



## TECHNICAL BULLETIN

### SUBJECT: DOT REQUIREMENTS SUMMARY

#### **Introduction**

See relevant 49 CFR and CGA pamphlets. The items below are not intended as a replacement for DOT specific training. Information is given for guidance only and as a quick reference. The appropriate DOT regulations **must** be referred to for further clarification.

1. Cylinders must be re-qualified in accordance with DOT requirements by properly trained operators.
2. A cylinder bearing a DOT specification must be tested in conformance with DOT requirements.
3. No person may mark a test date or RIN on a DOT specification cylinder unless all requirements have been met, and that person holds a current identification number issued by the Associate Administrator for Hazardous Material Safety.
4. Any change in name, address, ownership, test equipment, management or personnel performing any function shall be reported to the Associate Administrator for Hazardous Material Safety within 20 days of change.
5. Unless otherwise specified, each time a cylinder is re-tested, it shall be visually inspected, internally and externally in accordance with CGA pamphlets C-6, C-6.1, C-6.2 and C-6.3 as applicable.
6. The pressure-indicating device must permit reading of pressures to within 1% of the minimum prescribed test pressure of the cylinder under test.
7. For an analogue device, e.g. a gauge. Interpolation to 1/2 of the marked divisions is permitted.
8. The expansion-indicating device must permit incremental reading of cylinder expansion to 1% of the total expansion or 0.1cc, whichever is larger.
9. Each day the re-tester shall confirm that the pressure-indicating device is within  $\pm 1.0\%$  of the prescribed test pressure of any cylinder tested that day.
10. The pressure indicating device itself must have an accuracy of  $\pm 0.5\%$  or better of its full range and permit readings 90% - 110% of minimum prescribed test pressure.
11. Pressure indication device accuracy must be demonstrated at any point within 500 psi of test pressure at or above 3000 psi, or 10% below 3000 psi.
12. The expansion-indicating device must give a stable reading and be accurate to  $\pm 1.0\%$  of total expansion, or 0.1cc, whichever is greater.
13. The expansion indicating device itself must be accurate to at least an accuracy of  $\pm 0.5\%$ .
14. The test equipment must be verified as accurate within  $\pm 1.0\%$  of the calibrated cylinder's pressure and corresponding expansion values.
15. Minimum test pressure must be maintained for at least 30 seconds, and as long as necessary to complete cylinder expansion.
16. A system check may be performed at or below 90% of test pressure prior to test.
17. In event of a malfunction, tests may be repeated at a pressure increased by 10%, or 100 psi, whichever is less.
18. A condemned cylinder must be marked in accordance with DOT regulations.
19. Daily test records must be maintained.
20. 3HT cylinders must be tested in accordance with CGA pamphlet C-8.
21. 3HT cylinders must be condemned if Elastic Expansion exceeds the marked Reject Elastic Expansion, or 1.05 times original elastic expansion.
22. 3HT cylinders must be condemned after 24 years, or 4380 pressurisations, whichever is first.