

## 3 problems you can prevent with the right oil analysis



From machine reliability to production cost reduction, oil quality affects some of the most pressing problems Engineering and Maintenance Managers face

Research from Shell found that 70% of hydraulic component failures are due to the condition of the oil. Of those oil-related failures, 60% are linked to oil cleanliness. In other words, the condition of your oil has a direct impact on equipment performance – and your ability to deliver on schedule.

If your manufacturing faces any of the following 3 problems, a change in your approach to oil analysis will make it easier for you to deliver orders efficiently and reliably, without costly stoppages.

**1**

### Sub-optimal equipment and component life

Contamination in oil causes wear and tear

**2 to 5 microns**

Is the typical surface clearance between components



- Larger solid contaminants will cause damage to the surrounding components
- Chemical and water contamination cause additional degradation



The longer you operate machinery with contaminated oil, the sooner that equipment will need replacing



Regular oil analysis will:

- Identify all potential sources of contamination before they have operational and cost implications
- Make recommendations regarding oil, filtration, breathers and oil additives to rectify the problem, which will boost your return on capital investment


**2**

### Unpredictable and/or frequent machine breakdown and downtime

There is a direct correlation between fluid cleanliness and breakdown frequency

**Factor of 100 difference**

In the time between breakdowns for equipment operating with the **cleanest** versus the **dirtiest** fluid

**Dirtiest fluid**  
average 200 hours between breakdowns

**Cleanest fluid**  
average 20,000 hours between breakdowns  
(British Hydromechanics Research Association)



When you consider the costs of machine downtime and repair, 19,800 more hours of uptime translates to a significant sum



Regular oil analysis will:

- Establish the condition of your oil and the condition of your equipment
- Improve reliability while reducing costs associated with equipment downtime and failure
- Make it easier to meet KPIs around consistency, quality and safety – within budget


**3**

### A reactive approach to machine maintenance

Why Maintenance Managers struggle to keep to a preventative maintenance strategy:


**1**

They don't have enough information to plan an effective proactive strategy

**2**

They spend lots of time firefighting

As a result, maintenance is often on the back foot



The result: a drastic reduction in firefighting (read: late-night maintenance call-outs)



Regular oil analysis will:

- Give you more control over machinery by telling you what you need to do to prevent breakdown and minimise machine downtime
- Help you allocate resource and plan your maintenance schedule, with a traffic light system that colour codes issues to indicate urgency
- Include checklists with standard maintenance recommendations, so you save planning time



Reduce machine downtime, meet production targets efficiently and profitably, and easily manage your maintenance schedule

Those are just some of the benefits of the right oil analysis

At less than £100 per machine per year, it's an inexpensive solution, and can be the difference between being able to fill an order successfully and facing a penalty for missing a deadline. Weigh up the cost of getting your oil analysed with the cost of downtime or having to get your machines repaired – or even replaced – and you'll see just how much oil analysis could save you (in time and money).