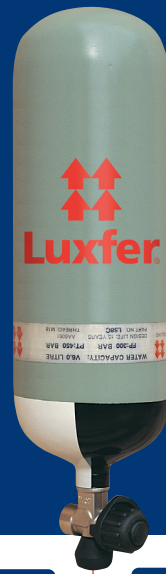


STEP-BY-STEP fitness check



The number one choice for SCBA users throughout the world - Luxfer's Carbon Composite Cylinder has been designed to deliver outstanding performance even under extreme pressure:

- Ergonomically designed for manoeuvrability and comfort.
- Ultra-lightweight specifications.
- Reduces physiological stress and air usage.
- Exceptional strength and durability.
- All cylinders conform to EN 12245 or ISO 11119-2 (previously HSE-AL-FW2).

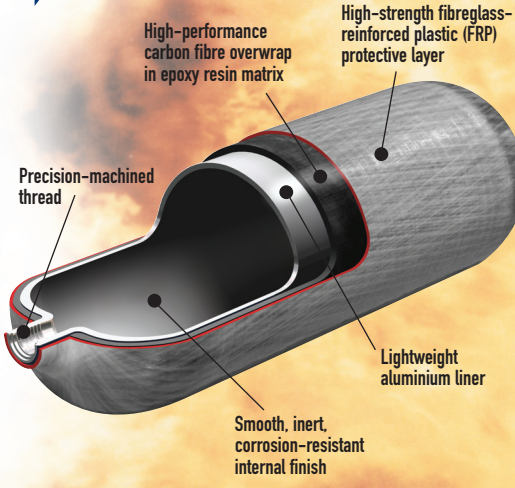
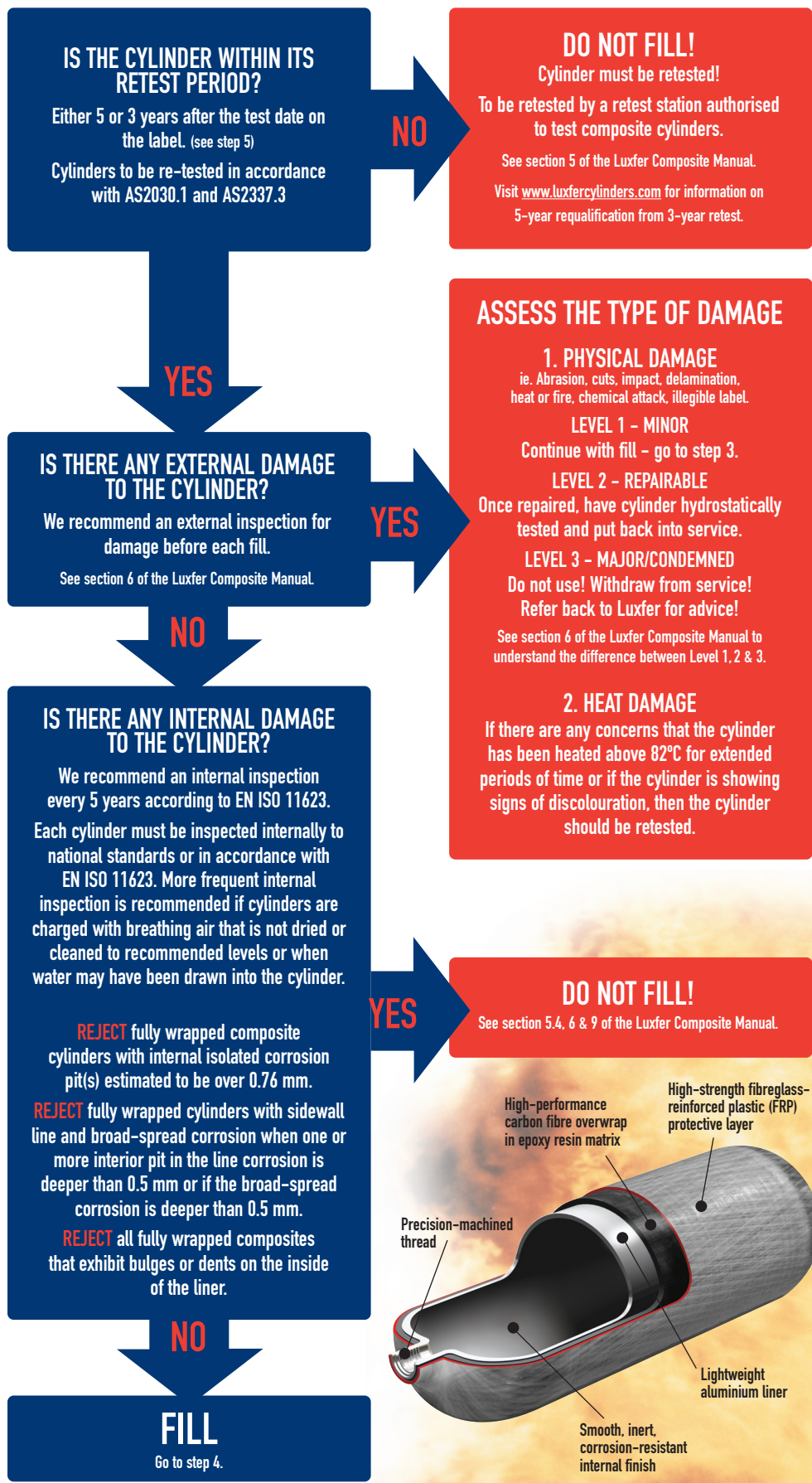


