Diagnostic tools and condition monitoring products

Bulletin 4058/UK
Held in high esteem by service technicians:
The condition monitoring and diagnostic equipment programme from Parker.
The efficiency of your machines and systems is determined to a large extent by routine status checks of the oil, monitoring the whole of the circulatory system, fault recognition and reliable diagnostics.

As the world’s leading supplier of hydraulic components, Parker offers you a complete programme of equipment for condition monitoring and diagnostics. Unequalled technology and precision. Sophisticated, reliable and user friendly. Harmonised devices with finely tuned technology and software. Everything from a single source. You will have difficulty finding something better. Put us to the test!
Parker Fluid Condition Monitoring equipment provides OEMs and end users with proven solutions in many industries.

Portable particle analysers support users' predictive maintenance programmes.

Hand-held monitors provide end-users with oil condition monitoring.

In-line sensors help protect systems against the effects of moisture in fluid systems.

OilCheck
- The hand-held monitor that detects and measures the dielectric constant of oil.

The Oilcheck can remove the need for costly and time consuming laboratory analysis of mineral and synthetic oils used in engines, gearboxes and bearing lubrication systems fast and accurately. It detects mechanical wear and any loss of lubricating properties in the oil with a repeat accuracy of more than 95%.

The Oilcheck is a comparative instrument, which detects and measures the dielectric constant in an used oil sample, which is compared against results taken from an unused lubricant of the same type and brand. Through this operation the OilCheck is able to show changes in the oil condition brought about by the ingress of water content, fuel contamination, metallic content and oxidation. Oilcheck is available with a numerical display to show positive or negative increases in dielectrics.

Oilcheck is the ideal workshop instrument. Hand-held, simple to use and robust in manufacture, it is designed to provide the user with a quick analysis of the oil being sampled.

LaserCM
- The portable particle analyser of choice.

For nearly 15 years Parker’s programme of portable particle analysers has led the field in automatic particle measurement and monitoring. 15 years in which developments in manufacturing techniques and monitoring technology have brought to our customers cutting-edge products such as the laser activated particle analyser – LaserCM.

Laser technology and laser reliability make LaserCM an instrument to be proud of. EPROM data programming, user ID, automatic testing, data retrieval, alarm level settings, barcode pen and graph printing functions are all available to ensure effective, predictive maintenance.

When it's accuracy of test results that counts, the only particle counter to 'count' on is the LaserCM from Parker.

Users expect a proven performance in the field, on the production line or in the laboratory. Others recognise manufacturing quality and reliability with the potential for reducing machine downtime and effective integration into an existing predictive maintenance programme. Users find originality and innovation irresistible qualities that, when combined, provide a fluid condition monitor that will out-perform the rest.
IcountPD – The newest technology in solid particle contamination analysis.

The design dynamics, attention to detail and the moulding compactness of the permanent mounted, on-line particle detector module, combines with on-board, laser based, leading-edge technology. It brings to all industry a truly revolutionary particle detector as a remarkable low cost market solution to fluid management and contamination control.

Calibrated by recognized online methods supported by the relevant International Standard Organisation procedures, the IcountPD gives the end user a low cost solution to prolonging fluid life and reducing machine downtime.

With its early indication for contamination levels using warning LED display indicators, the IcountPD allows independent monitoring of system contamination trends. Connection into the system is easy. The most common method of online sampling is to take a dynamic sample from a single pressure test point. These can be purpose made bleed points, pressurized reservoir fill points, and/or strategic test points. The IcountPD is manufactured with M16x2 Minimess couplings for easy connection to standard hydraulic test points.

MS100 and MS150 – Moisture sensors provide early warning of hydraulic contamination.

MS100 and MS150 moisture sensors help eliminate the problems caused by moisture forming in the hydraulic oils that are used in mobile hydraulic equipment, such as earth moving, forestry and military machinery, and in industrial plant – applications ranging from paper manufacturing to car body panel pressing. They are quick and simple to install and setup, by both OEMs and end users, compact and lightweight, extremely accurate and, as important, available at a low cost, enabling moisture detection now to be considered as a viable option in all hydraulic systems.

Moisture, typically in the form of condensation, is a common problem in most hydraulic systems that are exposed to regular fluctuations in temperature or used in demanding outside environments. Moisture can contaminate hydraulic and lubricating oils through faulty or worn cylinder rod glands or breather caps, or from leaks in heat exchangers. In each case, moisture contamination will adversely affect system performance and reliability, leading to component wear and eventual failure, with a corresponding increase in maintenance and repair costs.

