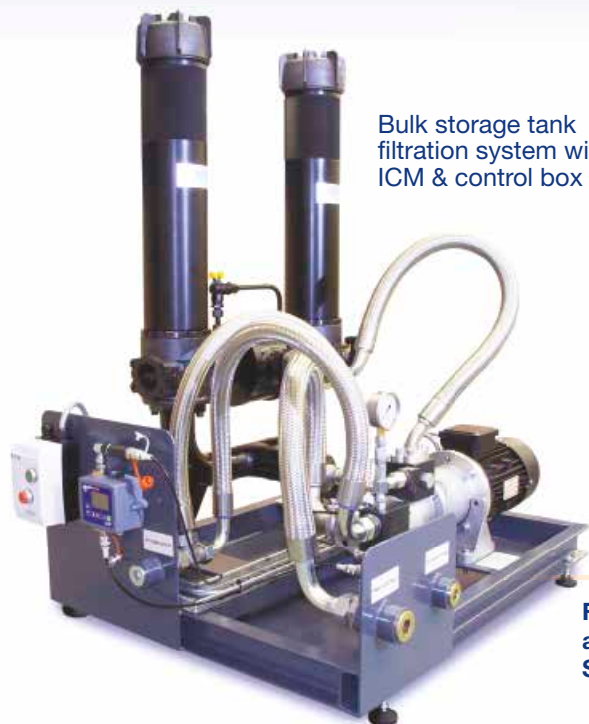
Hydraulic reservoirs with LMD 431 in-line duplex filters



Fluid hose reels with ICM Contamination monitor



LMP 210 in-line filters and MPS Spin-on for diesel, engine oil, adblue fluid



Bulk storage tank filtration system with ICM & control box

For further information or to request a quotation, please contact the Sales Department.

# WORLDWIDE NETWORK

CANADA ♦ CHINA ♦ FRANCE ♦ GERMANY ♦ INDIA ♦ SINGAPORE  
UNITED ARAB EMIRATES ♦ UNITED KINGDOM ♦ USA



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