Open Ball XL Base

Chris Borge

VIEW IN BROWSER

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Summary

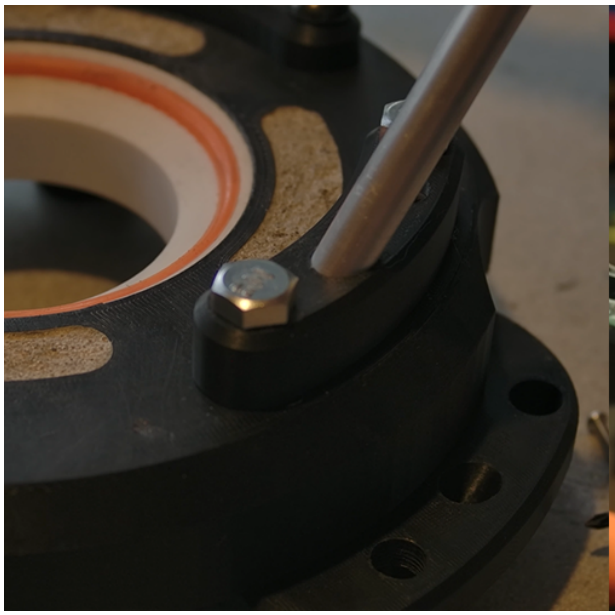
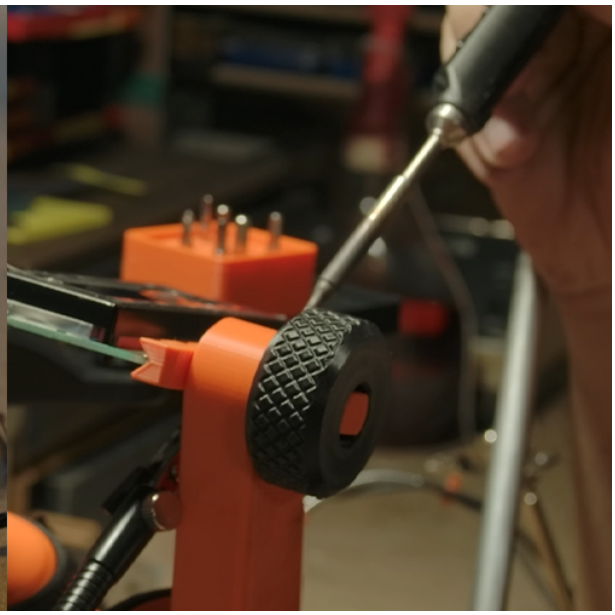
An alternate base for the Open Ball ball vise system

Hobby & Makers > Tools

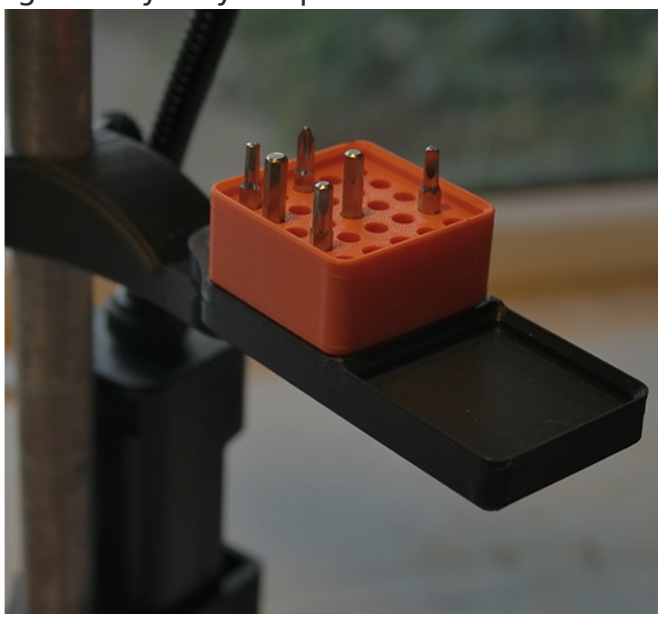
Uploading as a separate object as the page for the main ball vise is cluttered as is.

The XL base is an alternate base for the Open Ball that provides mounting options for many attachments, like helping hands, lights, parts bins and hand rests.
Bearing used: https://www.amazon.com.au/dp/B08DCZRLRM?psc=1&ref=ppx_yo2ov_dt_b_product_details
Video:

The XL base for Open Ball provides a myriad of mounting options for new addons. These are mounted via either the m8 threads around the ring of the base, a post on the back, or via spacer blocks that can be mounted between the base and the feet.
Ill immediately highlight the hand rest as one of the options as I was surprised with just how much it helped. Its a very simple design just some 10mm rod (or aluminum tube, in my case), that can be positioned in one of two holes. With my elbow on the table the hand rest gave me an amazing level of control in my soldering test. The workpiece was also so high it was only slightly below my face and I didnt need to strain my neck like I usually did while soldering. It was a really pleasant experience.

Other offerings I tested include the ability to mount magic arms, helping hands, tool racks and even a small gridfinity tray for parts or small tools.



These parts attach to the central “T” via a simple m4 thread so creating custom adons for this is very simple.
Parts:

-8 24mm m8 coupling nuts.
Note: Ive seen a lot of comments from people struggling to find these. Ive uploaded a printable alternative, or two regular m8 nuts could be used, at the cost of the ball being weaker and making it harder to mount things to the ball face. The printable alternative will need to be threaded with either a m8 or 5/16th tap to cut the threads.
8 10 or 25mm m8 bolts. 10mm bolts is just the feet, 25mm is with the spacer blocks.
For the rear post:
19mm tube for the rear post, as much as you want.

2 m8*20mm bolts
3m4*20mm bolts, for each “T” shaped parts/ tools rack
3m4 nuts, for each “T” Shaped parts/ tools rack. Could be replaced with heated inserts at the cost of strength.
For the hand rest:
10mm tube or rod, around 30cm.
2m8*20mm bolts
The helping hands I use have a m10 thread that I tighten into the adaptor feet. buying helping hands with an m8 thread will of course make installing them on the base 10x easier.
To build the new base is shown in the video. Install the 8 m8 coupling nuts, glue the inside and fill with concrete.

Model files

Addns 10 files

large-foot-xl-adaptor.stl

large-foot-xl-adaptor-right.stl

rear-post-magnifying-glass-mount-wip.stl

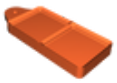
rear-post-mount-19mm.stl

upper-hand-rest-mount-right.stl

simple-tool-rack.stl

rear-post-t-mount-v1.stl

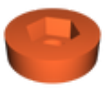
large-foot-rear-spacer.stl



2x1-gridfinity.stl

upper-hand-rest-mount-left.stl

Base 3 files



foot-v1.stl

xl-inner-v1.stl

xl-outer-v1.stl

ball-vise-xl.step

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