

## FLC-300 Ferrous Metal Grinding Fluid

FLC-300 is an economical grinding fluid formulated for use on ferrous metals. FLC-300 can perform most grinding operations that do not require high levels of lubricity for high levels of finish.

FLC-300 operates under severe conditions while providing high levels of cooling, superior corrosion protection, and long sump life.

**Outstanding Corrosion Protection** – FLC-300 passes the ASTM Cast Iron Chip test at a dilution of 25:1.

**Non-Foaming** – FLC-300 is non-foaming even under even under severe operating conditions, including Blanchard grinding.

**Rejects Tramp Oil** – FLC-300 rejects tramp oil, so machines stay cleaner and resist bacterial growth.

**Biological Stability** – FLC-300 provides extended tank life and low sludge levels due to biological build up.

**Non-Sticky** – FLC-300 will not build up on floors and equipment. It is re-dissolved by itself. Tanks can be cleaned by flushing with water containing D-SOLV dispersant.

**Calculating Starting Amount of Coolant** – To calculate the correct amount of coolant to be added to the sump, multiply coolant sump volume by 7.5 (the number of gallons of liquid in a cubic foot).

**Example:**

Tank width = 2 ft

Tank length = 6 ft

Tank depth = 2 ft

Volume = 2 x 6 x 2 = 24 cu ft

Liquid Volume = 24 x 7.5 = 180 gal

For a 50:1 concentration, add  $180/50 = 3.6$  gal to the coolant tank.

**Adding FLC-300 to the Coolant Tank** – When diluting FLC-300, ensure that the machine sump is clean and free of built up glass fines and other foreign materials. Always add water to the sump first after cleaning, and then add FLC-300. Circulate the sump for several minutes before starting production to give the tank time to completely mix.

**Checking Concentration** – Coolant concentration should be checked daily whenever possible. The simplest method is with a hand held refractometer. For the best results, always filter the coolant through a 1-micron filter before reading the solution concentration.

Once the coolant has been filtered, place a drop or two on the face of the refractometer. Hold the instrument up to the light and read the number just at the light colored line on the screen face. Write down and use it to refer to the refractive index chart enclosed with the product. Find the reading on the refractometer and locate it on the left-hand side of the chart. Now read to the right and down to determine the current dilution.

**Recommended Starting Dilutions**

Grinding                      20:1 to 25:1

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**FLC-300**  
**Ferrous Metal Grinding Fluid**

**Typical Properties**

Appearance	Clear Green Liquid
Volatile Component	Water
Freeze Point	32°F
Boiling Point	212°F
pH	10 - 10.3
Evaporation Rate	NA
Odor	Mild
Vapor Pressure	NA
Vapor Density	NA
Specific Gravity	1.04 - 1.05
VOC	None
Weight per Gallon	8.65 - 8.75
Solubility in Water	Infinite

**Packaging and Handling** – FLC-300 is a liquid packed in non-returnable drums, Tote Bins, Pails, and Bulk. Refer to the Material Safety Data Sheet for suitable materials of construction, for handling, and storing of this product. Observe all safety precautions shown on the label and in the Material Safety Data Sheet

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