GT4E - Guardian – Need to transfer oil at a controlled cleanliness level?

The Guardian filtration unit is the ideal solution complimenting condition monitoring procedures. With a broad selection of easy to change elements including water removal (WR) off-line clean up of existing oil in a reservoir is a simple process and does not require costly downtimes.

One of the main areas contamination originates is when new ‘dirty’ oil is introduced to your clean hydraulic system. The Guardian prevents this happening by filtering out contaminants during the filling process. The Guardian can also compliment existing filtration concepts by polishing your hydraulic fluids to assist in maintaining a clean, reliable and dependable application that won’t let you down.

Robust and fully portable – Guardian truly does offer the right solution in todays dependant mobile or industrial applications.
Early identification of disturbances
- Condition of oil/
  Contamination of oil
- Pressure
- Flow
- Temperature
- Speed level

Locally and stationary
- Preventing maintenance
- Commissioning
- Debugging

ServiceJunior
The ServiceJunior makes possible the measurement and display of pressures with one instrument. Measured values are shown with high precision on a 4-digit display. Pressure peaks are securely captured at a scanning rate of 10 ms.
- Digital pressure measurement and display
- Back-lit measured value display
- Accuracy ± 0.5% FS
- Pressure peaks captured by displaying MIN/MAX reading
- Graphic display with bar graph (trailing indicator), peak & hold function

ServiceJunior Kit
- Delivery in storage-case
- Incl. test point-adapters and test hoses

ServiceJunior wireless
- Measured data memory for storing pressure sequences
- Network operations: monitor several measurement points
- Read-out data from measured data memory to the PC via radio interface
- Set and evaluate measurement data using PC software “JuniorWin”
**Serviceman**
The Serviceman has 2 inputs for sensors. This enables a differential pressure measurement by pressing only one key. Fast comparisons of actual and set values are done very easily.
- Easy operation
- Prevention of measuring errors due to automatic sensor recognition
- Two-line display
- Pressure peak measuring in 2 ms

**Serviceman Kit**
- Delivery in storage-case
- Incl. test point-adapters and test hoses
- Attachments and sensors to measure pressure/temperature, flow

**The Parker Service Master Easy**
Measurement and display of up to four measured values simultaneously. Proportional technology differential values, addition, performance and signals are very easily analysed.
- Rapid fault diagnosis = high quality maintenance
- Pressure spike measurement 1 ms
- Measured value storage to record pressure sequences with various storage functions (auto trigger, start-stop, etc.)
- USB PC interface
- Setting and evaluation of measurement data with „SensoWin” software

**The Parker Service Master**
The Parker Service Master is a multi-channel hand meter for the simultaneous measuring of important hydraulic values. All hydraulic parameters such as pressure, differential pressure, flow and hydraulic power can be measured, displayed, stored and processed.
- Fast malfunction diagnosis = high servicing quality
- Measured data memory for storing pressure sequences
- Set and evaluate measurement data using PC software „JuniorWin”

**The Parker Service Master Kit**
- Delivery in storage-case
- Incl. attachments, test point-adapters and test hoses
For further information on other Parker Products, call the European Product Information Centre free of charge on 00800 2727 5374.

Parker Hannifin Sp.z o.o.
PL-02-235 Warszawa
Tel: +48 22 5732400
Fax: +48 22 5732403

Parker Hannifin Corporation
AE-Abu Dhabi
Tel: +971 2 6788587
Fax: +971 2 6793812

Parker Hannifin Portugal Lda
PT-4450-625 Leça da Palmeira
Tel: +351 22 9977360
Fax: +351 22 9961527

Parker Hannifin Corporation
AZPAR - Techn. Repr. for Parker Hannifin plc
AZ-1000 Baku
Tel/Fax: +994 12 4983966

Parker Hannifin S.A.-N.V.
B-1400 Nivelles
Tel: +32 67280900
Fax: +32 67280999

Parker Hannifin GmbH & Co. KG
D-41564 Kaarst
Tel: +49 2131 4016-0
Fax: +49 2131 4016-9199

Parker Hannifin Danmark A/S
DK-2750 Ballerup
Tel: +45 43560400
Fax: +45 43733107

Parker Hannifin España S.A
E-28850 Torrejón de Ardoz (Madrid)
Tel: +34 91 6757300
Fax: +34 91 6757711

Parker Hannifin Corporation
EG-Cairo
Tel: +20 2 5194018
Fax: +20 2 5190605

Internet: http://www.parker.com/euro_tfd
or http://www.parker.com/cmc
(Condition Monitoring products)