# **UsCutter**



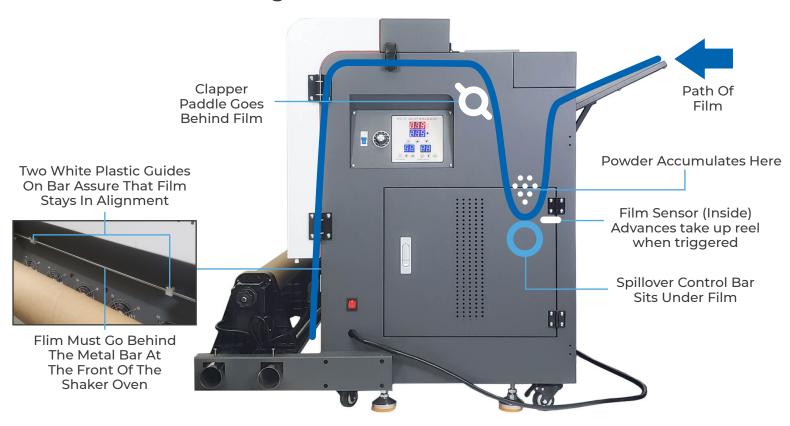
BP-20
Compact Powder Shaker Oven - 220V

### **BP-20 Compact Powder Shaker Oven - 220V**

The DTF BP-20 powder shaker machine is designed to work in conjunction with roll fed DTF printers that print film up to 24 inches wide.

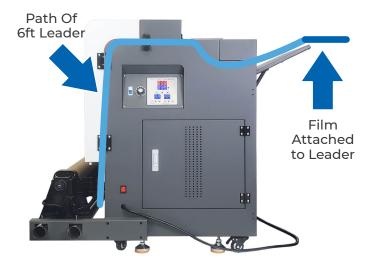
The powder shaker works independently of the printer, where the take up reel motor advances only when film drops below the sensor inside the main powder area. This allows the printer to be set to any speed and the powder shaker will automatically adjust itself. Film can be wound on the take up reel either clockwise or counterclockwise depending on user preference.

#### **Loading Film Into The Powder Shaker**



The BP20 powder shaker is designed to work with printers that have continuous output. Whenever the printer stops, the BP20 take-up reel also stops, so it is important to be aware that the heater oven continues to operate and could potentially melt film in the chamber unless the oven section is turned off.

The oven section should only be turned on when film is advancing through the powder shaker.



#### **How To Use A Leader**

In cases where you want to economize on film, it is possible to re-use a 6-foot piece of leader multiple times by attaching the fresh film to the leader with heat resistant tape. Similarly, it is possible to add a tailer to the end of the film when printing has finished so that film can still be fed through the shaker for end-of-film curing. Note that any film that has been in contact with powder should NEVER be placed back in the printer to prevent clogging the printhead with powder.

#### **Control Panel**



The main control panel allows adjustment of powder delivery speed, clapper speed to knock of excess powder and curing temperature in the heating section.

- 1. MAIN POWER SWITCH
- 2. PRE-HEATER CONTROL KNOB
- 3. PRESENT VALUE OF TEMPERATURE
- 4. SET VALUE OF TEMPERATURE
- 5. HEATER ON/OFF
- 6. SET TEMPERATURE UP/DOWN
- 7. CLAPPER ON/OFF
- 8. SET CLAPPER SPEED +/-
- 9. POWDER ON/OFF
- 10. SET POWDER SPEED +/-

#### **Recomended Control Panel Settings**

The specific starting temperature for curing the powder will depend on the brand, as different brands may have different melting points. The powder manufacturer may publish their temperature specs, but in general, you should start with a low temperature (approx 90 degrees F / 32 degrees C) and slowly increase heat until you achieve sufficient temperature to cure your brand of powder as used with your typical print speed. As your print speed increases, you may have to increase the oven temperature to compensate. Properly cured powder should be shiny dry with an orange peel texture.

If you have previously been using a bottom heated manual oven, you may find that the BP20 automatic shaker will cure the powder faster and at a lower temperature, since a bottom heated manual oven first needs to heat the film and inks before getting to the powder.

Unless your artwork is particularly large, starting with the lowest speed settings for powder dispersal and clapper motors should be sufficient.



#### **Powder Holder**

Located on the top rear of the Shaker Oven. This is where you will put your DTF Powder.



#### **Powder Catch Tray**

The powder catch tray is behind the door on the right of the shaker. This tray can be removed and powder can be reloaded into the powder holder for less wastel.

