Proper Cleaning and Preparation of Central Cooling Systems and Individual Machine Tanks for LIQUID ICE COOLANT:

The cleaner your central system or coolant tank is when LIQUID ICE COOLANT is added, the better the coolant will perform and the longer it lasts. The benefits of a clear coolant far out-weigh the minor inconvenience of a thorough cleanout.

If not removed, traces of the old coolant, accumulated shop waste, metal sediment, chips, hydraulic oil, mold growths, and pockets of bacteria will cause the tank life of LIQUID ICE COOLANT as well as its machining qualities to deteriorate. In a new system, construction debris in the trenches and tanks, the chemical waste such as welding flux, and the anti-rust agent applied before shipping must be removed from all surfaces the coolant will touch or flow through.

The cleanout, therefore, is an essential first step. It insures that your coolant has an opportunity to give maximum performance and maximum tank life.

The following procedure should be used whenever possible, while no operators are producing parts.

Procedure:

1. Drain the entire system or individual tank of old coolant.
2. Remove all chips and other debris from sumps, return trenches, oil pans, and filtration units.
3. Fill the system or tank with enough water to circulate through all lines and machines.
4. Add ClearPower Cleaner* at 1:10 (10%) and circulate for an hour. During this period run cleaner through every coolant line and turret station. If possible spray down all surfaces of the machine where the old coolant has touched such as the sides and ceiling. If not possible then use coolant lines to get as much area as possible.
5. Drain the system or tank of all cleaning fluid.
6. Remove tank if possible and clean out by hand or take outside and pressure wash or hose down the tank, all covers, panels, and screens.
7. Put back the tank and once again fill the tank with water and 2% of LIQUID ICE COOLANT mixture sufficient to circulate through all lines and machines. The 2% of LIQUID ICE COOLANT will prevent rusting as opposed to using just plain water.
8. Circulate the 2% of LIQUID ICE COOLANT rinse mixture through the system for 10 to 15 minutes and if possible spray down all surfaces getting rid of all traces of ClearPower Cleaner. Drain the rinse water from the tank or system. If rinse water is exceptionally dirty, rinse a second time. **Fill with** LIQUID ICE COOLANT **immediately after rinsing to prevent rusting.**
9. Consult label or Liquid Ice Corporation for proper percentage of Coolant necessary to accomplish maximum efficiency. Add water and coolant in proper proportions for tank or central system capacity.
10. Circulate through the system to insure proper mixing before production starts. After 10 to 20 minutes check concentration with a Refractometer and insure proper percentage has been reached before commencing part production. If the Refractometer reading is low add more coolant until desired level is reached.

* **Caution!** When working with ClearPower always wear gloves to prevent irritation.