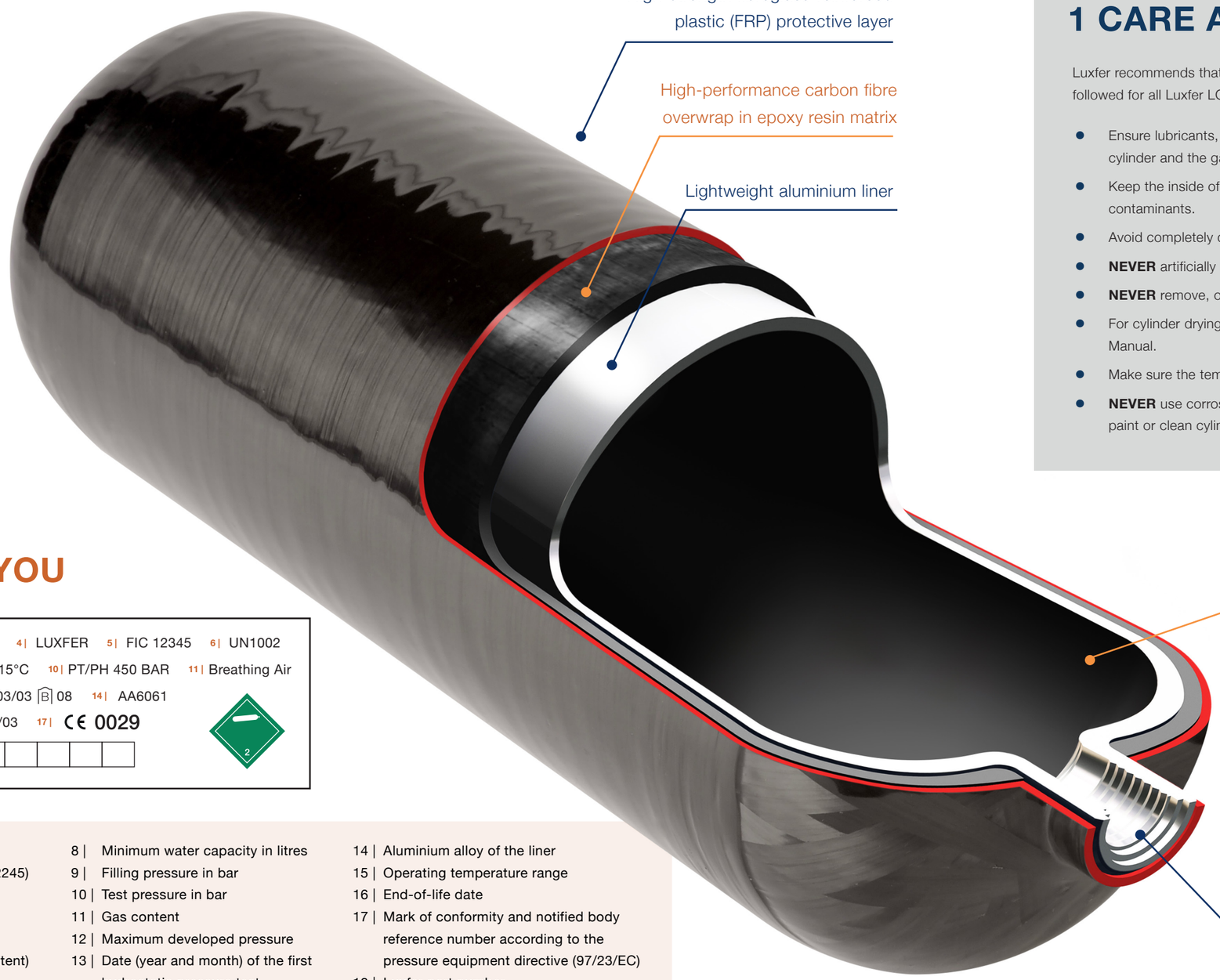
FITNESS CHECK

The number one choice for SCBA users throughout the world, LCX® carbon composite cylinders have been designed to deliver outstanding performance and reliability:

- Ultra-lightweight
- Unmatched safety record
- Exceptional strength and durability
- Manufactured with the highest-grade materials
- All cylinders conform to EN 12245 or ISO 11119-2

LUXFER
GAS CYLINDERS



1 CARE AND MAINTENANCE

Luxfer recommends that these basic maintenance procedures be regularly followed for all Luxfer LCX® 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, except for removal of the valve.
- **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 LCX User Manual.
- Make sure the temperature of your cylinder does not exceed 82ºC (180ºF).
- **NEVER** use corrosive, caustic or acidic strippers or solvents to remove paint or clean cylinder surfaces.

