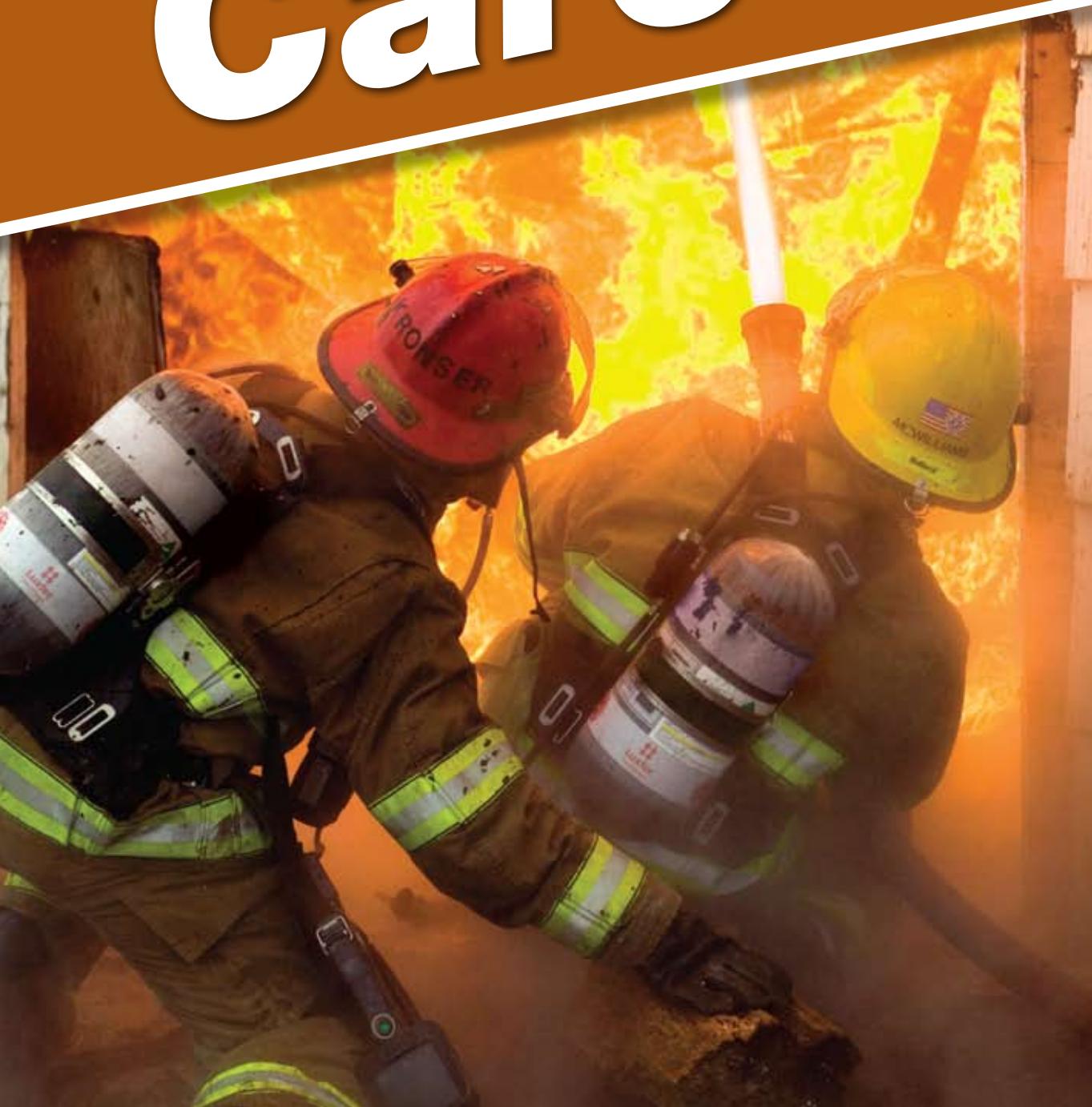


# Care & Maintenance

For Luxfer LCX®  
carbon composite SCBA cylinders



The number one choice of self-contained breathing apparatus users throughout the world, Luxfer carbon composite cylinders are the most compact, lightest-weight cylinders available. High-strength materials assure outstanding performance under extreme pressure.

