

# Keep your pumps pumping

**What should you do if pump output starts falling? Or you suspect the build-up of sediment? And what can you do to help prevent sewage back-up? We asked our most experienced service technicians to share their top tips.**

If you can't find the answers you're looking for here, or you want to learn more about how preventative maintenance can help prevent sewage back-ups, contact your local service workshop today or visit [www.flygt.com](http://www.flygt.com)

*SAFETY FIRST! Before doing any work on your pump, read the instructions in the Installation, Operating and Maintenance manual carefully.*



## **Problem:** **WON'T START/ PUMP TRIPPING**

The control panel displays an alarm or the pump does not start.



**Cause:** Installation is not receiving voltage.  
**Solution:** Check that main power switch is on, fuses are intact, voltage in all three phases. Ensure that voltage is OK.

**Cause:** An alarm has been triggered in the control panel.  
**Solution:** Reset the alarm. Check and reset overload protection. Ensure that the impeller rotates freely.

Note: If the pump will not start automatically, but can be started manually, you should first check to see if the start level regulation is working. Next, ensure that all control system connections are intact. Finally, check the relays, contactors, alternation relay and/or PLC functions.



## **Problem:** **LOW PUMP CAPACITY**

The pump is pumping very little or no water.



**Cause:** Impeller is rotating in the wrong direction.  
**Solution:** If it is a three-phase pump, transpose two phase leads. If it is a single-phase pump, the problem is more complicated. Contact Xylem for advice.

**Cause:** Clogged impeller.  
**Solution:** Clean impeller and pump housing (volute).

**Cause:** Pipes are obstructed.  
**Solution:** Clean out pipes to ensure a free flow.

**Cause:** Worn impeller and/or pump housing (volute).  
**Solution:** Check that pump housing (volute) is intact. Check adjustment of impeller. If impeller is worn, replace it.

**Cause:** Check valve is blocked or stuck.  
**Solution:** Clean valve. If damaged, replace.



## **Problem:** **CURRENT/POWER TOO HIGH**

Current usage or power consumption higher than expected.



**Cause:** Clogging.  
**Solution:** Remove pump and check to see if rags, fibres or solid objects are stuck in the impeller. Thoroughly clean the impeller and the pump housing (volute).

**Cause:** Wrong duty point.  
**Solution:** Check duty point. If needed, change impeller to suitable curve and adjust level regulators to correct levels.

**Cause:** Undervoltage.  
**Solution:** Check the voltage. If undervoltage is more than 10% contact your power company.



## **Problem:** **HIGH IMPELLER WEAR**

Unexpected high levels of wear of impeller and/or wet end.



**Cause:** Presence of abrasives.  
**Solution:** Replace with a more wear-resistant impeller.  
**Cause:** Wrong pump for type of liquid.  
**Solution:** Use a pump that is designed for the pumped liquid.



## **Problem:** **SEDIMENTATION**

Build-up of solids in the pipe or on the bottom of the sump.



**Cause:** Poor sump design.  
**Solution:** Add flush valve or change control method. There are a few different options – contact Xylem for advice. In extreme cases, you may need to add a mixer or redesign the sump.

**Cause:** Heavy rain.  
**Solution:** Add flush valve or change control method. There are a few different options – contact Xylem for advice.