



**AWS C3.7 Official Interpretation**

**Subject:** Furnaces

**Document:** C3.7M/C3.7:2005, *Specification for Aluminum Brazing*

**Code Provision:** C3.7: Page 5, Subclause 5.4.2. (Vacuum Furnaces)

**Inquiry:** Presently, the leak rate test for the vacuum furnaces we possess is performed once a half year in accordance with the in-house regulation. On the other hand, subclause 5.4.2 requires that the leak test shall be performed at least once a week.

The requirement of the in-house regulation is as follows:

A cold and previously outgassed furnace shall have a total of no more than 0.07 Pa per hour when the vacuum chamber is isolated from the pumping system after being evacuated to less than 0.01 Pa. The leak rate test for the vacuum furnaces that we possess is performed with a stricter requirement than subclause 5.4.2, so we believe that it is impossible for the furnaces to have a total leakage of more than 2.6 Pa.

Our interpretation is:

When the leak rate test is successfully performed once a half year in accordance with the in-house regulation, it does not need to be performed once a week because subclause 5.4.2 states "Such a leak rate test shall be performed at least once a week or whenever there is reason to suspect an unacceptable leak rate exists."

**Response:** The brazing operator may impose a lower leak rate criteria but that does not override the requirement for weekly testing.