



exactengineering QUICK MOUNT FOR RENISHAW OTS

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INSTRUCTIONS FOR INSTALLING EXACT ENGINEERING QUICK MOUNT (FOR RENISHAW OTS TOOL PROBE)



Kinematic Top (left) and Kinematic Base (right)

NOTE: The system uses 3 very strong rare earth magnets for nesting forces. Provided is a 4th spare magnet. We recommend you **not install the magnets** until you have the system mounted to the machine and the probe mounted to the kinematic top. This is to prevent the magnets from “grabbing” loose parts and potentially damaging the magnets. **See our youtube channel Exact Engineering, LLC for video installation instructions.**

1. Install Kinematic Base in machine. (see you our youtube channel as well)

It can be mounted to table via t-Slot, top of 4th axis, or vise or anywhere you can “see” the receiver. We recommend aligning two of the holes with pins to the x-axis as shown. This alignment is not precise and can be done with the naked eye.

2. Mount Kinematic Top to Renishaw probe.

Using the included M10x20 screw, fasten the Renishaw OTS to the Kinematic Top and securely tighten. Be sure to align the probe transmitter to Kinematic Top such that when mated to the Kinematic Base, the probe can communicate with the receiver. Install magnets to their pockets.

3. Install the tool probe with the Kinematic Top to the Kinematic Base.

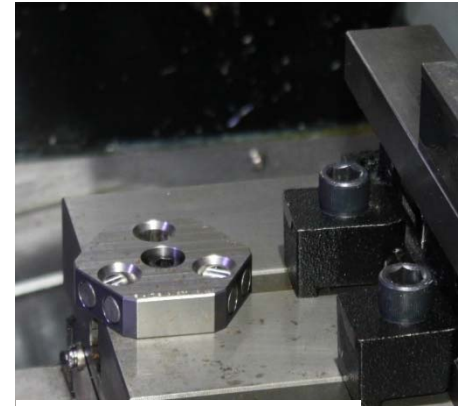
Start by setting two balls onto their pins, then lower the 3rd ball onto its pins, the magnets will pull the balls onto the six dowel pins. You should feel a “clunk” when it is seated. Practice taking it on and off a few times. To prevent damaging the pins and balls, always install in a controlled manner as outlined above. Be sure to clear chips and debris from the balls and the pins prior to installation as these must be clean for repeatability.

4. Calibrate the tool probe following your normal procedure.

You can now remove the tool probe and reinstall without any recalibration. You can run the machine with the tool probe installed or removed.

Want to share the probe across multiple machines?

Install additional Kinematic Bases (sold separately) to another machine as outlined above or within the same machine to provide for different mounting locations. Install the probe onto the Kinematic Base and calibrate the tool probe as normal. You can now share the probe between the machines!



Kinematic Base on machine table.



Probe mated to Kinematic Base.