

Guidance Note: Scuba Cylinder Valve Refurbishment, EN 14189 – 03/05. Amendment 01 – 09/11.

This guidance addresses some confusion, expressed by members regarding the interpretation of EN 14189 Clause 8.0 and the marking stamping of Scuba valves. This update incorporates guidance on this issue received from the HSE.

ASSET Guidance Note 03/2002, ASSET Code of Practice No 2 July 2002, the DITC and CTC Pt 1 Handbooks November 2002 anticipated the requirements of, what was, at that time, a provisional Standard Pr EN 14189. This amendment revises the advice contained in these. Current Codes and Handbooks have been amended accordingly.

Technicians inspecting and testing Scuba and BA cylinders should take particular note of page 2.

EN14189 2003

This standard contains requirements for valve examination and refurbishment. However, the wording is causing some confusion, giving rise to the question:

“Must a valve be refurbished every time it is removed from the cylinder?”

The confusion arises from reading Clause 6 without carefully considering the procedures in Clause 5.

Beginning with Clause 5.1, which states: *“Where the periodic inspection demands the removal of the valve, follow **procedure A**. Otherwise follow **procedure B**”.*

1. In the case of Scuba and BA cylinders, **the valve will always be removed** at the time of an inspection or inspection and test, therefore, **procedure A (Clause 5.2) always applies**.
2. Clause 5.2.1 requires that the valve must be **externally cleaned** and the valve bore (anti-debris tube and passages) and outlet be checked for corrosion, foreign bodies and contamination before examination. Clause 5.2.2 Calls for an external examination and a check of the valve action.
3. Clause 5.2.2 (G) states: “internal passageways containing foreign matter. These shall be inspected as far as possible, *without dismantling the valve*”.
4. Clause 5.2.3, Acceptance Criteria, states: “Valves with any of the defects listed in 5.2.2 shall be subject to a full refurbishment in accordance with clause 6 or be scrapped in accordance with clause 10”. **Therefore, Clause 5.2.3 is the key to answering the question.**

By implication, Clause 6 only applies if defects are found, therefore, **if no defects are found, the valve may be returned to service without refurbishment.**

In other words, 5.1 requires the valve to be externally cleaned (5.2.1) and externally examined for defects (5.2.2) every time it is removed from the cylinder, but if no defects are found, the valve may be returned to service without being refurbished (5.2.3).

If the valve fails inspection in accordance with Clause 5.2.2 (a), (c), (d), (e) and (f) or cannot be refurbished in accordance with Clause 6, it should be scrapped in accordance with Clause (10).

Clause 8

After being refurbished, **the valve must be stamped** with the year (two digits) and “test house” mark.

However, after consultation with the HSE, it has been agreed that it is not practicable to stamp Scuba and BA cylinder valves.

Instead, HSE OD4/4/1003/2003 – A17 advises: ignore clause 8 and instead issue the valve with a certificate instead.

Note 1: The example inspection/test certificate in the appendices of the Dive Industry Technician’s and ASSET Cylinder Tester’s Handbooks make provision for this requirement.

Scuba cylinder valves are subject to harsh conditions and, on average, considerably more wear and tear than other types. **It is recommended that scuba cylinder valves be refurbished at every inspection or test.**

This guidance is offered in good faith and is believed to be correct to the best of our knowledge. Nothing contained herein shall be deemed to override good practice, manufacturers’ policies, the relevant Standards and the Law.

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