Consult the following tables when problems are experienced, if solutions are not found in this chart or should there be any doubts, do not hesitate to contact POMPETRAVAINI or your local representative.

PROBLEM	LIST OF POSSIBLE CAUSES
Pump does not create or the vacuum is too low	1 - 2 - 3 - 4 - 9 - 11 - 18 - 19 - 22 - 23 - 24 - 25
Excessive noise	1 - 4 - 5 - 6 - 7 - 10 - 24
High power consumption	1 - 5 - 6 - 8 - 9 - 15 - 24 - 25
Vibration	5 - 6 - 7 - 8 - 10 - 12 - 13 - 24
Mechanical seal leaking	11 - 14
Pump looses liquid	11 - 19 - 23
Bearing failure	5 - 6 - 7
Pump does not start	1 - 6 - 20 - 21
Shaft partially or totally locked	6 - 10 - 15 - 16 - 21
Cavitation	3 - 4 - 8 - 9 - 17 - 24

	CAUSES	SOLUTIONS
1	Defective motor or wired wrong	Check the voltage, the frequency, motor type, power
		consumption, rotation, wiring connections, phase consistency
2	Leakage in suction piping	Repair piping; check valves for leakage
3	Service liquid high temperature	Lower the service liquid temperature
		Check the level of the service liquid
		Adjust the cooling liquid flow
		Adjust the radiator thermostat to lower temperature setting
4	Low service liquid flow	Increase the service liquid flow
5	Coupling misalignment	Re-align the coupling and the pump/motor assembly
6	Faulty bearing	Replace the bearing
7	Cavitation	Open the anti-cavitation valve or set the relief valve to a lower
		vacuum
8	High service liquid flow	Reduce the service liquid flow
Ŭ		Adjust the by-pass valve
9	High back pressure	Check the discharge line for obstructions or high friction losses
		Reduce the back-pressure to maximum 0.1 bar
10	Wrong pump/motor assembly	Verify that the base surface is level and that all pump feet are
		resting on the surface, add spacers if required
11	Mechanical seal failure	Change the mechanical seal
12	Wrong pump mounting	Remount the pump
13	Piping weight resting on pump	Support the piping with hangers or other means
14	Inadequate seal lubrication	Check flushing liquid temperature, flow and pressure
15	Mineral deposits from hard water	Clean the pump
16	Foreign particles in pump	Disassemble the pump to remove the foreign objects
17	Low suction pressure	Open the vacuum regulating valve and/or the anti-cavitation valve
		(vacuum relief valve)
18	Wrong pump rotation	Reverse the rotation
19	Bad gaskets	Replace the defective gaskets
20	Wrong motor connections	Check the electrical connections (connectors, fuses, breakers)
		and the power supply line
21	Pump seized	Disassemble and repair the pump
22	Pump undersized	Select a pump with higher capacity
23	Pump worn-out	Disassemble and repair the pump
24	Excessive liquid flow through suction line	Reduce the liquid flow through the pump suction
	· · ·	Install a centrifugal separator (cyclone) before the pump
25	Instrumentation out of calibration	Check the working characteristics, replace if required