

TUXING 2.5L carbon fiber tank

TUXING 2.5L 4500psi High Pressure Carbon Fiber Cylinder Instruction Manual

Model: 2.5L Carbon Fiber Tank

Brand: TUXING

1. INTRODUCTION

This manual provides essential instructions for the safe and effective use of your TUXING 2.5L 4500psi High Pressure Carbon Fiber Cylinder. This composite cylinder is designed for various high-pressure air applications, including diving scuba and PCP paintball systems. Please read this manual thoroughly before initial use and retain it for future reference.

2. SAFETY INFORMATION

WARNING: High-pressure equipment can be dangerous if not handled correctly. Failure to follow these safety guidelines may result in serious injury or death.

- Always be cautious of high-pressure exposure. Never expose any part of your body to direct high-pressure air.
- Ensure regular inspection and maintenance of the cylinder and all associated equipment.
- Adhere to all regional transportation and usage regulations for high-pressure cylinders.
- This product is **not DOT certified**. Verify local regulations for use and transportation.
- Never attempt to disassemble or modify the cylinder or valve assembly.
- Store the cylinder in a cool, dry place away from direct sunlight, heat sources, and corrosive materials.
- Always wear appropriate personal protective equipment (PPE) when handling or filling the cylinder.

3. PRODUCT FEATURES AND SPECIFICATIONS

The TUXING 2.5L Carbon Fiber Cylinder is engineered for high performance and durability.

Key Features:

- **High Strength Construction:** Utilizes an AL6061 aluminum alloy liner with full-wrapped carbon fiber

and glass fiber winding, externally epoxy coated for creep, shock, and corrosion resistance.

- **Lightweight Design:** Approximately 70% lighter than traditional steel cylinders, enhancing portability.
- **Stable Performance:** Non-magnetic properties and specially treated inner surface ensure clean, odor-free gas storage.
- **Long Service Life:** Designed for a 15-year service life with a 3-year inspection cycle.

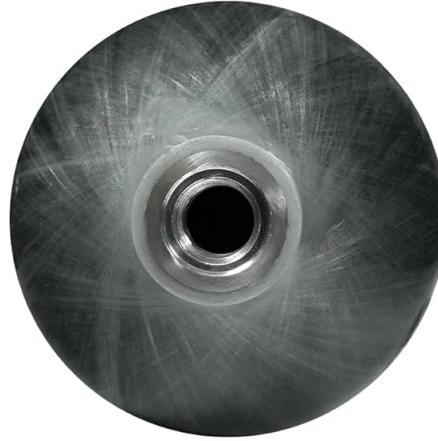
Technical Specifications:

Specification	Value
Product Capacity	2.5 Liters
Neck Thread	M18x1.5-6H
Working Pressure	30MPa / 300Bar / 4500psi
Hydrostatic Test Pressure	50MPa / 500Bar
Minimum Burst Pressure	102MPa
Product Certification	CE / EN approved (Not DOT)
Inspection Cycle	3 Years
Service Life	15 Years
Material	Carbon Fiber and AL6061 Aluminum Alloy
Item Weight	1.6 Kilograms
Length	310mm
Outer Diameter	129mm



310mm

129mm



THREAD SIZE

M18*1.5



VOLUME

2.5L



WORKING PRESSURE

30MPa/300BAR/4500PSI

Image: TUXING 2.5L Carbon Fiber Cylinder showing its dimensions (310mm length, 129mm diameter), M18*1.5 thread size, 2.5L volume, and 30MPa/300BAR/4500psi working pressure.

