

Modular Workstation

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Summary

Flexible workstation for all those times you find yourself lacking an extra hand or when you just need some precision.

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This Modular workstation can be altered to your need.

• The Frame

Main base is built by two "frame-side" and some Ø8 rods for extra stability. Length on rods depends on your needs. "Frame-side" can hold up to three slides if needed but that will limit the adjustability.

Optional is the "frame-middle" that allows to have one or more centre arms that slides on the rods that can hold a flashlight or magnifier or whatever you see fit. Step on attachment points is provided so you can alter it to fit your equipment.

• The Slide

Each slide consists of a slide-middle, two slide-side and a slide-lock

Midde and sides are screwed with two M3x25, washers and locknuts. Assemble them directly on the frame-side, note that the nut-slot has to be downwards and the clearing on the "slide-side" has to be inward.

Nut in the “slide-middle” can be mounted after.

The “slide-lock” allows you to move and lock the slide along the slope.

Use the knob and a M3x35 for easier handling.

- **The Flex-arm system**

This provides you a variety of options depending on what you are working on.

Knob and M3x20 provides handling without tools.

- **The Knob**

Is designed for M3 where the head is grinded on the sides for transferring the force.

Add “Knob-center” to cover up the screw.

- **The Clamping plate (added 2024-04-03)**

Clamping plate for fixating whatever flat object you might have.

Comes as rod attached or flexarm attached.

Clamping plate claws comes in 10-30-60mm width so you can clamp multiple pieces at once.

However you can't fit 2 Knobs directly beside each other, but for those times you can just fit a regular M3 with washer.

- **Update (added 2024-04-06)**

Clamping plate and flexarm for Ball end attachment added.

Ballend neck increased from Ø4 to Ø6. Might be a weak layer adhesion on my print only, but better safe than sorry 😊

- **Update (added 2024-04-19)**

Flexarm Footplate added to support singel free standing flexarm. Fits with flexarm for rod attachment. Ø8 holes on rear leg to attach extra weight to if needed. Guess your imagination is as good as mine for how to 😊

This is a work in progress but and I've printed parts on a MK4 with material PETG, to verify functionality.

- Print settings used.

Vertical shells 3 - Top layer 5 - Bottom layer 4

Infill 60%

Layer height 0,2

Nozzle 0,4

I'm sort of a beginner on the printing platform so you might know better how to set the printer parameters for maximum output.

I've added STEP for rod-attachment, ball- attachment and flexarm-attachment so it is easy to modify for whatever special need you have 😊

Model files

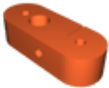


frame-side.stl

☐ Printed on the side. Has to be printed with support locally in the slot and at "rod grip"



frame-middle.stl



rod-slide-center.stl



rod-slide-side.stl

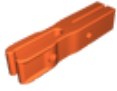


rod-slide-lock.stl

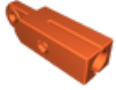


flexarm-base-attachment.stl

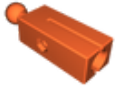
☐ Need support locally at V-slot



clamp-rod-attachment.stl



flexarm-rod-attachment.stl



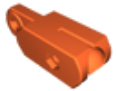
ball-end-rod-attachment.stl



flexarm-middle-joint.stl



flexarm-ball-end.stl



flexarm-ball-attachment.stl



flexarm-flashlight-holder-d26.stl



flexarm-footplate.stl



knob-center-cover.stl



knob.stl



gripper-ball-attachment.stl



clamping-plate-flexarm-attachment.stl

☐ Insertion M3 nut. !!!NOTE!!! My M3-nuts has a hight of 2,4mm. Higher nuts can lead to a crash



clamping-plate-rod-attachment.stl

☐ Insertion M3 nut. !!!NOTE!!! My M3-nuts has a hight of 2,4mm. Higher nuts can lead to a crash



clamping-plate-ball-attachment.stl



clamping-plate-claw-60.stl



clamping-plate-claw-30.stl



clamping-plate-claw-10.stl

flexarm-open-end.step

rod-attachment.step

ball-attachment.step

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