



# KEY #1 TO OIL ANALYSIS SUCCESS

MPC varnish potential testing (ASTM D7843) measures how likely a lubricant is to form varnish deposits.

MPC stands for Membrane Patch Colorimetry (ASTM D7843).

Don't let invisible varnish kill your turbines.

## What is MPC Testing?

MPC is a [varnish-potential test](#) that captures insoluble contaminants on a filter patch and measures its color to trend oxidation byproducts helping prevent varnish-related failures in turbines, compressors, and hydraulic systems.

Essential for gas turbines and critical rotating equipment, finding the contaminants standard tests miss. MPC helps reveal "what's coming" before deposits form, making it a predictive test rather than a reactive one.

## Why It Matters!

Catch the "Invisible" Enemy

Varnish stays dissolved and invisible for a long time.

Standard visual checks often look perfect even when a system is at risk. By the time you see deposits, the damage is already done.

MPC is predictive, not reactive. It reveals what's coming before it sticks to your bearings and valves.

## How It Works

The Science Behind the Stain:

**Incubation:** The oil is heated and "rested" to force varnish precursors out of solution.

**Filtration:** Oil is pulled through a 0.45-micron membrane patch.

**Measurement:** A colorimeter analyzes the patch to find the Delta  $\Delta E$  (Delta E) value.

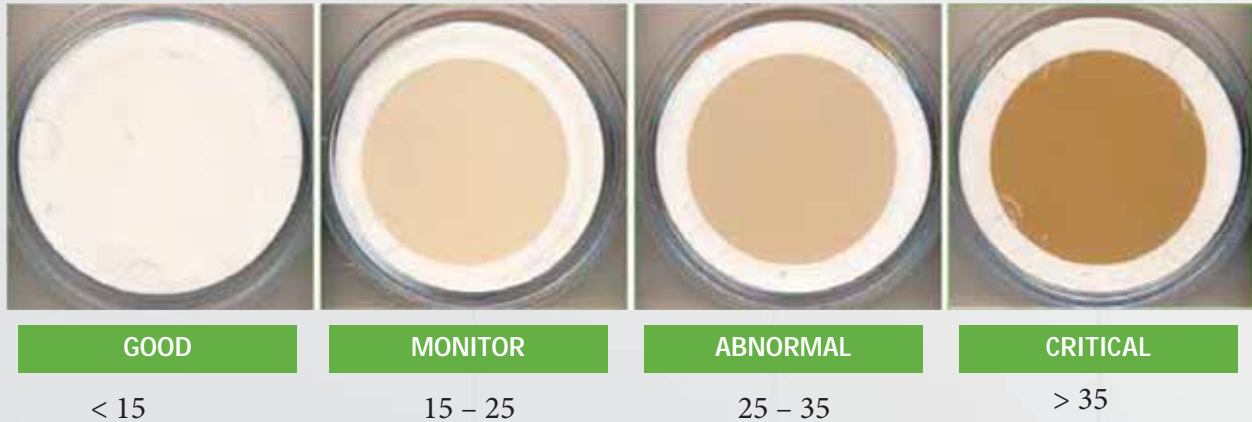


## Reading the results.

The patch is measured with a colorimeter, producing a Delta E ( $\Delta E$ ) value.

Lower  $\Delta E$  = cleaner patch = lower varnish potential.

Higher  $\Delta E$  = darker/more stained patch = higher varnish potential and higher deposit risk.



### Stop Guessing, Start Trending

Our Fluid Technical Center team takes the routine out of oil analysis, providing a complete picture of your fluid condition to ASTM standards. Testing packages are designed for each application and performed by professional chemists, delivering accurate, actionable results.

Data is reviewed and interpreted by application specialists and PhD chemists to provide a comprehensive overview of your samples and deeper insight into root cause. As part of our [ACE™ assessment](#), advanced testing **including MPC Testing** is performed to provide deeper insight into varnish potential and overall fluid health, empowering you to make data-informed decisions about your critical assets.

It's as easy as 1, 2, 3.

