

# TRENT BOSCH HOLLOWING TOOL VISUALIZER

- THE VISUALIZER WILL CHANGE THE WAY YOU HOLLOW.
- GIVES YOU THE ABILITY TO SEE EXACTLY WHERE THE TOOL IS INSIDE YOUR VESSEL, WHICH GIVES YOU ABSOLUTE PRECISION WALL THICKNESS.
- EASILY ATTACH TO THE TRENT BOSCH STABILIZER OR ADAPTED TO ANY OTHER HOLLOWING SYSTEM AVAILABLE.
- TAKE THE NEXT STEP IN HOLLOWING PRECISION.



THE TRENT BOSCH VISUALIZER HAS BEEN DESIGNED TO BE USED IN CONJUNCTION WITH THE TRENT BOSCH STABILIZER OR CAN BE ADAPTED TO ANY HOLLOWING TOOL SYSTEM. ITS CONCEPT AND SET UP ARE SIMPLE YET INCREDIBLY EFFECTIVE.

#### PARTS LIST:

Monitor, Camera and two Bars, Mount for Monitor, 3/8-16 cap head screw, Mount for bars, 5/16-18 Button Head Cap Screw, 1 red wet erase marker, Power supply (two pieces), 5/32" super allen wrench, 3/16" allen wrench, Visualizer wall thickness guide

#### SET UP:

THE VISUALIZER HAS TWO PARTS TO ITS SET UP: THE MOUNTING OF THE MONITOR TO THE HEADSTOCK AND THE MOUNTING OF THE CAMERA AND BARS TO THE HOLLOWING SYSTEM.

To Mount the Monitor to the headstock or another location (such as a mobile stand, nearby wall etc) there is a mounting bracket included. The Mounting bracket can be mounted to a vertical or horizontal surface using the supplied 3/8 -16 tpi socket head cap screw. Some lathes will have an attachment point already on the headstock and on others you will have to drill and tap in the desired location. This is left up to the user. Please be aware that Trent Bosch Studios inc. Is not responsible for any damages that May occur. Once mounted the 1/2" hole in the mount will accept the ½" post on the Monitor. Make sure it is secure before mounting the monitor.

To mount the camera and bars to the Trent Bosch Stabilizer there is a threaded hole on top of the tool holding part of the stabilizer. Remove the 5/16 – 18 tpi set screw and attach the supplied mounting bracket with the supplied 5/16 – 18 tpi button head cap screw using the supplied 3/16" allen wrench making sure that the mount is securely fastened. You can now mount the vertical post into the horizontal post which has the camera attached and lock down using the supplied 5/32" allen wrench, making sure to mount the flat side of the post towards the Set Screw. Now the camera and bar assembly can be placed in the mount on the stabilizer and lightly tightened down using the supplied 5/32" allen wrench.

IF YOU ARE MOUNTING THIS UNIT TO ANOTHER HOLLOWING TOOL SYSTEM – IT SHOULDN'T BE DIFFICULT BUT YOU MAY HAVE TO DRILL AND TAP 5/16 – 18 TPI HOLE TO MOUNT IT. THIS PROCESS IS LEFT UP TO THE USER AND CAN BE DONE IN MANY DIFFERENT WAYS.

#### USE:

Now that you have the monitor mounted and the camera and bars mounted you can go ahead and power it up. You can assemble the supplied 12v power supply and plug it into the wall (110v). The other end of the power supply can be plugged into the connector right by the monitor mounting point. The monitor will turn on to a blue screen for a few seconds and then go into power saving mode and shut off. You can now locate the blue cable and route it abound to the two connectors on the camera and bars. One of the connectors is power for the camera and the other is the video feed for the camera. They are obviously different connectors and will easily connect to only the correct one. Upon connection the monitor will light up and show the projected image from the camera. (should this not happen check troubleshooting section)

Now that you are all connected your tool should be projected on the screen. We want to align the camera so it is directly above the cutting tip of the tool. This is done by manipulating the bars so that the cutting tip of the tool is in the center of the monitor screen. Make sure all of your connections of the bars are snug. If they are not snug the process of turning can vibrate and move the bars and lead to misalignment. Use the included Wet Erase Marker (red) to trace the outline of your tool. Make sure you are looking directly at the monitor when you do this because if you are at an angle the drawing will not be as accurate. Now you will make a secondary line at the distance that you want your wall thickness to be. This is done by taking a ruler and holding it up against the edge of your cutting tool. Now look at the monitor and make a corresponding mark on the monitor screen using the wet erase marker at the thickness you would like your wall to be. You can now transfer that mark all the way around your tool tip at the same distance. (note what you see on the screen is magnified so as an example a ¼" wall thickness will appear larger on the screen but rest assured in real life your wall thickness will be that ¼" that you measured) The beauty of this is that when the process is magnified we can get more precise final wall thickness easier.

Now you are all set to hollow. Hollow as you normally would using the image on the monitor to aid in establishing your precise wall thickness. Whenever you change tools use a damp cloth to erase the monitor screen and redraw your new tool on the screen.