Note: The spillover control bar may inhibit opening the catch tray unless it is removed



#### **Cooling Fans & Fan Power Switch**

Your BP-20 Has cooling fans that are controlled by the red switch on the right side of the Shaker Oven



#### **Adjustable Exhaust Vent**

Your BP-20 Shaker Oven has an adjustable vent. To adjust the level of venting access the adjustment plate from inside of the front oven panel.

Note: Make sure that this vent is open before using the Shaker Oven.

When using the shaker oven, you must either attach an optional air filter machine or otherwise vent exhaust fumes to the outside of your building.



#### Take Up Reel Power Switch

The power switch for the take up reel motor is separate from the main control panel.

Centered = OFF

**Up/Down** = Enabled

Note: Motor only advances once film sensor inside powder chamber is triggered.

## **Take Up Reel Assembly Instructions**



#### **Take Up Reel Assembly**

Assembly of the Takeup reel can be accomplished with a screwdriver. You will need the following pieces:

- 1. LEFT TAKE UP REEL HOLDER
- 2. RIGHT TAKE UP REEL HOLDER WITH MOTOR
- 3. POWDER SPILLOVER CONTAINMENT BAR
- 4. TAKE UP REEL ROLLER BARS
- 5. LEFT TAKE UP REEL BRACKET
- 6. RIGHT TAKE UP REEL BRACKET
- 7. TAKE UP REEL MEDIA CORE.
- **8. BAG OF SCREWS** (Small, Medium, & Large Screws Will Be Used. Extra screws in the bag are for optional accessories, these will not be used in the initial assembly)



#### **Step 1: Attach Take Up Reel Brackets**

Using the Medium screws, attach the Left (5) & Right(6) Take Up Reel Brackets with four Medium screws on each side of the powder shaker machine.



#### **Step 2: Install Rear Roller Bar**

Loosen the screws already installed in the Take Up Reel Brackets (5 & 6), and slide in one of the Take Up Reel Roller Bars (4) in the back slot of the brackets.

# Take Up Reel Assembly Instructions (Continued):



#### Step 3: Install Front Take Up Reel Roller Bar and Take Up Reel Holders

Thread the 2 Take Core Holders (1 & 2) onto the front Roller Bar (4) and then slide into place through the front slots on the Take Up Reel Brackets (5 & 6) and onto the back Roller Bar.



# Step 4: Plug In Right Take Up Reel Holder With Motor

Plug the Right Take Up Reel Holder With Motor (2) into the front Of the BP20 Compact Shaker Oven.



#### **Step 5: Powder Spillover Control Bar**

Adjust the small powder spillover control bar to maximum width and place in the bottom of the shaker machine.

The spillover control bar attempts to keep powder away from the edges of the bottom tray

Note: Use of the powder spillover control bar is optional.



Your Correctly Assembled BP20 Compact Shaker Oven Should Look Like This

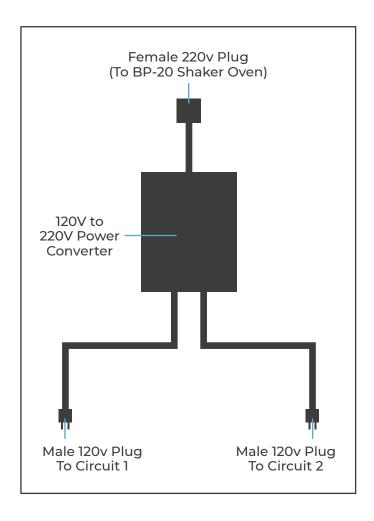
### **Power Considerations:**



# 220v (6-20 Plug Configuration For 6-20R Receptacle)

the BP-20 shaker oven uses 220V power. It can be plugged directly into a 20amp 220V outlet

120V Installations require a power converter as shown below.

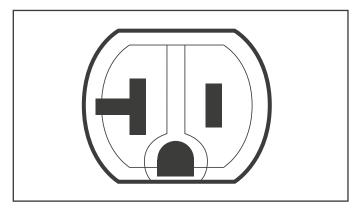


#### **Alternative Power Setup For 120V**

Connecting the 220V BP-20 shaker oven to 120V installations is possible with a 120V to 220V power converter connected to 2 separate 20amp 120V circuits.

Note: The 120V to 220V power converter is sold separately.

If your area is prone to low voltage brown outs, you may try to reduce power demand by turning off the BP20 cooling fan and/or turning the pre-heater to a lower setting.



#### 20amp, 120 Volts Outlet

20amp, 120 Volt Outlets sometimes use a special T-shaped slot. It is for use with large 120V appliances that require 20 amps of current.





Congratulations On Your Purchase Of The BP-20 Compact Powder Shaker Oven.