

# 24246 T-Mech Powder Coating Oven



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# Specification

### **Product Description**

Thank you for purchasing this T-Mech Powder Coating Oven.

The T-Mech Powder Coating Oven is used in the 'curing' process of powder coating items. Once you have sprayed the desired items, simply place them inside the oven. The consistency of the heat reacts with the powder particles, resulting in high-quality products. Using a curing oven results in items that not only look superb, but are tough and durable, able to last a very long time. As this oven is electric, it's also considered safer than many other non-electric ovens.

With two shelves and two rails per shelf, there's plenty of room for hanging your powder coated metal work to cure too, saving you time and running costs in the process. It's perfect for a new powder coating business, or a company wishing to expand. You'll be able to fit alloy wheels, small to medium appliances, windows and door frame extrusions, outdoor garden tools, bicycle and vehicle frames and parts, hand tools, anti-corrosion items such as valves, fittings, and pipes, office furniture, cabinets, lamp housing, and much more. Due to the size of the unit, you'll be able to fit many of these in all at the same time!

NOTE: This oven has a special lock mechanism which avoids using levers. This means it can be opened from the inside.

This product must be wired to a 32 AMP power supply with RCD protection.

We at Monster Group UK understand that it is a new and exciting purchase, and although it is tempting to get stuck in, please CAREFULLY read the instructions and safe working practices before you start using the machine.

WARNING: The T-Mech Powder Coating Oven is designed to be used by a competent person. It should not be used or stored in wet or damp conditions. Personal Protective Equipment (PPE) must be worn by the operator of this equipment.

CAUTION: It is normal to see light smoking from the roof of the oven, especially during the first use. This is most likely the new paintwork. If you notice excessive smoke, stop the machine immediately, vacate the area and do not attempt to switch on until sufficient time to cool has passed.

Please refer to and read Safety Advice, Safe Working Practice to ensure prevention of injury or damage to the device before starting.

# Specification

### **Technical Information**

Voltage: 230V Frequency: 50Hz Power: 7.2kW Over Voltage Category: II Insulation Plate:8cm thick Warm Up Time (at ambient 20°C temperature): 25- 30 minutes (180°C) Ambient Operating Temperature: 0-40C Pollution Degree: II Temperature Stability: < ±5°C Temperature Range: 0-250°C Fan Motor Voltage: 0-220V/50Hz Fan Air Speed: 2800rpm Fan Power: 60W x 2 120W Fan Volume: 180x180x440mm

## **Product Specifics**

External Measurements (L x W X H): 121.5cm x 102cm x 199cm Internal Measurements (L x W x H): 84.5cm x 84.5cm x 160cm Weight: 440kg Material: Iron Shell

# Specification

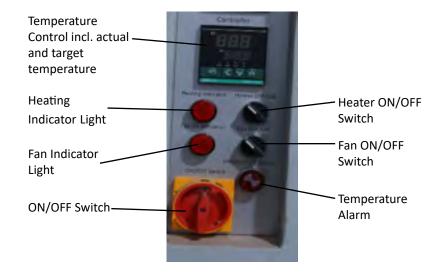
### Monster Guarantee

If you wish to return a product in perfect working order, we provide a 30 day returns policy as long as the item is unopened and in a resalable condition.

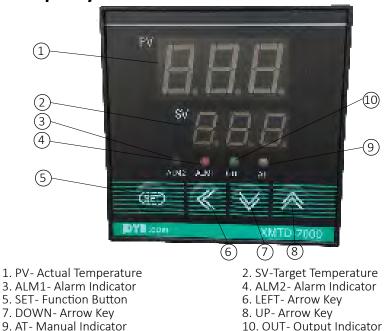
A 12 month warranty applies to all of our electrical products; we will cover the cost of labour and parts. Our policy is to try and repair the item before arranging an exchange or refund.

If for any reason a part is missing please get in touch with us within 7 days on receipt of your order. You can contact our friendly and helpful Customer Support Team via email or call. For full terms and conditions contact our Support Department via the details on the Contact Us page.

### **Product Features**



### **Display Features**



# Symbols Explained

# Safe Working Practice





The people working with and around this oven should be aware that the surface of the door will get hot enough to cause serious injury during use. Do not touch the door until the oven has cooled.



This oven and any components should be disposed of following WEEE guidelines. WEEE waste can contain hazardous substances and must be disposed of separately from household waste.



This product has an alternating current (AC) of 230v

Ν

The symbol for Neutral which is a circuit conductor that carries current back to source.