HIGH-

STRONG
CORROSION
RESISTANCE

NO
MAGNETIC
PROPERTY

STABLE
PERFORMANCE

PERFORMANCE

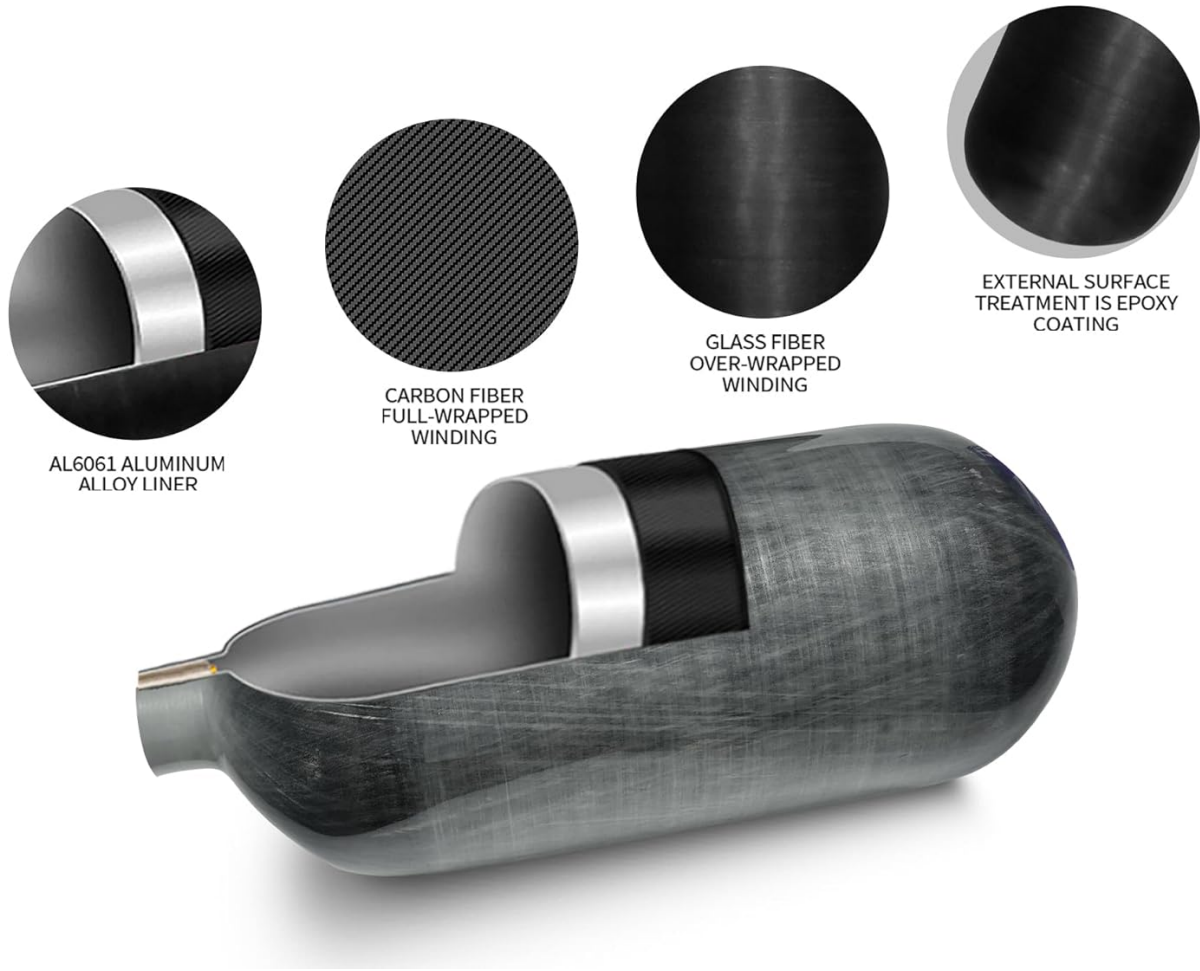


Image: Cross-section diagram illustrating the cylinder's construction: AL6061 aluminum alloy liner, carbon fiber full-wrapped winding, glass fiber over-wrapped winding, and epoxy coated external surface. Highlights strong corrosion resistance, no magnetic property, and stable performance.

