

# *Andy's Perfect Powder Coating Stand*

## **Optional Tools:**

1. Hex Keys – 2mm
2. Wrench – ½’’
3. Bench Mount Vise, or Pliers

**Note:** When tightening all hardware, do not overtighten. All nuts are captive & will not fall out.

## **Assembly instructions:**

Step 1 – Unpack each bag from the box and clean off the surface protectant with a dry cotton cloth.

Step 2 – Locate the Base, support rod and one 5/16’’ hex nut. Thread the Nut on one end of the rod about 1’’ from the tip. Thread the support rod into the base, do not tighten the rod fully or the base will not rotate. This is the locking mechanism. You can rotate the rod once assembled to provide pressure to the base plate and immobilize the stand. Hand tightening the nut above ensures locked rotation, and locked immobilization.

Step 3 – Locate the Height Control Plate, Rim Support Plate, and one 5/16’’ hex nut. Thread the nut onto the support rod first, then thread the Height control plate smooth side down. Spin to your desired height, then place the rim support plate smooth side up over the support rod, and slide down until resting on the height control plate. This provides the overall height control of the mounted container. Spin the height control plate up and down to provide support and seal the containers open face when applying powder coat. Spin the plate down before placing in the oven to ensure a clean edge and no sticking of the finished coating. Spin the hex nut into the bottom of the height control plate to lock it in position and prevent movement during container changes, spinning of the stand or travel to the oven.

Step 4 – Locate the second 5/16’’ hex nut and your choice of top hat. Thread the nut onto the top of the support rod and thread the top hat smooth side up right above it and flush with the end of the support rod. Hand tighten the nut upwards until it locks the top hat in place.

Step 5 – \*Optional: Locate the tab at the base of the stand. This tab can be bent into any position that suites your specific needs. Using a 2mm hex key, remove the 4 screws located under the base and remove them. Do not worry about losing the nuts as they are permanently pressed into the bearing plate. Only bend the loose plate, do not leverage the assembled base or damage to the bearings can occur. You can clamp the tab up to ¾ of the distance to the inner edge and bend it with square faced pliers, or leverage in a securely mounted bench vise. Do not clamp the entire length of the tab. Poor results or damage may occur. Additionally, there is a mounting hole provided in the tab for placing a bolt or screw. This is handy for larger arrays to be moved at one time, special grounding, or hanging for storage.

## **Operation:**

### Optional Materials:

1. Aluminum Foil
2. Silicon Disks / Pads

Step 1 – Choose your appropriately sized top hat for the inner bottom of your container and thread it on the top of the stand. Spin the height control plate down the support rod out of the way and place a semi crumbled ball of foil on the top of the top hat. This should be slightly larger than the diameter of the top hat. Place your container over the top of the stand and snug it down flat. This ensures good electrical contact with the container and prevents scratching of the interior.

Step 2 – Prepare the rim support plate with a layer of aluminum foil evenly around or over the top surface. This protects the rim plate from being permanently coated when baking and should be replaced after each container. You may also purchase silicone pads, disks, plugs and sheets to act as this barrier. They are reusable, provide the best seal on the container lip and will not build up coatings. Rotate the height control plate up the support rod until you reach the top lip of the container and snug it without lifting the container off the top hat. You can also hand tighten the hex nut below to ensure it will not back down during rotation.

Step 3 – Ensure the base is unlocked by loosening the support rod from the base and hand tighten the nut to lock it in place. Attach the ground clamp of your powder coating gun to the base tab and check for smooth rotation of the stand. Apply your coating to the container evenly, rotating the base all the way around until a satisfactory layer is applied.

Step 4 – Loosen the lower nut and tighten the support rod into the base to immobilize rotation. Snug the nut back to lock it in place. Test the rotation of the stand to ensure it is immobile. Loosen the nut under the height control plate until the rim support plate no longer makes contact with the lip on the container. Snug the nut back into the height control plate to ensure no further advancement towards the container occurs. You can immobilize the rim support plate with one hand while loosening the height control plate to reduce agitation of the container and prevent smudging. You can now transport the stand to the oven without added agitation of the container and registration of the ground clamp.

Step 5 – After baking, let the stand cool prior to removing the finished container or rotating any components of the stand. This will ensure ease of removal of the container, and reduce any wear of the interacting metal parts due to thermal expansion and cooling contraction in the varying components.

## **Storage & Care:**

Required Materials:

1. Clean Cotton Rag
2. Water Displacing Surface Protectant ( WD40 / Boesheid T-9 / Light Oil )
3. Solvent ( Acetone / Remove 9000 / B17 )

Before storage or take down after a coating session, ensure all aluminum foil or silicon pads are removed.

Excess stray or baked powder should be removed from the support rod and surfaces regularly to reduce build up over time that may inhibit the travel of moving parts. This can be removed with acetone, or other products such as Remove 9000 or B17. Follow the instructions for use provided by the manufacture of any solvent you choose.

Give all metal surfaces a light wipe with a water displacement oil to prevent discoloration and rusting. I recommend Boesheid T-9 as it penetrates the pores of the metal more deeply than oil or WD40.

Store the protected and clean stand in a cabinet or box to reduce the exposure to contaminants and moist humidity.

Remember to clean off the protectant oil and contaminants prior to the next coating session. Depending on the location of your oven, the stand can be heated to vaporize the coating and cleaned with a cotton rag. Ensure you are in a well-ventilated area, and do not breath any smoke or fumes that may be presented by this process. Proper Protective Equipment and common sense apply.

## **Support:**

If you have any questions or comments please email us at

DemetersWorkshop@gmail.com, or [www.demetersworkshop.com/contact](http://www.demetersworkshop.com/contact)

*Thank You for Your Purchase!*