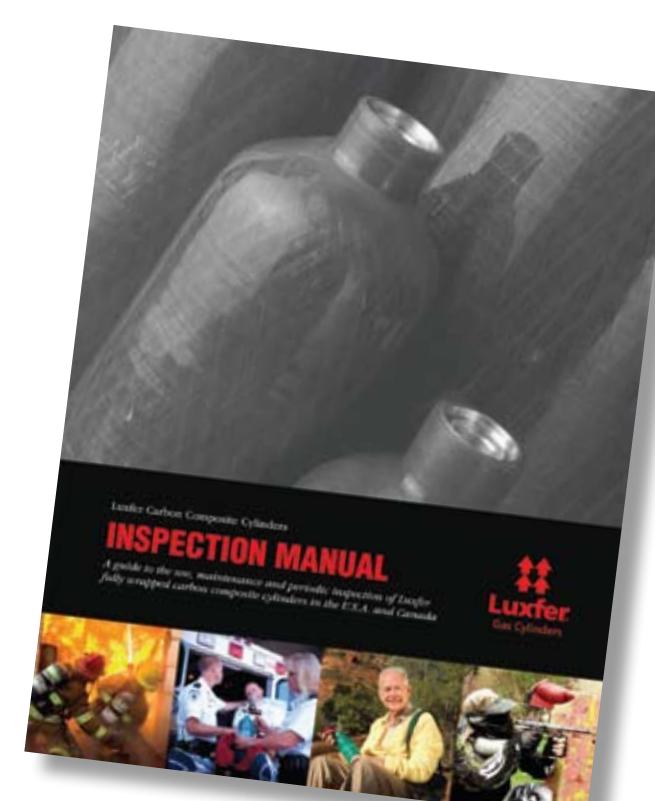
- Ultra-lightweight design for maneuverability and comfort.
- Reduced physiological stress and more efficient air usage.
- Exceptional strength and durability.
- All cylinders conform to DOT and Transport Canada (TC) standards.



## Luxfer carbon composite cylinder *Inspection Manual*

This poster, used in conjunction with the Luxfer carbon composite cylinders *Inspection Manual*, provides the basic information required to inspect and maintain your Luxfer LCX® SCBA cylinders. Following these guidelines will ensure that your cylinder provide years of safe, reliable service.

The Luxfer carbon composite cylinders *Inspection Manual* is available for download from the Luxfer Gas Cylinders website at [www.luxfercylinders.com/downloads](http://www.luxfercylinders.com/downloads), or you can call Luxfer customer service toll-free at 1-800-764-0366 to have a copy e-mailed directly to you. In addition, Luxfer customer service can provide you additional posters.



## Here's what the cylinder label tells you

- ① TC-SU 5134-310
- ② DOT-E 10915-4500
- ③ IL 123456 ④ LUXFER
- ⑤ 6A07 ⑥ REE: 118
- ⑦ CONTENTS: AIR 45 SCF AT 4500 PSIG
- ⑧ Luxfer part number L65G-13

**Warning!** Do not fill if damage has caused strand unravelling  
MADE IN USA

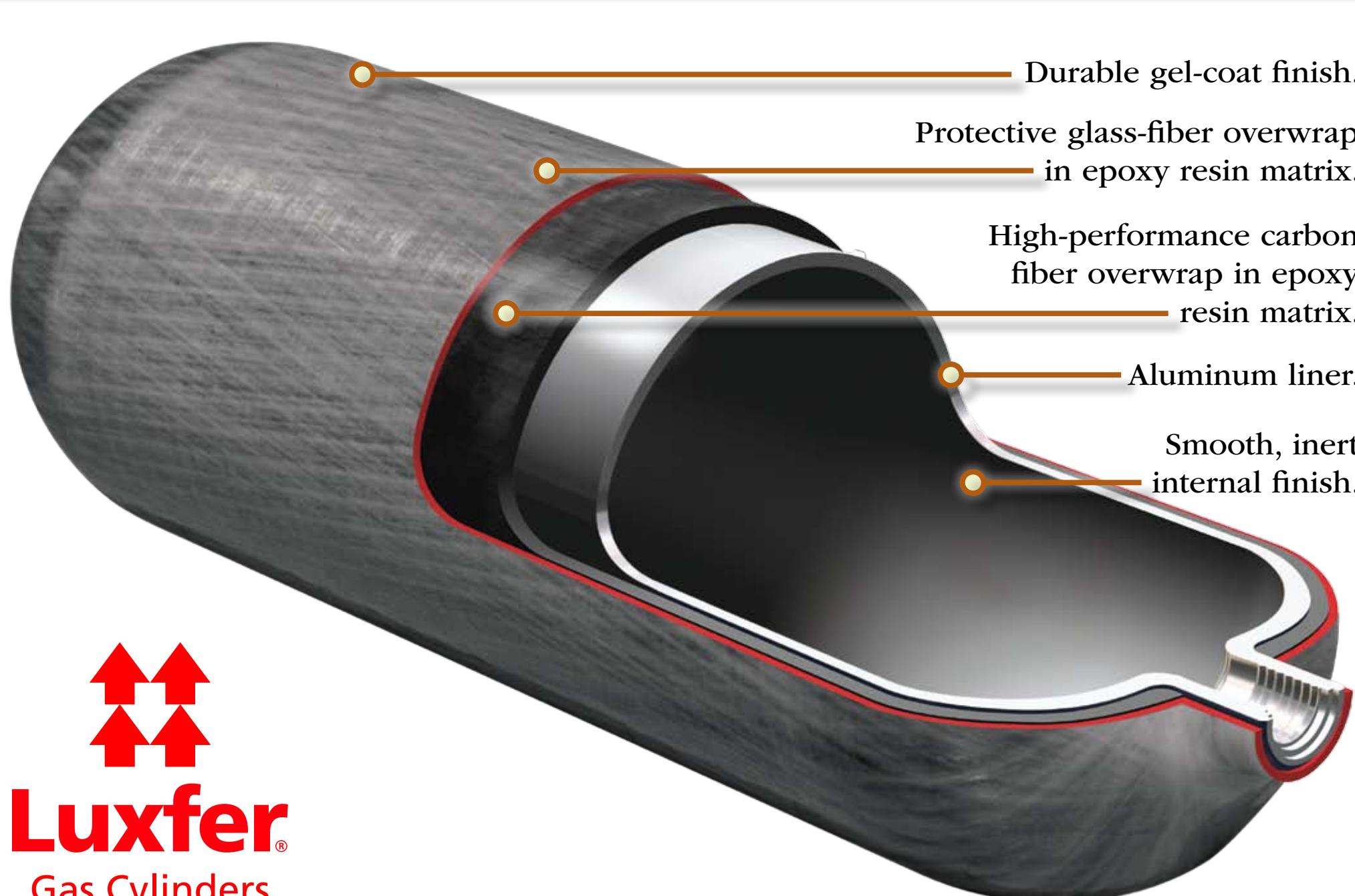
- ① Transport Canada authorization number.
- ② DOT authorization permit number issued to Luxfer (also denoted as DOT-SP).
- ③ Cylinder serial number (e.g., IL 123456).
- ④ Manufacturer's mark (e.g., Luxfer).
- ⑤ Date of the first hydrostatic pressure test (in the example above, June 2007).

