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OMTech RYGEL-LSPXF18US

OMTech XF-180 Fume Extractor User Manual

Model: RYGEL-LSPXF18US | Brand: OMTech

1. INTRODUCTION AND OVERVIEW

The OMTech XF-180 Fume Extractor is an industrial-strength air purification system designed to effectively remove harmful fumes and particulates generated during various industrial processes such as laser cutting, engraving, soldering, CNC machining, and welding. Equipped with an 80W DC motor, it provides a powerful 106 CFM (Cubic Feet per Minute) airflow, ensuring a cleaner and safer working environment.

This unit features a highly efficient 3-stage filtration system that captures a wide range of airborne contaminants, from large dust particles to microscopic fumes and unpleasant odors. Its compact design, coupled with four quality caster wheels, allows for easy mobility and flexible placement within your workspace.



The OMTech XF-180 Fume Extractor, showcasing its compact design, flexible extraction arm, and a visual representation of its multi-stage filtration system.

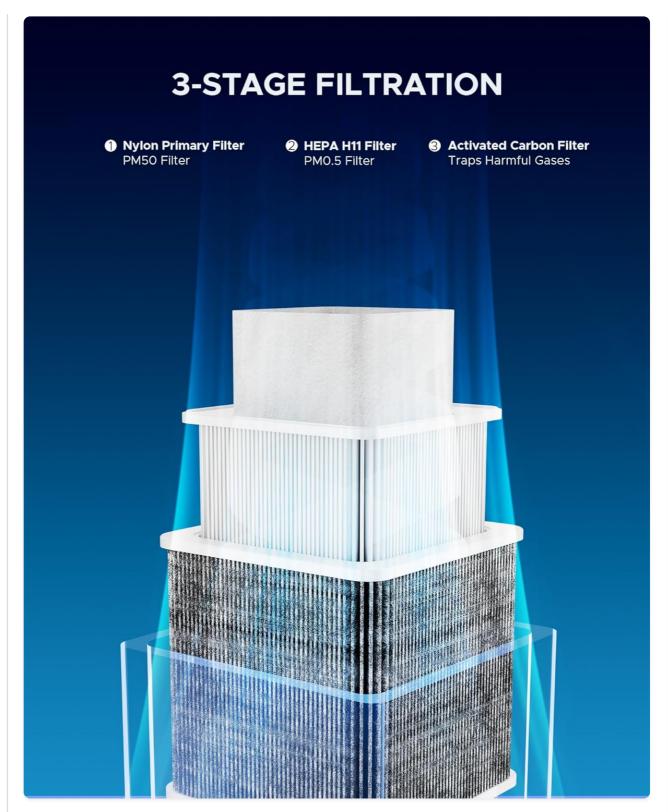
Please read and understand all safety warnings and instructions before operating the OMTech XF-180 Fume Extractor. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure the unit is connected to a grounded power outlet with the correct voltage. Do not operate with a damaged power cord or plug.
- Ventilation: While the fume extractor significantly reduces airborne contaminants, ensure adequate general ventilation in the workspace.
- Filter Maintenance: Always turn off and unplug the unit before performing any maintenance, especially filter replacement. Wear appropriate personal protective equipment (PPE) such as gloves and a mask when handling used filters.
- Flammable Materials: Do not use the fume extractor near highly flammable liquids, gases, or explosive dust.
- **Intended Use:** Use the unit only for its intended purpose of fume and particulate extraction. Do not block the intake or exhaust vents.
- Children and Pets: Keep children and pets away from the operating unit.

3. PRODUCT COMPONENTS

The OMTech XF-180 Fume Extractor comes with the following main components:

- · Main Fume Extractor Unit with Caster Wheels
- Flexible Extraction Tube (Gooseneck Arm)
- Extraction Hood/Nozzle
- 2.6" to 4" Adapter
- 3-Stage Filter Set:
 - Nylon Primary Filter (PM50 Filter)
 - HEPA H11 Filter (PM0.5 Filter)
 - Activated Carbon Filter
- Power Cable



A detailed diagram showing the three distinct filtration layers: Nylon Primary Filter (PM50), HEPA H11 Filter (PM0.5), and Activated Carbon Filter, designed to trap harmful gases and particulates.

