

CIMCOOL[®]

Technical Report

Milacron Marketing LLC | Cimcool Fluid Technology | Cincinnati, Ohio 45209

CLEANOUT PROCEDURE FOR CENTRAL SYSTEM AND INDIVIDUAL MACHINE RESERVOIRS

A clean metalworking fluid performs better and lasts longer than a dirty fluid. When recharging an individual machine or central system fluid tank, a cleanout of the tank is beneficial so that the fresh charge of metalworking fluid can perform with maximum efficiency.

If not removed, accumulated shop waste, metal swarf, oil, mold growth, and pockets of bacteria cause deterioration of the fresh mix. In a new system, construction debris in the trenches and tanks, the chemical waste such as welding flux, must be removed from the assembly of steel trenches. If the trenches are constructed of cement, a good cleaning helps to season them.

The cleanout, therefore, is an essential first step. It insures that your metalworking fluid has an "even chance" to give maximum performance with a minimum number of problems.

The following cleanout procedures should be used when ever possible, while no operators are producing parts.

Procedure

1. Drain the entire central system or individual tank.
2. Remove all metal swarf and other debris from sumps, return trenches, oil pans, and filtration units.
3. Fill the system or tank with water sufficient to circulate through all lines and machines. Warm water is desirable, but is not absolutely necessary.
4. Add CIMCLEAN[®] 30 cleaner at 1:50 or stronger and circulate from 2 to 8 hours. During this period of circulation, brush all trenches and filter elements; scrub machines and oil pans.

CIMCLEAN[®] 30 is highly alkaline and prolonged contact with the skin may cause irritation.

5. If possible, steam clean areas where suspected accumulation of swarf, oil, or both may not have been removed by the cleaner.
6. When the physical cleaning is complete, drain the CIMCLEAN[®] 30 mix from the system.
7. Refill with enough fresh water to circulate throughout the system or tank(s) so that all traces of cleaner and swarf are removed. Drain all lines and sumps. If the rinse water is exceptionally dirty, rinse a second time.
8. Charge the system or individual tank(s) with the required amount of water.
9. Add CIMCOOL[®] product at the recommended concentration.
10. Circulate through the system to insure proper mixing before production starts. In precision grinding systems, circulate the fresh charge until it reaches room temperature. Otherwise, size control problems may be encountered by the first production shift.

Sometimes it is not possible to drain the system because of production demands or a manpower shortage. However, try to incorporate as much of the cleanout procedure as possible into one of the alternate methods (during shutdown or during production) shown below to achieve a good cleanout.

With Used Fluid- During Shutdown

After production stops, add one gallon CIMCLEAN[®] 30 to each 50 gallons of dirty fluid in the machine reservoir or central system. Circulate the mixture for 4 hours or longer through all lines and machine tools. Drain, rinse, and recharge with a fresh CIMCOOL[®] mix.

With Used Fluid- During Production

Not recommended for individual machines unless carefully supervised. During production, add 1 gallon CIMCLEAN[®] 30 to each 100 gallons of dirty fluid in the machine reservoir or central system. Circulate the mixture for 4 - 8 hours through all lines and machine tools. Drain, rinse, and recharge with a fresh CIMCOOL[®] mix. ■

NOTE: CIMCLEAN[®] 40 must be used for aluminum applications.

WARNING ! Protective gloves must be worn by maintenance personnel during this operation because
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