



Homogenizer Trouble Shooting Guide

SYMPTOM		CAUSE	REMEDY
MAIN MOTOR	Does not start or stops suddenly	Blown fuse	Replace the fuse
		Overload switch has released	Adjust the overload relay
		Too low oil pressure	Adjust the oil pressure
		Defective LOP switch	Check the correct function
	Gets too hot/ amps too high	Incorrect motor connection	Correct the motor connection
		Main voltage differs from the motor connection	Provide correct main or motor voltage
		Too high ambient temperature	Provide sufficient motor cooling
		Belts sliding	Tighten belts
CAPACITY	Drops or varies	Product is too viscous	Increase the feed pressure
		Belts sliding	Tighten belts
		Suction or discharge valves dirty or worn	Clean or replace the suction and discharge valves
		Air included in the product	Remove the included air
		Air included in the liquid cylinder	Vent the liquid cylinder
		Too high product temperature	Cool the product or increase the feed pressure
		Plunger packing or gaskets are worn	Replace the plunger packing or gaskets
		HOMOGENIZING PRESSURE	Drops or varies
Broken spring caught between the valves or spring slipped out of the spring groove	Remove all parts of the broken valve spring and fit new springs		
Air included in the cylinder block	Vent the cylinder block		
Suction or discharge valves dirty or worn	Clean or replace the suction and discharge valves		
Plunger packing or gaskets are worn	Replace the plunger packing or gaskets		
Defective pressure gauge	Replace the pressure gauge		
Product is too viscous	Increase the feed pressure		
Belts sliding	Tighten belts		
Out of reach	Micro-Gap® placed upside down		Refit the valve according to instruction
	Too low actuator pressure		Adjust actuator pressure
HOMOGENIZING EFFICIENCY	Is insufficient	Homogenizing valves are dirty or worn	Clean or replace the homogenizing valves
		Product was not correctly prepared	Alter the product composition or preparation
MICRO-GAP® VALVE SPRINGS	Slipping from spring groove	Too few valve plates	Check to see that the correct number of valves were reinstalled. Check with SPX for correct number of valves
INSUFFICIENT CLEANING	Of Micro-Gap® homogenizing valve	Cleaning process with operating HVA pump	Shut off the HVA pump before starting the cleaning process

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		Cleaning process is too short	Longer cleaning process	
		Too low flow rate of water during cleaning process	Run homogenizer throughout process cycle. Do not cycle homogenizer	
	HYDRAULIC MOTOR	Does not start or stops suddenly	Blown fuse	Replace the fuse
			Overload switch has released	Adjust the overload relay
Too high homogenizing pressure			Check the process and control	
Too low feed pressure			Check the process and control	
Gets too hot		Incorrect motor connection	Correct the motor connection	
		Main voltage differs from the motor connection	Provide correct main or motor voltage	
		Too high ambient temperature	Provide sufficient motor cooling	
HYDRAULIC PRESSURE	No hydraulic pump pressure	Moto not started	Start motor	
		Unloading valve is OFF	Activate unloading valve	
		Unloading valve damaged	Replace unloading valve	
		No or low hydraulic oil level	Refill hydraulic oil and check for leaks	
		Pump damaged	Replace pump unit	
	Too low hydraulic pump pressure		Regulation valve not adjusted	Adjust regulation valve
			Oil temperature too high (>45C)	Add cooling
	No hydraulic pressure to actuator		Pump worn	Replace pump unit
			No control signal to amplifier	Adjust control signal
			Amplifier scale too low	Adjust amplifier scale
			No unit pressure	Increase unit pressure
	Too low hydraulic pressure to actuator		Worn homogenizing valves	Replace valve with new or reground set
			Control signal to amplifier too low	Adjust control signal
			Amplifier scale too low	Adjust amplifier scale
			Too low unit pressure	Increase unit pressure
	Hydraulic pressure fluctuates		Air included in the product	Remove the included air
			Plunger packing or gaskets are worn	Replace the plunger packing or gaskets
			Suction or discharge valves dirty or worn	Clean or replace the suction and discharge valves
			Unstable or too low feed pressure	Stabilize or increase the feed pressure
			Air in hydraulic system	Bleed the hydraulic system
PRODUCT RELIEF VALVE	Release	Too high operating pressure	Check process and replace damaged parts	
		Pressure spikes	Call SPX FT service	
		Out of adjustment	Call SPX FT service	
	Leaking		Seat, ball or spring damaged	Replace damaged parts
ABNORMAL NOISE	Power end	Loud knocking sounds caused by wear or damage of mechanical connections	Check mechanical connections	
	Gear	Metallic noise caused by insufficient lubrication	Check oil for particles and water. Clean gear box and fill in new oil	
	Pipes	Shaking/vibrations due to heavy flow or pressure pulsations	Improved feed and discharge conditions. Install pulsation dampening device(s)	
	Homogenizer valve	High frequency loud noise due to imperfect guiding of the valve	Improve valve guidance or replace valve guides	
	Valve housing		Pump valve springs damaged	Replace pump valve springs
			Air in the product	Remove air from product
Insufficient filling of cylinders			Increase feed pressure	