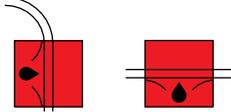


3.10 Trouble-shooting and possible correction

Problem	Possible cause	Correction
System will not start or stops in mid-operation (no indication of fault)	1) Mains power supply cut off 2) Fuses have blown 3) Control voltage fuses in DELTA-BOOSTER have blown	Connect mains power supply Check that fuses correspond to power consumption (model plate). Renew fuses Call customer engineer
System does not start or stops in mid-operation with the following fault indication:	Any of the below faults is fatal and should be corrected	When fault has been corrected restart system - check that the fault indication has disappeared
C3K 	Motor guard on motor 2 cut out: 1) No phase 2) Pump - motor blocked 3) Short-circuit in motor	*) Call customer engineer (C3K pump no. 2 can be withdrawn on the steering - see section 3.5 - upon which the operation can be resumed)
C3K 	Thermal cut-out sensor in motor 3 cut out 1) Air intake obstructed	*) Allow the motor to cool Check the air intake and clean, if necessary
Water tank 	Water level in water tank too low	Check that the shut-off's on the water inlets are open and clean the inlet filters, if necessary. Check that the water supply meets the requirements stated in sect. 1.5
Water tank 	Temperature in water tank too high (>80°C) Temperature in water tank too low (<2°C)	Allow the water to cool, empty the water tank, if necessary. Check that the cold water connection is open and, if not, that the temp. on the hot connection does not exceed 75°C Empty the water tank, and make sure that the temperature of the water inlets are above 2°C.
Pipeline / internal hoses 	Leakage: external or internal	In case of external leakage: disengage any open spray handles, if relevant - repair leakage. In case of internal leakage: repair leakage
Sensors 	Combination of sensor values illegal. I.e. if the high pressure switch is ON and the low pressure switch is OFF .	Call customer engineer
One or more pumps will not stop after end of operation	High-pressure cock at outlet point does not close Flow sensor return defective	Check that all high-pressure cocks at outlet points have been closed Call customer engineer
Pump restarts at short intervals	The system cannot keep up pressure	Check that all high-pressure cocks at outlet points have been closed
Working pressure too low	The high-pressure cock at outlet point not completely closed Double spray lance used at outlet point without injector Excessive water consumption	Check that all high-pressure cocks at outlet points have been closed. Shift to single spray lance at this outlet point. Check whether the water consumption of the spray lances used exceeds the capacity of the system - shift to other spray lances, if necessary
No working pressure	High-pressure cock at one outlet point is left open	Shut off the high-pressure cock at outlet points not in use
Irregular working pressure (machine vibrates)	Air in pump Inlet water too hot	Vent the system, cf. sect. 2.5.3 Allow water to cool and check that inlet temperature does not exceed 80°C
Water volume at outlet point too small	Blockage of filter for inlet water Nozzle blocked	Clean the filter, cf. sect. 3.9.2 Clean the nozzle

*) In both cases the plant will stop and the related control lamp will flash. When restarting the plant, the pump will **AUTOMATICALLY** cut out, and the operation can be resumed - the control lamp will now be constantly alight.

If other faults occur than those enlisted please contact your nearest  service centre.