PROBLEM	CAUSES	SOLUTIONS
Foaming	Concentration too high	Adjust concentration to specifications
	Machine Cleaner in sump	Check pH – drain and recharge if necessary
	Mechanical – lines on suction side leaking, cracks in hose, loose fittings, impeller damage, cavitation	Repair or replace hose, pump, seals, impeller
	Soft water	Sample water, treat in necessary
	Pump pressure too high	Regulate as needed
	High tramp oil content	Skim off oil. Check for leaking oil lines
	Fluid level too high, too low	Adjust fluid levels
Rusting	Concentration too low	Adjust concentration to specifications
	Poor mixing (soluble oils)	Add concentrate to water. Never add straight water or straight concentrate to sump
	High concentration of dissolved solids (TDS)	Sample water. Drain and recharge sump if needed. Keep coolant filtered and remove chips & fines from machine bed. Use purified water. Call Star Metal Fluids
	Galvanic reaction from dissimilar metals	Clean chips from sump. Drain and recharge sump if necessary. Keep coolant filtered
	Evaporative cooler	Divert air flow away from machine
	Fluid contamination	Check for contamination sources
Poor Tool Life	Concentration too low, too high	Adjust concentration to specifications
	Wrong product being used	Call Star Metal Fluids
	High tramp oil content	Skim off tramp oils or replace coolant
	High Solids content	Filter or replace coolant
Odor	Low concentration	Adjust concentration to specifications
	Low pH	Check pH. Call Star Metal Fluids
	High tramp oil content	Skim off tramp oil or replace coolant
	Contamination	Find contamination source
	Solids, sludge or swarf	Drain sump. Purge solids, sludge or swarf. Put back old coolant and adjust concentration. Recharge with fresh coolant if necessary
	Bacteria, fungus	Treat with bactericide, fungicide. Drain, clean and recharge with fresh coolant.
Skin Irritation	High concentration	Adjust concentration to specifications
	High pH	Check pH, call Star Metal Fluids
	High tramp oil content	Skim off tramp oil or replace coolant
	Dirty shop cloths	Use clean, chip free cloths
	Contamination	Find contamination source
	Allergies	
Residue in	High concentrations	Adjust concentration to specifications
Machine	High tramp oil content	Skim off tramp oil or replace coolant
	Incorrect mixing	Add concentrate to water. Never add straight concentrate or water. Mix thoroughly
	Hard water	Treat water. Contact Star Metal Fluids
	Heavy misting	Check ventilation. Adjust coolant nozzles



Arizona: 602-256-2092 Utah: 801-641-2214 Toll Free: 800-367-9966



PROBLEM	CAUSES	SOLUTIONS
Foaming	Concentration too high	Adjust concentration to specifications
	Machine Cleaner in sump	Check pH – drain and recharge if necessary
	Mechanical – lines on suction side leaking,	Repair or replace hose, pump, seals, impeller
	cracks in hose, loose fittings, impeller damage, cavitation	· · · · · · · · · · · · · · · · · · ·
	Soft water	Sample water, treat in necessary
	Pump pressure too high	Regulate as needed
	High tramp oil content	Skim off oil. Check for leaking oil lines
	Fluid level too high, too low	Adjust fluid levels
Rusting	Concentration too low	Adjust concentration to specifications
	Poor mixing (soluble oils)	Add concentrate to water. Never add straight water straight concentrate to sump
	High concentration of dissolved solids (TDS)	Sample water. Drain and recharge sump if needed. Keep coolant filtered and remove chips & fines from machine bed. Use purified water. Call Star Metal Fluids
	Galvanic reaction from dissimilar metals	Clean chips from sump. Drain and recharge sump necessary. Keep coolant filtered
	Evaporative cooler	Divert air flow away from machine
	Fluid contamination	Check for contamination sources
Poor Tool Life	Concentration too low, too high	Adjust concentration to specifications
	Wrong product being used	Call Star Metal Fluids
	High tramp oil content	Skim off tramp oils or replace coolant
	High Solids content	Filter or replace coolant
Odor	Low concentration	Adjust concentration to specifications
	Low pH	Check pH. Call Star Metal Fluids
	High tramp oil content	Skim off tramp oil or replace coolant
	Contamination	Find contamination source
	Solids, sludge or swarf	Drain sump. Purge solids, sludge or swarf. Put bar old coolant and adjust concentration. Recharge wit fresh coolant if necessary
	Bacteria, fungus	Treat with bactericide, fungicide. Drain, clean and recharge with fresh coolant.
Skin Irritation	High concentration	Adjust concentration to specifications
	High pH	Check pH, call Star Metal Fluids
	High tramp oil content	Skim off tramp oil or replace coolant
	Dirty shop cloths	Use clean, chip free cloths
	Contamination	Find contamination source
	Allergies	
Residue in	High concentrations	Adjust concentration to specifications
Machine	High tramp oil content	Skim off tramp oil or replace coolant
	Incorrect mixing	Add concentrate to water. Never add straight concentrate or water. Mix thoroughly
	Hard water	Treat water. Contact Star Metal Fluids
	Heavy misting	Check ventilation. Adjust coolant nozzles



Arizona: 602-256-2092 Utah: 801-641-2214 Toll Free: 800-367-9966

