

5003360 - Test All Slots

Test all slots (slots are pick locations designated in the shelves of the VBX-160) can be run anytime after calibration has been completed on TCP, dovetails, and shelves. It can be done before vise calibration, and this might be desired depending on timing of the installation. Test All Slots should run through the cell and hit every slot to help validate that the cell is well calibrated. There are multiple part pick templates that should be tested from 2 pick to 18 pick.

Testing All Slots validates:

- TCP Calibration
- Dovetail Calibration for Jaws Slot 1:1
- Shelf Calibration
- Locators (if installed)
- Singularities
- Each slot positions
- Gripper sensors (unless disabled in part configuration)

Test all slots can be run with or without locators although positioning the part for the first pick can be tricky without locators.

Test all slots can be run without a part, but the value of the test is significantly diminished.

Test all slots should be run before a cell ships out from VersaBuilt and also before cutting parts in the CNC on-site.

Create a part

- Using the Configuration page on the hamburger menu in the upper left hand corner, setup a new part that matches the details of the part you want to use for test all slots.
- Infeed and Outfeed height should be the same, since the part won't actually be milled between pick and place.
- Most part configuration details have no impact on this test, so existing part definition can be used (copied) with the previously mentioned modification of infeed-outfeed.

Load the job

Test All Slots uses the core software of the VBXC so you have to load the job as if you were running a part.

- Create a new job with size of 1 part and add in the Operation page
- Load the part to the first slot you want to start testing from, usually shelf 2, slot 1 (2:1)
- When this step is complete, it should look like you want to mill a single part with the jaws loaded appropriately. And the part in the starting slot. The upper right hand corner should say "Cycle Start". You should not be in Recovery for this test. ***Do not press Cycle Start to start the test all slots procedure.**

Run Test All Slots for VBXC version > 2.2.x

- On the hamburger menu, choose the Support page.
- Scroll down on the Support page and click Control Panel to open up the Control Panel page.
- In the Calibration Operations section, click Test All Slots
- Choose the starting Jaw Slot, Part Slot, and if it should run continuously or just once through the cell. Click Run and Test All Slots should start running. Usually slot 1:1 for Jaws, and slot 2:1 for the part.
- Scroll up to the hamburger menu and choose the Operation page, this will allow you to see any errors that happen.

Troubleshooting

Common Issues:

- Job not setup in Operation page when Test All Slots is started. No errors will occur unless you check logs.
- Sometimes the system gets confused about what jaws are in the specific slot, no error will be visible on the Operation page, but in logs it will generate an error. The best way to prevent this is to cancel the job if it fails part way through and create a new job, or restart the VBXC.
- Incorrect part configuration.
- Pressed Cycle Start instead of finding Test all slots procedure in the Support page.