

Mau-Sherwood Supply Co.

Distributor of Industrial Supplies since 1908



Maximizing your coolant dollar.

It is important to follow the manufacturers' recommended guidelines for the metalworking fluid you use. These guidelines are suggested operating parameters designed to optimize the coolants performance. Final operating parameters will be determined by your specific application.

Example 1: Concentration Impact

It is estimated that through evaporation and carry off a machine tool will lose on average between 5 and 10% of fluid volume daily. For every five hundred gallons of sump capacity that equates to 25–50 gallons of make up required to keep the sump at the proper level. This would require a daily concentrate add of 1/4 to 1/2 gallons for every 1% of desired concentration, or 1-1/4 to 2-1/2 gallons each week. Assume a fifty week work year and we are now at 62-1/2 to 125 gallons of concentrate per 1% add rate for every 500 gallons of sumpage. A \$13.00 a gallon coolant would cost between \$812.50 and \$1,625.00 extra for every 1% excess concentration for a 500 gallon system.

On the opposite side too low of concentrations may save on the concentrate cost but lead to more expense in other areas; poor tool life, shortened sump life, corrosion. These costs can be significantly more expensive than the initial cost of the coolant concentrate.

Example 2: Fluid Selection Impact

Selecting the wrong chemistry can lead to undesirable results; machine tool and part corrosion, rancidity, dermatitis, undesirable residues, poor tool life to name a few. All of which add to the cost. There are also new technologies available that can increase sump life and reduce carry-off. It is not unusual to achieve a 10-30% reduction in concentrate usage by using some of these new technologies. Mau-Sherwood can help you determine the best ways to maximize your coolant dollar.