The symbol for Earth (ground) which is a conductor that prevents voltage spikes.

CE marking is a certification mark which indicates that this oven conforms with health, safety and environmental standards within the EU.

# **Safety Advice**

## Safe Working Practice



### Please read through the safe working practice to ensure prevention of injury or damage to the device.

This oven must be installed on a dry and level solid ground.

The area must be clean and well ventilated.

This oven must be used with RCD protection and a 32amp power supply to enable the machine to be isolated from the mains.

This oven is to be treated as a permanent unit and not moved once installed.

This oven must be used below an altitude of 2000m.

Do not install in a damp environment or in an area with high humidity.

Do not install outdoors or in an area without sufficient cover.

Do not install in an area exposed to flammable or corrosive gases.

The ambient temperature of the area must be between 0 and 40°C.

The oven should be installed at least 1 metre away from any wall in order to provide sufficient ventilation.

The oven must be in a place which gives easy access to the power and control switches.

Entering the oven whilst it is turned on WILL cause death or serious injury. DO NOT enter the oven.

It is advised that you do not operate the oven on your own. Have at least 2 people working with it.

You must wear a Tyvek suit or appropriate coveralls to protect your skin, as the powder material/paint can cause irritation. Check individual safety recommendations of product you are using.

# **Safety Advice**



## Safe Working Practice

Please read through the safe working practice to ensure prevention of injury or damage to the device.

You must wear a dust mask at all times whilst using and working around the oven.

You must wear gloves and sufficient eye protection at all times, as the powder material/paint can cause irritation. Check individual safety recommendations of the product you are using.

Ensure regular maintenance is carried out on the Powder Coating Oven by appropriately trained personnel. They should be given a copy of the instruction manual.

Before the service takes place all the risks must be specified to the trained personnel carrying it out. The machine must be cooled down and turned off before the service can begin.

All parts should be inspected and replacements should only be supplied by Monster Group U.K.

Make sure the work piece can fit in the oven prior to turning the oven on and coating the piece.

Do not use the powder curing oven for food. The fumes from the powder coating can be toxic. Each time the oven gets turned on, the paint's fumes get reintroduced. Make sure you wear a dust mask.

Make sure the work piece has properly cooled before handling.

Do not operate an open flame in your powder coating area. Powder Coating powders can be explosive. Clean the area thoroughly between uses.

Make sure the door is securely closed before curing begins, this will prevent the hot air from injuring the operator.

Even with 2 people working with the oven we recommend carrying out 15 minute interval checks to the working area to ensure that the personnel and environment are safe.

# **Safety Advice**

### Safe Working Practice



Please read through the safe working practice to ensure prevention of injury or damage to the device.

The maximum furnace temperature is 250°C. Use above this temperature is strictly prohibited.

Do not put fingers through the vents on the oven as the elements can be hot. When the oven is not in use, ensure that it is correctly turned off and allowed to cool sufficiently before closing up the vented area.

The key should be turned to the locked position and then safely locked away. It is recommended that only authorised personnel have access to the key. You will receive 2 keys for the lock with your oven so we recommend that you keep the spare in a safe place.

This item is extremely heavy and you should not be moved without the appropriate equipment in place and following health and safety guidelines.

No flammable liquids can be stored nearby and any that are in the vicinity should be kept in a lockable cabinet and COSSH guidelines should be followed.

# **User Guide**

## Initial Assembly and Set-Up

### For safety reasons during transit, the power cable is found within the lower side panel, to the right of the oven.

1) Unscrew the orange lower side panel and detach the white power cable. Lead the cable through the hole to the base and connect.

2) Use the two bolts and Allen key provided to attach the handle to the door. Align and tighten the bolts simultaneously, otherwise, the holes will not correspond.

# WARNING: Before proceeding to the next step, you MUST check all bolts, nuts, and screws are tight. Do not proceed before performing this check.

CAUTION: Before turning on the machine, check that the oven is situated on a solid and level surface. Consider the oven's location. It must be in a well-ventilated area.

3) Turn on the ON/OFF Switch and the Fan.

4) Use the **SET**, **UP** and **DOWN** buttons to set the Target Temperature. For many curing operations, this should be around 180°C but check your item's requirements before continuing.

CAUTION: It is normal to see light smoking from the roof of the oven, especially during the first use. This is most likely the new paintwork. If you notice excessive smoke, stop the machine immediately, vacate the area and do not attempt to switch on until sufficient time to cool has passed.