4. SETUP INSTRUCTIONS

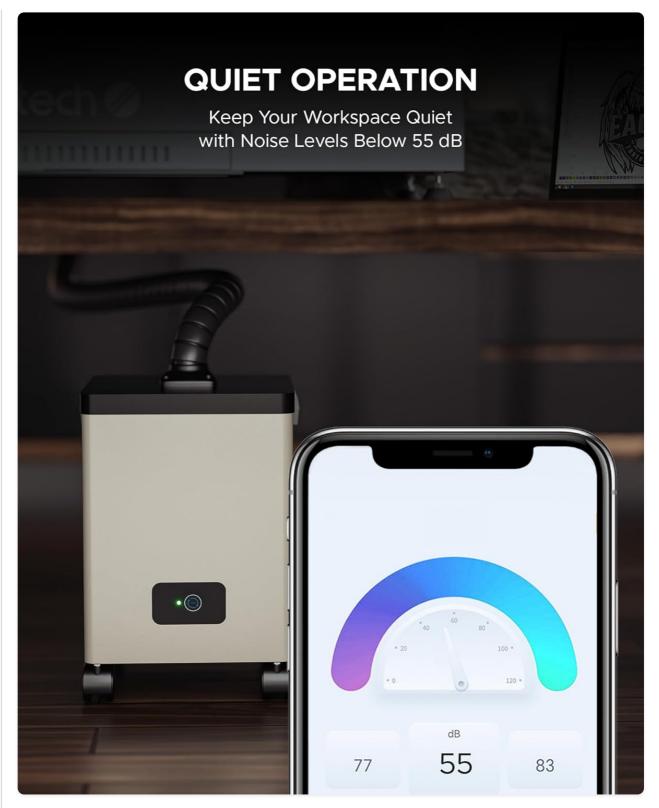
Follow these steps to set up your OMTech XF-180 Fume Extractor:

- 1. Unpacking: Carefully remove all components from the packaging. Inspect for any shipping damage.
- 2. **Filter Installation:** The 3-stage filters are typically pre-installed. If not, open the top cover by unlatching the side clips. Insert the filters in the correct order: Nylon Primary Filter at the top, followed by the HEPA

- H11 Filter, and finally the Activated Carbon Filter at the bottom. Ensure they are seated properly. Close and latch the cover securely.
- 3. **Attach Exhaust Port:** Remove the four screws from the top exhaust port. Place the exhaust port adapter over the opening and secure it with the screws.
- 4. **Connect Flexible Tube:** Attach one end of the flexible extraction tube to the exhaust port adapter on the fume extractor. Secure it with the provided clamp, tightening with a screwdriver.
- 5. **Connect to Machine:** Attach the other end of the flexible tube to your laser engraver, cutter, or other machine's exhaust port. Use the 2.6" to 4" adapter if necessary for compatibility. Secure this connection with another clamp.
- 6. **Positioning:** Utilize the caster wheels to easily move the fume extractor to your desired location. Lock the wheels in place once positioned.
- 7. **Power Connection:** Plug the power cable into the unit's power input, then plug the other end into a grounded electrical outlet.

Setup Demonstration Video

This video demonstrates the assembly and connection process for the OMTech XF-180 Fume Extractor, including filter installation and connecting to a laser machine.



Illustrations showing the fume extractor's compatibility with different OMTech laser engravers and cutters, demonstrating its versatile application.

5. OPERATING INSTRUCTIONS

The OMTech XF-180 Fume Extractor is designed for intuitive operation.

- 1. **Power On/Off:** Press the power button on the front panel to turn the unit on or off. The indicator light will illuminate when the unit is active.
- 2. Adjust Airflow: The unit features three adjustable airflow modes. Press the power button repeatedly to

cycle through the modes:

- **Gentle:** Indicated by a green light. Suitable for light fume generation.
- Moderate: Indicated by a blue light. For average fume levels.
- Strong: Indicated by a red light. For heavy fume generation or when maximum extraction is required.
- 3. **Positioning the Extraction Arm:** Adjust the flexible gooseneck arm and hood to optimally capture fumes at their source. Ensure the hood is positioned as close as possible to the work area without obstructing your work.



