

# Quench Oil Filtration Systems

## What happens to your quench oil over time?

As any quench oil is used, its inherent properties of heat resistance, hardening ability, and finishing quality begin to degrade. A gradual buildup of particulate contamination causes this degradation in quench quality. Also, particulate contamination will promote cracking or distortion of steel parts.

Oxidation occurs in quench oil as it is exposed to air or oxygen. At elevated temperatures, this oxidation occurs at a relatively high rate. Oxidation results in the buildup of organic acids and the formation of insoluble materials, or sludge. These insoluble materials increase the viscosity and decrease the finishing quality of the quench oil.

When the oil is exposed to elevated temperatures, thermal cracking may occur. This thermal cracking results in the formation of new materials; some are light, relatively volatile products that lower the flash point of the oil while others are heavy, less volatile materials that increase the viscosity of the oil.

## Are you experiencing any of the following problems with your quench oil?

- Diminished resistance to heat
- Increased oxidation
- Increased thermal cracking
- Non-uniform hardening
- Deterioration in hardness or finish
- Sludge build-up
- Uneven cooling on parts

## Solution: COMO Filtration Systems

Particulate contamination does not mean that your quench oil must be disposed of and replaced. COMO Multi-Pass Filtration removes the particulate from the quench oil, and thus extends the life of the fluid. COMO Multi-Pass Filtration removes both fine and gross contamination, which will reduce part-cracking and distortions, promote uniform hardening, and improve finish quality.

COMO Model 465-QH (Quench Filtration)

COMO Model 665-QH (Quench Filtration)