### HELPFUL HINTS:

- WHEN PUTTING ON AND REMOVING YOUR HOLLOWING SYSTEM WITH THE VISUALIZER ATTACHED, ALL YOU NEED TO DO IS UNPLUG THE VIDEO AND POWER TO THE CAMERA. ONCE THE VIDEO IS LOST THE MONITOR WILL GO INTO SLEEP MODE. WHEN YOU ARE READY TO PUT YOUR HOLLOWING SYSTEM BACK ON, PLUG THE TWO FEED IN AND YOUR MONITOR WILL WAKE UP WITH THE IMAGE ON THE SCREEN. IT IS RECOMMENDED TO UNPLUG THE POWER SUPPLY WHEN YOU ARE FINISHED FOR THE DAY.
- WHEN DRAWING THE TOOL ON THE MONITOR MAKE SURE YOU ARE LOOKING SQUARELY AT THE SCREEN FOR THE MOST ACCURATE IMAGE OF YOUR TOOL.
- WHEN HOLLOWING MAKE SURE YOU ARE LOOKING AS SQUARELY AT THE SCREEN AS POSSIBLE AGAIN FOR THE MOST ACCURATE IMAGE OF WHERE YOUR TOOL IS INSIDE THE HOLLOW FORM.
- LOCATE YOUR TOOLS CUTTING EDGE VERTICALLY AND HORIZONTALLY IN THE CENTER OF THE MONITOR SCREEN FOR THE MOST ACCURATE WALL THICKNESS.

#### TROUBLESHOOTING:

THE VISUALIZER SET UP AND OPERATION IS FAIRLY SIMPLE BUT SHOULD YOU RUN INTO ANY ISSUES THESE TROUBLESHOOTING TIPS SHOULD HELP YOU FIGURE IT OUT.

THE MOST COMMON PROBLEMS STEM FROM THE MONITOR NOT SHOWING THE IMAGE. SO THESE STEPS WILL SHOW WHAT TO CHECK STEP BY STEP:

- DOES THE MONITOR HAVE POWER? CHECK THE POWER AT THE SOURCE.
- IS THE POWER SUPPLY GETTING THE POWER? THERE IS A LITTLE GREEN LIGHT ON THE POWER SUPPLY THAT SHOULD BE LIT UP IF IT IS RECEIVING POWER.
- IS THERE POWER TO THE MONITOR? IF YOU HAVE A DIGITAL MULTI METER YOU CAN CHECK THE POWER FROM THE POWER SUPPLY PLUG. THE RED LEAD GOES INSIDE THE HOLE AND THE BLACK LEAD IS HELD AGAINST THE METAL ON THE OUTSIDE. IT SHOULD READ 12 OR MORE VOLTS.
- IS THE MONITOR TURNED ON? THERE IS A RED BUTTON ON THE BACK OF THE MONITOR. I USUALLY DON'T TURN THE MONITOR ON AND OFF- I JUST UNPLUG IT FROM THE WALL BUT THE POWER BUTTON CAN BE ACCIDENTALLY USED.
- I AM NOT SURE IF THE MONITOR IS ON? WHEN THE MONITOR TURNS ON WITHOUT THE VIDEO FEED IT WILL HAVE A BLUE SCREEN FOR SEVERAL SECONDS BEFORE GOING INTO SLEEP MODE. THIS CAN EASILY CONFUSE YOU AS IT GOES TO SLEEP RATHER QUICKLY.
- I GET THE BLUE SCREEN BUT NO VIDEO? THERE IS MODE BUTTON ON THE CONTROLLER ON THE BACK OF THE MONITOR. THERE ARE THREE MODES AV1, AV2, AND VGA. THE VISUALIZER IS SET UP TO WORK IN AV1 MODE. PUSH THE MODE BUTTON, IN A FEW SECONDS YOU WILL SEE A BLUE SCREEN AND THE MODE IT IS IN UP IN THE LEFT HAND CORNER IN RED. PUSH UNTIL YOU ARE IN THE PROPER MODE, REMEMBERING IT TAKES A FEW SECONDS TO SWITCH MODES.
- Its really cold in my shop and my monitor isn't turning on? On cold days it may take several minutes for your monitor to warm up and project an image.
- I AM TOTALLY LOST AND DON'T KNOW WHAT I'M DOING???? GIVE TRENT A CALL HE IS HERE TO HELP!

THANKS FOR PURCHASING THIS TOOL. MY GOAL IS TO CREATE TOOLS TO HELP YOU TURN YOUR IDEAS INTO REALITY. FOR FURTHER INSTRUCTIONS ON USE I HAVE INSTRUCTIONAL VIDEOS AVAILABLE. CHECK OUT WWW.TRENTBOSCH.COM FOR THESE AND OTHER INNOVATIVE TOOLS. ENJOY YOUR NEW TOOL!

Happy Turning, Trent



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