**Important:** Five years after this date, the cylinder must be hydrostatically retested.

- ⑥ Rejection Elastic Expansion. The expansion level above which the cylinder will be rejected at hydrostatic retest.
- ⑦ Air capacity in standard cubic feet and service pressure in PSIG.
- ⑧ Luxfer part number.

**Follow any additional instructions on the label, if applicable.**

## Anatomy of a Luxfer LCX® carbon composite cylinder



**Luxfer**  
Gas Cylinders

## Regular maintenance

Luxfer recommends these regular maintenance procedures for all Luxfer LCX carbon composite SCBA cylinders:

- Ensure that all components and lubricants are compatible with the gas mixture inside your Luxfer LCX carbon composite SCBA cylinder.
- Keep the cylinder interior free from oil, dirt and other contaminants.
- Do not completely discharge cylinder contents unless you are removing the valve.
- Never remove, obscure or alter labels or markings.

## Inspect cylinder before every fill

START HERE

### Has the cylinder reached or exceeded its 15-year life limit?

The current approved life for Luxfer LCX carbon composite cylinders is 15 years from the date of manufacture (see label section to the left).

YES

### Is there any external damage to the cylinder?

Regulations require that all cylinders undergo periodic inspection for damage. See the Luxfer *Inspection Manual* for details about damage levels and repair procedures.

NO

### Assess the level of damage

External damage falls into three categories: level 1, level 2 and level 3. Types of damage include: abrasion, cuts, impact, delamination, heat or fire, chemical attack and illegible label. (See the Luxfer *Inspection Manual* for details.) Level 1 damage does not require repair, but level 2 damage *does* require repair.

LEVEL 3

### Repair level 2 damage

See the Luxfer carbon composite cylinders *Inspection Manual* for additional details. Repaired cylinders must be requalified.

YES

LEVEL 1

LEVEL 2

### Does the cylinder require hydrostatic retest?

Five years after the most recent test date (see label section to the left).

NO

### Fill the cylinder

Follow National Fire Prevention Association (NFPA) guidelines for proper filling of composite SCBA cylinders.

YES

### Insert the valve

Use only the O-ring recommended by the SCBA manufacturer.

Use a manual torque wrench (consult the SCBA manufacturer for details).

Only use lubricants and sealing materials recommended by the SCBA manufacturer.

Always use a new O-ring.

Make sure that the O-ring, O-ring groove, valve and cylinder threads are clean.

### Remove the valve

Safely vent all cylinder contents. Remove the valve using the proper holding fixture and tools to prevent damaging fiber windings and the valve. Inspect the valve and cylinder threads for damage. Clean the O-ring groove.

### Is there any internal damage to the cylinder?

Inspect the cylinder interior at least every five years. See the Luxfer carbon composite cylinders *Inspection Manual* for details.

Internal inspection has only two results: *pass* or *fail*.

PASS

FAIL

PASS

### Perform hydrostatic test

See the Luxfer carbon composite cylinders *Inspection Manual* for details. Hydrostatic testing has only two results, *pass* or *fail*.

PASS

FAIL