

SCARA robot



Davy

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Summary

Educational scara robot. Slower than industrial versions, yet pretty strong and accurate

[Learning](#) > [Engineering](#)

Tags: [educational](#) [robot](#) [scara](#)

INNOVET SCARA Robot. <1000€ educational SCARA robot. Easy to build with easy to obtain parts in Europe. Perfect as a schoolproject. Not only the building of the robot, but the robot can also be used in many STEAM projects. Check the BOM for parts and the movie for assembly.

The STL's should be printed, the STEP files, should be machined out of 6061 Aluminium.

Use any 4 axis CNC controller to control the robot. I have succefully used GRBL-HAL on a teensy 4.1 and 6-axis GRBL on an arduino mega.

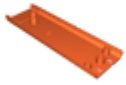
I used car bearings for a solid setup (see bom)

Check the assembled step-file for assembly.

or:

everything can be printed without support.

Model files



j3-arm-cable-cover.stl



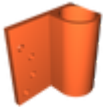
buisdop.stl



j2-j3-bearing-bottom-cable-cover.stl



kleine-riemschijf-voor-test.stl



flexhosecoupler.stl



bearing-spacer.stl



voorlopig-definitieve-riemschijf.stl



bevestigingsflens.stl



houder-endstops.stl



j2-j3-tensioner.stl



j2-bearing-side-cover.stl



houder-z-endstop.stl



flens-rotatieplatform.stl



remschijfriemschijf.stl



holder-y-endstop.stl



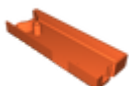
j2-j3-bearing-side-and-cable-guide.stl



j2j3-joint-cover.stl



endstop-rotation-holder.stl



j2-wire-cover.stl



top-lid.stl



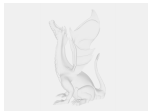
upper-flange.stl



bushing.stl



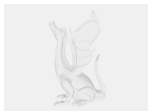
spanner-j1-motor.stp



j3-arm.stp

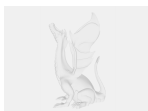


j2-arm.stp



scara-robot-assembled.stp

Other files



bom.pdf

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