DESCRIPTION
- Title : Service Manual
- Page : 20
- Date :Sepetember 09

TROUBLESHOOTING CHART

PUMP PROBLEMS

PROBABLE CAUSE AND REMEDY	Pump does not rotate.	Pump does not discharge/	Discharge output low.	Discharge output fluctuates.	Pump drive overloaded.	Pump noisy.	Shaft seal leaks.	Stator wears too fast.	Rotor wears too fast.
Incorrect power supply; drive not properly wired. *Check motor nameplate data; test voltage, phase & frequency.*					●		●		●
Foreign matter in pump. Remove foreign matter.				●	●		●		●
If pump or stator is new, too much static friction. *Fill with liquid and hand turn.*					●				●
Stator swells due to chemical attack. *Change stator material.*		●			●				●
Stator swells due to high liquid temp. *Reduce liquid temp. or use an undersized rotor.*	●	●			●				●
Blockage due to solids in liquid. *Decrease solids-to-liquid ratio.*									
Liquid settles and hardens after pump shut down. *Clean and rinse pump after each use.*	●	●	●	●	●	●	●		●
Suction pipe not submerged. *Reposition suction pipe.*				●		●	●	●	
Air in suction pipe. *Tighten connections to stop leaks.*				●		●	●	●	
Pump speed too low. *Increase drive speed.*							●	●	
Suction lift too high (cavitation). *Reduce suction losses; move pump to lower elevation; increase pipe size.*	●	●		●		●	●	●	
Pump running dry; no prime. *Fill pump with liquid; relocate suction piping.*		●		●	●		●	●	
Stator worn excessively. *Replace stator & inspect rotor.*				●		●	●	●	
Rotor worn excessively. *Replace rotor.*		●		●		●	●	●	
Wrong direction of rotation. *Reverse drive motor polarity.*			●					●	
Discharge pressure too high. *Open discharge valve; reduce discharge pipe length; remove obstruction, increase pipe size.*	●	●		●		●	●		
Suction pipe leaks. *Tighten pipe connections.*				●		●	●		
Shaft packing leaks. *Tighten packing gland; replace packing; lubricate packing.*						●	●		
Stator material brittle. *Replace stator.*	●	●		●			●		
Pump speed too high. *Reduce drive speed.*	●	●		●	●	●			
Liquid viscosity or specific gravity too high. *Measure and compare with specification.*				●	●	●	●	●	●
Packing too tight. *Loosen gland nuts, & lubricate packing.*					●				●
Bend drive shaft. *Replace drive shaft.*				●	●				
Drive and pump misaligned. *Re-align drive and pump.*				●					●
Flexible drive coupling worn. *Repair or replace coupling.*				●					
Drive shaft bearings worn. *Replace bearings.*			●	●					
Incorrect packing. *Change packing material.*			●						
Packing too loose. *Tighten gland nuts & lubricate.*			●						
Incorrect parts. *If pump has been rebuilt, check to verify original Syno parts used.*	●	●		●	●	●	●	●	●

Note : If further troubleshooting procedural information is needed, please contact your authorized Syno Pump Distributor.