



**WP/SEA MINIMUM REQUIREMENTS
Hydro Testing**



MEMORY JOGGERS

Ensure that the following conditions are met before proceeding. If not met, address on WP/SEA.

- Communicate the **“RIGHT TO STOP WORK AUTHORITY POLICY”** and is exercised by all crewmembers and other personnel that believe something or some condition has changed. The job is to be stopped and accessed before proceeding. The WP/SEA may need to be modified or a new WP/SEA maybe required before starting the work task again.
- A list shall be prepared of all sensitive equipment that shall be removed, blocked off or isolated during hydro-testing operations.
- Test pressure shall be decided prior to beginning HYDRO-TEST.
- Hydro Test area shall be barricaded off with red barricade type before pressuring up system.
- No non-essential personnel are to be in the area while systems are pressured up.
- All equipment, material, and connections (i.e. pumps, hoses, bleed off valves, valves, flanges, gauges, fittings and piping) must meet pressure rating of test and shall be inspected prior to use.
- A qualified person shall install piping & tubing as required for the HYDRO-TESTING operation.
- Pump and recorder shall be set up as far away as possible from the items or systems being HYDRO-TESTED.
- All pipe work shall be free from dirt and grease.
- Ball valves shall be pressure tested in half open position.
- All piping shall be adequately supported before filling the piping systems with water.
- Piping containing check valves shall have the check valve disc removed or jacked open.
- All other valves in system not removed shall be HYDRO-TESTING in the full open position.
- Turbines, pumps, compressors and vessels shall be blinded off prior to HYDRO-TESTING operations.
- All items being tested must have bleed points prior to pressuring up.
- Piping systems or vessels to be HYDRO-Tested shall be walked down and all bolts, valves, plugs etc. shall be checked for tightness prior to test media being introduced to the systems being tested.
- Verify all crewmembers involved with ICP HYDRO-TESTING have on appropriate PPE within the testing limits.
- No test will be attempted which will maximize the equipment being used.
- Verify good communications is established and maintained between the platform operators and the ICP Hydro-Testing crew.
- Verify access and escape routes are clear at all times or alternative routes marked and the work force informed.
- Verify all QC requirements have been met and have been released for HYDRO-TESTING.
- Check pins and whip checks must be fitted across all crows’ foot connectors before starting.
- Check all areas above and below the worksite to minimize the probability of objects falling onto or from the **worksite**.

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1)	Verify All conditions identified in the “Memory Joggers” section are met (or are not applicable); if ANY are not met, STOP and add the necessary step to the WP/SEA to ensure the safest method possible.
2)	Review the work scope with the crewmembers and associated personnel before starting flushing of pipe begins.
3)	Release flange joints at test limits and carry out visual inspection.
4)	Fit/install rated blind flanges/spades at test limit points as per test pack isometrics.
5)	Fit D&T blind flanges and instrument valves at fill & vent points if required.
6)	Erect signs & barriers and make announcements over platform PA system.
7)	Connect fill hose from utility station and top off piping with potable water until water starts to flow or vent out. (Carbon Steel Only)
8)	Install pressure gauges, chart recorder (dead weights if required) and test pump.
9)	Pressure piping to utility source pressure checking for leaks.(pressure source typically good for 60 to 90 psi)
10)	Verify valves from piping to test pump are open and all gauge vales are open.
11)	Commence pressuring operations in 25% increments observing gauges, chart recorder and checking the soundness of the piping and flange joints for leaks.
12)	Increase water pressure as required until pressure reaches desired level and stabilizes.
13)	Once water pressure as stabilized at desired pressure close valves to test pump only and start chart recorder.
14)	On completion of pressure Test Company representative must sign off pressure test results.
15)	Perform all QC functions and sign off.
16)	Upon QC acceptance and company representative sign off hydro crew may start to de-pressure piping
17)	Once piping has been depressurized hydro crew may start draining the piping
18)	Verify all the water has been drained.
19)	Remove all test equipment, spades or blinds, needle valves used for testing.
20)	Replace all valves, specialty items, check flappers and replace with new gaskets.
21)	Replace all bolts and torque or hammer wrench tight.
22)	Perform all QC functions and sign off.
23)	Upon complementing the work, a review of the work area by the designated person will remove all barriers or will instruct one of the crewmembers to do so.
24)	The designated person and crewmembers will verify that all the equipment and location have been left in a clean, safe condition. All the tools, equipment and barriers have been removed and all persons have been accounted for.