# Never change your oil

Kleenoil has launched a new on-board oil analysis and cleaning system, that it claims will allow engine and hydraulic oil to last virtually the life of a machine, eliminating oil changes, extending the life of the engine and hydraulics and improving efficiency.

It is generally accepted that a machine's oil quality and its cleanliness is a significant influence on the economic life of a machine. Another fact that is much less accepted is that even partially contaminated oil can increase friction and resistance within bearings etc.. leading to higher fuel consumption.

Kleenoil claims that its new By-pass filter with built-in analyser will both monitor and clean the oil as the machine operates. Another benefit is that with the oil remaining clean, dirt and sludge that normally builds up between oil changes and is rarely fully flushed, is eliminated. This is particularly true with hydraulic oil, which is changed less often and thus degrades between changes. Changes are usually carried out guickly, as part of a routine service which inevitably leaves a good deal of contamination in the system, including particles and water, thus increasing machine wear and costs.

Kleenoil's lifetime oil concept is a three part programme:

#### 1. Use long term environmental oils

Begin by installing long-term oils with environmentally considerate non-tox characteristics. Kleenoil recommends Panolin HLP Synth O rapidly biodegradable hydraulic oil that has



been proven suitable for long-term applications with more than a billion operating hours and up to 100,000 operating hours without a change. Oils such as this carry the Blue Angel approval sign while another product HLP Synth E also carries the 'Euro-Margerite' certification.

#### 2. Oil microfiltration through the by-pass circuit

The Kleenoil By-pass filters are independent of the return line and can therefore be equipped with exceptionally fine filters- down to 1µm nom, (avoiding the danger of filtering out components from the oil itself) along with a high dirt and water retention capacity. Therefore most abrasive and catalytic contamination is filtered from the oil. This results in the protection of the components. At the same time the chemical ageing process of the oil is slowed down. The oil retains its chemical and tribiological properties and therefore oil change intervals can be significantly extended.

### 3. Kleenoil ICC on-board oil analysis system

The Kleenoil Identification Contamination Control - ICC system is an oil analysis sensor that has been designed for the on-board oil analysis, in order to achieve the

> highest possible precision the data of the oil that is installed is programmed into the sensor. The state of the oil is then either displayed to the operator or the data can be sent to the machines on-board monitoring system or be sent via GSM/satellite where a telematics system is in operation.



Parker Hannifin has introduced a number of new hydraulic hoses, including the PowerLift 477, designed for typical crane and lifting equipment applications. It is a medium pressure hose designed for restricted spaces and offering higher working pressures. It features two steel wire braids and offers a combination of higher working pressure, smaller outside diameter based on compact hose construction, tight bending radius and light weight. In addition, the nitrile inner tube offers increased chemical resistance to bio oil, while the outer cover is resistant to abrasion, providing longer service life and reduced overall equipment costs.

Other new hoses include the RemoFlex 412, a highly flexible pilot line hose for an increased constant working pressure of 12.0 MPa for hydraulic control systems in mobile applications. And the Push-Lok Plus 801, a new low pressure hose from Parker with a higher working pressure and extended colour range.

## High performance ropes for mobile harbour cranes

Teufelberger has launched a new high-performance rope, the Evolution Q8, for harbour cranes and industrial applications which, it says, offers a longer service life and higher breaking strength. The Evolution Q8 offers a 40 percent longer working life than its predecessors, especially in single-layer configurations. The company says that the claim has been proven in both laboratory and extensive field testing.

At the same time the new rope offers a higher breaking strength, thanks to its compacted outer strands, delivering a 20 percent gain compared to conventional 8x25 steel wire ropes and around a five percent improvement over more sophisticated products. The compacted outer strands also provide improved multi-layer winding characteristics.