WARNING: We strongly advise you raise the temperature gradually until you reach the target temperature. For example, if your target temperature is 180°C, we strongly suggest you use 30-60 minutes to reach this temperature. Raising the temperature to 180°C in as little time as possible may warp and buckle the metal sheets inside the oven.

# **User Guide**

## **General Powder Coating**

This T-Mech Powder Coating Oven is used during the curing process of powder coating. For the purposes of safe and proper use of this machine, below is a non-exhaustive, step-by-step guide to powder coating. It is highly recommended you read and study how-to guides on the powder coating process before commencing work with this machine. There are many helpful guides available online.

NOTE: Powder coating should be undertaken by an experienced and competent person.

WARNING: You should wear a Tyvek suit/coveralls and gloves to protect your hands and skin. Eye protection should also be worn at all times. A dust mask will protect you from inhaling paint. Electrostatic paint can dry out your skin and cause irritation.

1) Determine which type of material you are going to use to powder coat. Select a suitable powder for the finish.

2) Depending on the item, dismantle any and all parts. Clamps, bolts, nuts, etc., though metal, may become unusable after being powder coated. It is recommended you use strong masking tape to cover these parts. Powder coating items individually will also provide a much stronger finish.

3) Once disassembled, you must clean the base metal thoroughly from dirt, oil, grease and grime. The cleaner the base metal, the better the finish and the longer the powder coating will last. Cleaning, stripping, outgassing and sandblasting are some of the many methods used in the cleaning process.

4) At this stage, it is recommended you wear gloves when touching the item; otherwise, fingerprints may show. Apply the powder to the desired item. This is undertaken using a spray gun or a compressed air sprayer which charges the powder material so that it sticks to the base metal item.

5) After applying the powder, be careful not to brush or blow on the fresh powder coating; this could lead to an imprecise finish.

6) Set the curing oven to an appropriate temperature; the curing oven will raise the item and coated material to a specified temperature and for a set time. Normally, this is 175-190°C (350-375°F) for approximately 10-15 minutes. Allow to cool.

Again, it must be stressed that this process is heavily simplified. The more research you undertake, the higher the quality and safety of the process will be.

# Maintenance

# Safe Working Practice

When performing maintenance on the Powder Coating Oven, you must cut off the power supply beforehand and allow the oven to cool down.

Always use non-flammable cleaning products.

- 1. Keep the oven clean and the fan clear.
- 2. The top of the oven must be cleaned regularly keeping it clear of dust and debris.
- 3. Lubricate the mounting bearings regularly.

4. Repair or maintenance of inside the control box should only be carried out by skilled electricians.

5. The top of the oven must be cleaned regularly keeping it clear of dust and debris.

# Troubleshooting

## **Resolution Guide**

Please read through the guide below if you have any issues or faults with your device. The information covers and resolves the majority of frequently asked questions and concerns.

### Q: There are parts missing from my order.

A: If there appears to be any parts missing from your package, contact our Customer Support team via the details on the **Contact Us** page within 7 days of receipt.

#### Q: The oven and/or temperature control will not turn on.

A: The power supply may not meet the requirements of the specification. Check that you have the correct power supply, and that it is supplying the correct voltage. Check that the power cord plug has not become loose.

#### Q: The switch is not on but the temperature keeps rising in the oven.

A: The heating AC contactor may be bonded together. You will need to replace the AC contactor. Seek professional advice if unsure.

### Q: The temperature is unusually high.

A: The thermocouple may not be working and may need to be replaced. Alternatively, the work piece may not be placed in the oven correctly or the door may not be shut tight. You can easily move the work piece, but make sure the machine is turned off first. Ensure the oven is turned off when opening and re-closing the door also.

### Q: There appears to be an electrical fault.

A: Do not touch or tamper with any of the wires or components. Repair or maintenance of inside the control box should only be carried out by skilled electricians.

For all other issues please contact our Customer Support department via the details on the Contact page.

# **Contact Us**

### Sales Department

For information regarding this device or other products from our Monster divisions please use the following details below.

Tel: 01347 878888 Email: hello@monstershop.co.uk

# Support Department

For queries about this device, warranty, returns or reporting faults please use the following details below.

Tel: 01347 878887 Email: help@monstershop.co.uk

# Website

To view our product range and fantastic offers in the Monster Chef division please visit our website

www.monstershop.co.uk

# Address

To visit our office Monster House and view our products, send postal correspondence or return items our address is provided below.

Monster House, Alan Farnaby Way, Sheriff Hutton Industrial Estate, Sheriff Hutton, York YO60 6PG



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Our dedicated customer service team will be more than happy to help with any questions you may have.

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