

# OMAX WATER JET CUTTER SAFETY & OPERATION SHEET

## SAFETY MUST HAVES

### Personal Protective Equipment

- GLASSES
- GLOVES
- HEARING PROTECTION
- TOE PROTECTION
- MEDICAL ALERT NOTE TO PHYSICIAN

## MAKE Software PREPARATIONS

- Open .dxf file or import from other CAD
  - Use generation 4 setting
  - Uncheck box - all advanced settings
  - Check mark box- move drawing on to grid “ if not already there”
  - Press OK
  - Press Select all
  - Left click on Clean up drawing
  - Check mark box – all settings
  - Press start and OK if drawing is fine
  - Press Select All
  - Right click on Quality
  - Left click on Selected
  - Choose Quality of 1 or better
  - Right click on Lead I/O
  - Left click on Auto Path (quick) or Advanced & Configure
  - Right click on Path
  - Left click on Automatically Generate
  - Click on Lead in
  - Click on Save
  - Right click on Path
  - Left click on Open Path in Windows Make
  - Select -Material
  - Select -Thickness
  - Select -Cut Settings, if cutting plastics or glass
  - Check mark box – Cut using Low pressure
  - Select -Pierce Settings, if cutting plastics or glass
  - Select -Use Low pressure
  - Select- Very Brittle Material
- IMPORTANT (Ensure Terrain Follower box is checked) -Select- Use Terrain Follower to set and maintain stand off.

## In MAKE software

- Click on Change Path Setup
- Right click on Check for collisions
- Left click on Convert collision traverses to "Heads up"
- Click on Yes
- Click on Nest if more than one duplicate is required
- In Setup, Select appropriate rows and columns
- Press – Save

## OPERATION SAFETY

- Clamp material using care to avoid potential nozzle collisions
- Do not place hands near nozzle once cut is started. Nozzle movement can exert up to 1000 pounds or 4.4 kN of force, easily crushing hands and fingers caught between it and another object.

## PREPARATION PROCEDURES

- Make sure Garnet hopper is filled with the appropriate garnet abrasive
- Clamp material using clamps and weights taking care to avoid potential nozzle collisions

## OPERATION

- Press Z-axis up button to clear obstructions
- Press User Home button
- Move to desired position on material using arrow keys
- Do not change the User Zero Home position, but certainly change the User Home position if you need to find where you started.
- Press Z-axis to lower to approximately 3/8" above material surface
- Using physical tank water level lever, raise water level to about 1 inch above material
- Turn pump switch on located on side of pump housing
- Press Start, do not put hands to retrieve parts use only a magnetic stick retrieving tool for picking up steel or press pause, to extract parts using tweezers
- At end of cut turn pump switch off
- Using physical tank water level lever, lower tank water level to about 1 inch below material
- Press Z-axis up button to elevate Z-axis well above table and other hazards
- Return nozzle to User home position
- Clean debris off material and surrounding area and remove following safe practices

## SHUT DOWN PROCEDURES

- At end of cutting turn pump switch off
- Using physical tank water level lever, lower water level
- Remove material using safe handling practices such as gloves
- Wash down area use squeegee to remove water from tank surfaces
- Remove debris and clamps store safely
- Close down Omax Layout and Make