



Tanks hydrostatic & visual testing centers requirements

1. A hydrostatic testing device capable of testing high pressure tanks up to 300/340bars & equipped with a deformation gauging device.
2. The testing hydrostatic device must measure walls deformation using water jacket system
3. The elasticity of the tank's walls (permanent deformation of the walls) must not exceed 10%
4. The accumulative (when making the second, third test, etc) permanent deformation of the walls must not exceed 10%
5. A mechanical tumbling device capable of cleaning all around the tanks.
6. Tumbling materials for aluminum tanks should be aluminum oxide chips and /or glass granules.
7. Tumbling material for steel tanks may include: sand, ceramic granules, granite and basalt granules.
8. A high pressure washing device.
9. Hot air blowers for drying the tanks.
10. The technical manager is licensed to perform hydrostatic test and visual inspection for SCUBA tanks (i.e. PSI, ASSET or any other agency recognized by WRSTC or EUF)
11. Trained personnel for operation.
12. Special tank stamp & unique marking including date of test.
13. Proper visual inspection tools, lights, tank & valve thread testing and measuring device, tank internal, external, bottom and side wall pits measuring device and training certification.
14. Suitable tool to damage Scuba tanks that failed the Hydrostatic or Visual test; so it can **NEVER** be used as a compressed gas container again.
15. Special documents & sticker for **Annual** tank visual inspection.
16. Documentation system including tank type, serial numbers, date & client's name.
17. A technical validity certificate (TVC) from CDWS.



Rules and regulations:

1. The first hydrostatic test for new **Aluminum/Steel** scuba tanks will be made after
2. 5 years.
3. The following hydrostatic tests for **Aluminum/Steel** scuba tanks will be made every 5 years.
4. It is **recommended** by the manufacturers to conduct the visual inspection for heavily used scuba tanks (tanks filled more than 4-5 times a week) every 4 month.
5. The **maximum** allowed intervals between visual inspections is 12 months.
6. The scuba tank must be condemned if it fails visual and/or hydrostatic tests.
7. All tanks with garbled, unclear or no serial number must be condemned.
8. Tank valve must be checked and serviced along with every visual inspection.
9. All repaint jobs for scuba tanks must be conducted after fully stripping the old paint.
10. New paint must show clearly the tank brand, serial number, operating and testing pressure and the last hydrostatic test date.
- 11.** Tanks that fail hydrostatic or visual tests must be damaged (condemned) to make sure that it will be **impossible** to use them as a container for any gas at any pressure. **(without exceptions)**



Testing standards from LUXFER & Catalina Cylinders manufacturers

1. CONDEMN all cylinders with any interior sidewall, crown, or base isolated pit estimated to be over 0.060 inch (1.53 mm) deep.
2. CONDEMN all cylinders with interior sidewall line or broad spread corrosion when one or more interior pit in the line corrosion is deeper than 0.030 inch (0.76 mm), and/or if the interior broad spread corrosion is deeper than 0.030 inch (0.76 mm).
3. CONDEMN all cylinders with interior sidewall line corrosion that is over 6 inches (152 mm) long.
4. CONDEMN all cylinders with internal broad spread corrosion covering more than 25% (one fourth) of the cylinder.
5. CONDEMN all cylinders with one or more external corrosion pits over 0.060 inch (1.53 mm) deep in the sidewall, crown, and/or base.
6. CONDEMN all cylinders with external line or broad spread corrosion when one or more pit, or the broad spread corrosion, is over 0.030 inch (0.76 mm) deep in the sidewall or crown.
7. CONDEMN all cylinders with external line corrosion over 6 inches (152 mm) long.
8. CONDEMN all cylinders with external broad spread corrosion covering more than 25% (one fourth) of the cylinder.
9. **Or** as per other manufacturers recommendations.

NOTE:

The tank testing station is **responsible** to perform and follow all the above mentioned regulations and **condemning tanks in case of test failure.**