Alarms, Automatic Cut-Outs	Testing that every designed and installed alarm and safety function operates properly / Testing to demonstrate that every automatic cut out operates at the designed level.
Muncher:	Blockage cut-out test/Currency reading during normal operation & at blocked situation/Safety test
Gearboxes:	Oil reservoir breather / Rotation / Vibration / Oil leakage test
Surge Protection:	Test run with fresh water under start & stop conditions with empty and filled pressure line, readings at the vent valves / pressure vessel / test run under normal operation conditions

1.4.5 Individual Plant Components

1.4.5.1 Testing Step I

All plant components shall be tested and commissioned, as far as practicable, under dry-run conditions, strictly in accordance with the manufacturers' instructions.

1.4.5.2 Testing Step II

After successful completion of Step I the hydraulic performance of each plant component shall be tested, using effluent or potable water.

1.4.5.3 Hydraulic Performance Tests

A. After successful completion of individual plant component tests the hydraulic functioning of the plants shall be tested as follows to verify the performance as specified:

B. The wet well of the pumping stations shall be filled with sweet water in such intervals to enable running of the stations for one hour under expected high flow conditions with a minimum of 6 pumping cycles. The water shall be discharged to the pressure pipeline / network connecting the pumping stations with the main pumping station.

C. Each pump shall be individually tested for a period of at least 48 hours continuously.