4. SETUP AND CONNECTION

Proper setup is crucial for safe operation. Follow these steps to connect your TUXING carbon fiber cylinder to a filling station or compressor.

Connecting to a PCP Air Compressor:

1. Ensure both the cylinder and the compressor/filling station are clean and free of debris.
2. Attach the appropriate valve to the cylinder's M18*1.5 neck thread. Hand-tighten securely.
3. Connect the high-pressure hose from your PCP air compressor or filling station to the cylinder's valve. Ensure a tight, leak-free connection.
4. Before starting the compressor, ensure all valves are closed and the system is properly sealed.

PCP air compressor

CONNECTING AIR COMPRESSOR

compressor-charging-cylinder system



Image: A TUXING 2.5L Carbon Fiber Cylinder connected to a PCP air compressor via a high-pressure hose, illustrating a typical compressor-charging-cylinder system setup.

Video: PCP Air Tank with Filling Station

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Video: This video demonstrates the process of connecting and filling a PCP air tank using a filling station, showing the steps for attaching the valve and hose.

Video: 2.5L Carbon Fiber Tank Product Overview

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Video: A brief overview showcasing the TUXING 2.5L carbon fiber tank, highlighting its design and features through a rotating view.

5. OPERATION

Once properly connected, operate the cylinder according to the instructions of your specific filling equipment.

- **Filling:** Slowly open the valve on the cylinder and then activate your compressor/filling station. Monitor the pressure gauge carefully to ensure the tank is not overfilled beyond its maximum working pressure of 4500psi (300Bar).
- **Disconnection:** After filling, turn off the compressor/filling station. Slowly release any residual pressure in the hose before disconnecting it from the cylinder. Close the cylinder valve completely.

- **Usage:** When using the cylinder with a PCP airgun or diving equipment, ensure all connections are secure and leak-free. Follow the specific operating instructions for your connected device.

WIDE APPLICATION



Image: A collage illustrating the wide application of the TUXING carbon fiber tank in various activities such as target shooting, paintball, and scuba diving.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your carbon fiber cylinder.

- **Cleaning:** Keep the exterior of the cylinder clean and free from dirt, oil, and other contaminants. Use a damp cloth and mild soap if necessary. Avoid harsh chemicals.
- **Inspection:** Periodically inspect the cylinder for any signs of damage, such as cracks, dents, or deep scratches. Check the valve and threads for wear or corrosion. If any damage is found, do not use the cylinder and seek professional inspection.
- **Storage:** Store the cylinder in a cool, dry, and well-ventilated area, away from direct sunlight and extreme temperatures. Ensure it is protected from physical impact.
- **Re-testing:** Adhere to the recommended re-test period of 3 years. Only qualified facilities should perform hydrostatic testing.

7. TROUBLESHOOTING

If you encounter issues with your TUXING carbon fiber cylinder, consider the following common problems:

- **Air Leakage:** Check all connections for tightness. Ensure O-rings and seals are in good condition and properly seated. Replace worn or damaged seals.
- **Difficulty Filling:** Verify that the compressor/filling station is operating correctly and that all valves are open as required. Check for blockages in the hose or valve.
- **Pressure Gauge Malfunction:** If the pressure gauge is not reading correctly, it may need calibration or replacement. Do not rely on a faulty gauge.

For issues not resolved by these steps, please contact TUXING customer support.

8. WARRANTY AND SUPPORT

Your TUXING 2.5L 4500psi High Pressure Carbon Fiber Cylinder is manufactured to high standards. For specific warranty details, please refer to the product listing or contact the seller directly.

Customer Support:

TUXING Official Store provides customer support for their products. If you have any questions about purchase or use, please feel free to contact them via email. Their professional team aims to reply as soon as possible.

For returns or specific product inquiries, you may also refer to the Amazon return policy or contact the seller, TUXING Official Store (Seller ID: A39CP3T8JONR46).



Image: Information regarding TUXING's 24/7 VIP Customer Support, including online service and contact methods for inquiries.