1 CARE AND MAINTENANCE

We recommend that these basic, regular maintenance procedures be followed for all Luxfer composite cylinders:

- Ensure lubricants, if used, and components are compatible with both the cylinder and the gas mixture.
- Keep the inside of the cylinder free from moisture, oil, dirt and other contaminants.
- Avoid completely discharging your cylinder.
- Never artificially heat your cylinder.
- Never remove, obscure or alter cylinder labels or markings.
- For cylinder drying and repainting see section 8 of the Luxfer Composite Manual.
- Ensure cylinder remains below 82°C for extended periods of operation.
- Never use corrosive, caustic or acidic paint strippers or solvents to remove paint.
- Never repaint the cylinder with paints that require curing at elevated temperatures.

2 PRE-FILL CHECK LIST



3 VALVE REMOVAL AND INSERTION

REMOVING THE VALVE:

- Safely vent cylinder.
- Remove valve using proper tools and holding fixture so that cylinder fibre windings and valve are not damaged.
- Inspect threads of valve and cylinder for damage.
- Clean 'O' ring groove.

INSERTING THE VALVE:

- Internally inspect and ensure the cylinder is clean and dry.
- Ensure a suitable sealing method is used.
- Use a manual torque wrench.
- Ensure lubricants/sealing materials are approved for the gas service.
- Always use a new 'O' ring compatible with the gas service.
- Make sure 'O' ring, cylinder groove, and valve and cylinder threads are clean.

See section 8.1 and 8.3 of the Luxfer Composite Manual.

Although it is not mandatory, it is recommended that valve removal and insertion is performed by a certified Australian Test Station.

Valves should be fitted to the recommended torque levels:

THREAD	TORQUE RANGE
M18 x 1.5	80-100 Nm (60-75 ft lbs)

4 FILLING

Fill with clean, dry, filtered air only. Ensure the compressor is properly maintained so that air quality complies with ASNZS1715 and AS3848.2.

See section 4.3 of the Luxfer Composite Manual.

Luxfer recommends either of the following processes for every fill:

SLOW FILL:

- By filling slowly, you will greatly reduce generated heat.
- We recommend a maximum charging rate of 30 bar/min or less.

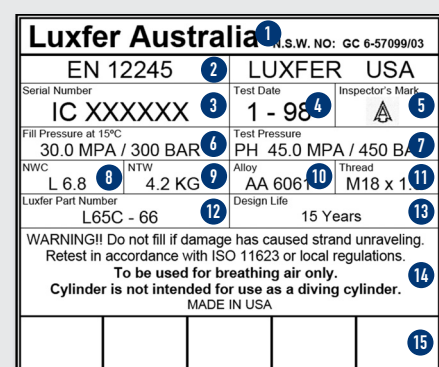
QUICK FILL:

- By filling quickly, there will be a higher generation of heat, requiring topping up to reach full-rated, maximum service pressure.
- Luxfer composite cylinders can be filled to a higher pressure of up to 10% maximum above normal filling pressures to compensate for developed pressure.
- Quick fill is not recommended for normal filling practices.

IMPORTANT: Some movement of the composite material during filling and discharging may cause a crackling noise, which is normal and no reason for concern. In addition, when the cylinder is pressurized, a slight opening in the composite material sometimes appears where the neck meets the shoulder; this is caused by differences in relative expansion of the neck and shoulder composite structures. Since the neck-to-shoulder transition is a low-stress area, such crack-like openings are strictly cosmetic and not a cause for concern.

See section 5.2 of the Luxfer Composite Manual.

5 WHAT YOUR LABEL TELLS YOU



1. Manufacturer's name
2. The design specification (eg EN 12245)
3. The cylinder serial number
4. Date (month and year) of the first hydrostatic pressure test
5. Inspector's mark
6. Filling pressure
7. Test pressure
8. Water capacity in litres
9. Empty weight of cylinder
10. The aluminium alloy of the liner
11. Cylinder thread identity
12. Luxfer part number
13. Design life
14. Safety information
15. Dates of hydrostatic pressure re-tests

Please display this poster in a prominent place in SCBA maintenance areas.
Produced by: Luxfer Gas Cylinders. www.luxfercylinders.com Tel: 61 2 9830 0999 Fax: 61 2 9622 9227
For additional copies of this poster, please contact customerservices@luxfer.net