Nation Drop Shear

Machine Purpose: Cut and Shear Metal and Plastic

Safety: **Must wear safety glasses while operating machine. Support both sides of material (raw and drop), never place fingers inside machine, or in the clamping area.**

Materials: Metals, Plastics, Synthetic

Machine Specs: 4’ wide max

Limitations: ¼”: carbon steel, Aluminum. 1/8”: Stainless. 20-25% Carbon Composition Max, B65 Rockwell hardness, 30 ksi, 50, Tensile Strength

Tooling: Outfeed Table, depth stops, infeed table

Instruction Required: Yes, Help Session Training

Set up

1. Check material thickness limitations, do not use if outside allowable range
2. Set up any necessary supports (front or back)
3. If wanted set depth stop on back side of machine
4. Align cut

Supports

If your material hangs off more then 10”’s off the front (22” from the blade) or 6”’s of cut off behind the blade

1. For the front of the machine there are 2 options of material support. Support material longer then 10”
    1. Bolt on arms, stored underneath the machine
    2. Table on rollers
2. Backside of the machine - 6” of drop off
    1. Outfeed Table – make sure that it not under the depth stop arms as they will run into the table.

- Make sure the outfeed table is between the depth stop arms or remove them

Depth Stop

There are 3 options for setting up your measurement for your cut

1. Backside Depth Stops
2. Front side rulers
3. Scribe Line

Cut Alignment

Always make sure your material is sitting flat on the bed of the machine

1. For a square cut make sure your stock is sitting flush against the rulers
2. Depending on your measurement technique there are options
    1. Depth stop – make sure your material is set firmly against the depth stop so that you get an accurate cut
    2. Ruler – make sure the edge of your stock is flush against the ruler marking
    3. Scribe line – view from the top the edges of your scribe line to the edges of shearing blade

It is always a good idea to

- Double check squareness of installed rulers
- If using the ruler or depth stop to make a test cut with scrape material to see is measurement devices are set up correctly

Operation

1. Turn on hydraulic power
2. Align cut with rulers, depth stop or scribe line
3. Apply pressure to the top of material if needed to keep material flat to bed
4. Insert foot into trigger switch and press down until blade stops moving
5. Release foot pressure to raise blade