Close-up of the fume extractor's control panel, highlighting the three adjustable airflow modes: Gentle, Moderate, and Strong, indicated by different colored lights.



Visual comparison demonstrating the effectiveness of the fume extractor, showing significant reduction in smoke and fumes during a laser engraving process.

6. MAINTENANCE

Regular maintenance ensures the optimal performance and longevity of your fume extractor.

Filter Replacement

The OMTech XF-180 uses a 3-stage filtration system, and each filter has a recommended replacement cycle:

- Nylon Primary Filter (PM50 Filter): Recommended replacement every 7-30 days, depending on usage and material.
- HEPA H11 Filter (PM0.5 Filter): Recommended replacement every 3-6 months.
- Activated Carbon Filter: Recommended replacement every 6-12 months.

To Replace Filters:

- 1. Turn off the fume extractor and unplug it from the power source.
- 2. Unlatch the side clips and carefully open the top cover of the unit.
- 3. Remove the old filters, starting from the top (Nylon, then HEPA, then Activated Carbon). Dispose of used filters according to local regulations, as they may contain hazardous materials.
- 4. Insert new filters in the correct order: Activated Carbon Filter at the bottom, followed by the HEPA H11 Filter, and finally the Nylon Primary Filter at the top. Ensure they fit snugly.
- 5. Close the top cover and secure the side latches.
- 6. Plug the unit back in and test its operation.

General Cleaning

Periodically wipe down the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the intake and exhaust vents are free from obstructions.

7. TROUBLESHOOTING

If you encounter issues with your OMTech XF-180 Fume Extractor, refer to the following common troubleshooting steps:

• Unit Does Not Power On:

- Check if the power cable is securely plugged into both the unit and the electrical outlet.
- Verify that the electrical outlet is functional by testing it with another device.
- Ensure the power button on the unit is pressed.

• Low Airflow/Poor Fume Extraction:

- Check if the filters are clogged. Replace them if necessary, especially the primary filter.
- Ensure the flexible extraction tube is not kinked or obstructed.
- Verify that the extraction arm and hood are positioned correctly and close to the fume source.
- Confirm the unit is set to an appropriate speed level (Moderate or Strong for higher fume generation).

Unusual Noise During Operation:

- Check for any loose components or foreign objects inside the unit or the flexible tube.
- Ensure the unit is placed on a stable, level surface.
- $\circ~$ If the noise persists and is excessive, contact customer support.

For issues not covered here, please contact OMTech customer service for assistance.

8. Specifications

Feature	Specification
Model	XF-180
Filter Layers	3 (Nylon, HEPA H11, Activated Carbon)
Power Consumption	80W
Max. Airflow	106 CFM (180 m³/h)
Max. Noise Level	55 dB
Dimensions (L x W x H)	11 x 11 x 17 inches (28 x 28 x 43 cm)
Item Weight	19.8 pounds (9 kg)



A table providing key specifications for the XF-180 model, including filter layers, power consumption, maximum noise level, dimensions, and weight.

9. WARRANTY AND SUPPORT

OMTech stands behind the quality of the XF-180 Fume Extractor with a strong warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official OMTech website.

Our dedicated customer service team is available 24/7 to assist you with any questions, concerns, or technical support needs. We are committed to ensuring your satisfaction and providing prompt assistance for years to

Related Documents - RYGEL-LSPXF18US



OMTech SH-G570 80W CO2 Cabinet Laser Engraver User Manual

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Manual de Usuario: Grabador Láser CO2 Omtech SH-G1490 (130W)

Guía completa de usuario para el grabador láser de CO2 Omtech SH-G1490 de 130W. Incluye instrucciones de seguridad, instalación, operación y mantenimiento para garantizar un uso seguro y eficiente.