2 WHAT YOUR LABEL TELLS YOU

1| M18 2| EN12245 3| FRANCE 4| LUXFER 5| FIC 12345 6| UN1002
7| 4,20KG 8| 6,8L 9| FP 300 at 15°C 10| PT/PH 450 BAR 11| Breathing Air
12| PSmax: 374 BAR at 60°C 13| 2003/03 B 08 14| AA6061
15| TS: - 50°C to 60°C 16| FIN 2018/03 17| CE 0029
18| Date of Periodic Inspection
LUXFER PN L65C-248

1 | Cylinder thread identity
2 | Design specification (e.g., EN 12245)
3 | Country of manufacture
4 | Manufacturer's mark
5 | Cylinder serial number
6 | UN number (referencing gas content)
7 | Empty weight of cylinder
8 | Minimum water capacity in litres
9 | Filling pressure in bar
10 | Test pressure in bar
11 | Gas content
12 | Maximum developed pressure
13 | Date (year and month) of the first hydrostatic pressure test
14 | Aluminium alloy of the liner
15 | Operating temperature range
16 | End-of-life date
17 | Mark of conformity and notified body reference number according to the pressure equipment directive (97/23/EC)
18 | Luxfer part number

3 PRE-FILL CHECK LIST

IS THE CYLINDER WITHIN ITS RETEST PERIOD?

Either 5 or 3 years after the test date on the label. Cylinders manufactured from February 2002 onwards, carrying the CE mark, can automatically be extended to a 5-year retest*. (*Subject to national regulations). Cylinders manufactured before this date should be competently inspected at a 3-year interval and, if acceptable, can be extended to a 5-year retest period.

N → **DO NOT FILL**
Cylinder must be retested by a requalification station authorised to test composite cylinders. - see section 5 of the Luxfer LCX User Manual.

Y ↓

IS THERE ANY EXTERNAL DAMAGE TO THE CYLINDER?

We recommend an external inspection for damage before each fill. See section 6 of the Luxfer LCX User Manual.

Y → **ASSESS THE TYPE OF DAMAGE**

1. HEAT DAMAGE - if there is any concern that a cylinder has been heated to or above 82˚C for extended periods of time, or if a cylinder shows signs of heat damage, it should be requalified by an authorized retest station.

2. PHYSICAL DAMAGE - eg abrasions, cuts, impact damage, delamination, chemical attack, illegible label.

LEVEL 1 – MINOR Continue with fill - see valves.

LEVEL 2 – REPAIRABLE Upon repair, the cylinder must be retested and can then be returned to service.

LEVEL 3 – MAJOR CONDEMNED Cylinder must be condemned and removed from service. See section 6 of the Luxfer LCX User Manual for more information on damage levels and methods of repair.

N ↓

IS THERE ANY INTERNAL DAMAGE TO THE CYLINDER?

We recommend an internal inspection every 5 years according to EN ISO 11623. Each cylinder must be inspected internally to national standards or in accordance with EN ISO 11623. More frequent internal inspection is recommended if cylinders are charged with breathing air that is not dried or cleaned to recommended levels or when water may have been drawn into the cylinder.

REJECT fully wrapped composite cylinders with internal isolated corrosion pit(s) estimated to be deeper than 0.76 mm.

REJECT fully wrapped cylinders with sidewall line and broad-spread corrosion if any interior pit in the line corrosion is deeper than 0.5 mm or if the broad-spread corrosion is deeper than 0.5 mm.

REJECT all fully wrapped cylinders that exhibit bulges or dents on the inside of the liner.

Y → **DO NOT FILL**
See section 5.3 & 6 of the Luxfer LCX User Manual.

N → **FILL**
See valves.

4 VALVES

For valving procedures, follow the SCBA manufacturer's recommendations and any requirements in the country in which the cylinder and valve are being used.

Valves should be torqued to a level not to exceed:

THREAD	MAX. TORQUE VALUE
M18 X 1.5 6H	100NM (74 FT LBS)
0.875 - 14 UNF	108.46 NM (80 FT LBS)
0.750 - 16 UNF	101.68 NM (75 FT LBS)
0.625 - 18 UNF	67.7 NM (50 FT LBS)

If the valve must be removed from the cylinder, follow the guidelines provided by the SCBA manufacturer, or the current edition of ISO 25760, *Gas cylinders — Operational procedures for the safe removal of valves from gas cylinders*.

5 FILLING

Follow filling procedures recommended by the SCBA manufacturer. Only fill the cylinder with breathable air according to the SCBA manufacturer's recommendations and any air quality requirements in the country in which the cylinder is being used.

PLEASE NOTE: 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 5.1 of the Luxfer LCX User Manual.

Please display this poster in a prominent place in SCBA maintenance areas. Produced by: Luxfer Gas Cylinders. For additional copies of this poster, please contact lifesupport@luxfer.net. Tel: + 44 (0) 115 980 3800 | www.luxfercylinders.com.
ISO 11623:2002 (Transportable gas cylinders – Periodic inspection and testing of composite gas cylinders) ISO 11119-2:2002 (Gas Cylinders of composite construction – Specifications and Test Methods – Fully wrapped fibre reinforced composite gas cylinders with load-sharing metal liners).