

Program Goals Determine Basic or Advanced Testing

How do you decide if a basic fluid analysis package will provide sufficient testing? How do you know when a more advanced package is necessary? Knowing how fluid analysis fits into your maintenance plan and what you want to accomplish with regular sampling allows you to determine which tests you actually need.

For both engine and non-engine applications – hydraulics, turbines, gearboxes, compressors – basic testing will suffice if you simply want to monitor the condition of the unit and the fluid. It will identify dirt, water, fuel, soot and coolant contamination as well trends in wear particles less than 10 μ (microns) in size.

More advanced testing should be chosen for those units most critical to operations. This testing includes Total Base Number, Total Acid Number and Oxidation/Nitration, which are vital to extending oil drain intervals. Adding particulate analysis by PQ (Particle Quantifier) or ISO Particle Count monitors particle size, count and distribution.

Going even further, an Analytical Ferrograph or Micropatch qualifies the type of wear occurring and can identify its sources. Analytical Ferrography is ideal for turbines, gearboxes and rolling element bearing systems. Micropatch is also well-suited for turbines as well as hydraulic systems and compressors. Either can take your program to a preventive or predictive maintenance level that allows you to avoid catastrophic failure.

[Basic & Advanced Engine Oil Testing](#)

[Basic & Advanced Non-Engine Oil Testing](#)