

MT AN CHECK

Acid Number Titration Test

In the course of time the quality of oil can be substantially reduced due to high operation temperatures and nonlinear thermal load of the system as well as inadequate storage conditions and ingress of aerial oxygen. These various factors can cause oxidation and nitration of oils, viscosity increase and forming of acid sludge and sludge deposits. A change in the acid concentration can be of potential risk to different parts of hydraulic systems. Therefore, the MT AN CHECK test method is designed to assess the possible ageing of oil caused by both organic and inorganic acid contamination easily on-site in order to stay confident that this value remains within the normal ranges.

Features:

- Measuring range: 0 – 3 AN
- Measuring time: about 3 min.
- Accuracy: +/- 0.1 AN

Benefits:

- Easy and quick test procedure
- Applicable for hydraulic, gear and turbine oils
- Demonstrative test results



To determine the presence of acid in oil two reagents (indicator and titration solvent) are mixed until the green color appears. Then the oil sample is added, and the well-mixed liquid changes the color back to red if the acid is present.

To define the acid number the titration solvent is added drop by drop to the previously obtained mixture until the color changes again from red to green. The amount of titration solvent required corresponds to the equivalent acid value in the comparison chart (provided in the instruction manual).