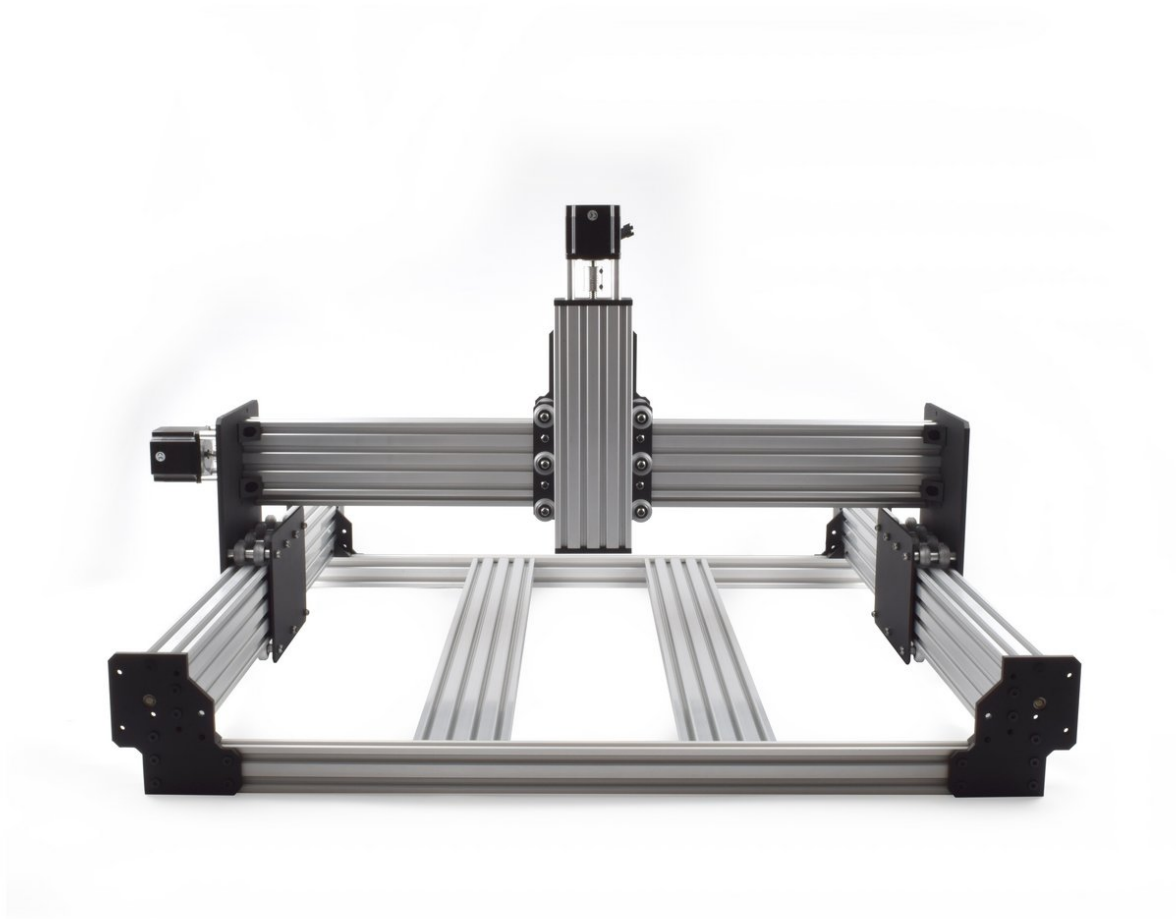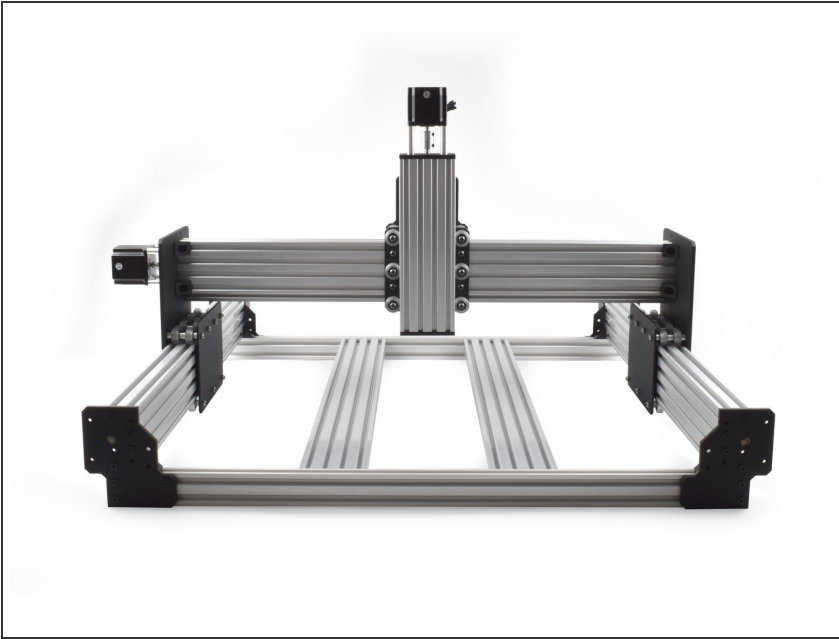# 1. Introduction

Written By: Harry Ince

Step 1 — Reading The Manuals

- We recommend that you read through the whole manual before beginning the build, as this enables you to get a rough idea of how it all goes together.

- ⚠ Work through all categories and guides in numerical order. If a category or guide has the same number, you only need to complete **one** of them based on the machine you bought or assembly preference.

- Before starting each step make sure you have studied the diagram and fully understand what you are doing.

⚠ When attaching parts, make sure they are properly squared and aligned, and everything should easily fit together. If a part is requiring significant force to attach, stop, take it off, re-read the instructions, and try again. Do not over tighten bolts, as you may strip the threads.

ⓘ If you forget to insert a Tee-Nut when instructed, there is no need to undo any of the work you have done. We have included spare M5-Drop-In-Tee-Nuts in the kit for this situation.

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ⓘ M5-Drop-In-Tee-Nuts do not have to be inserted from the end of the extrusion - simply place them in the V-Slot, then screw in the bolt. This will turn them, and engage them into the underside of the V-Slot.

⊡ This manual has been written for the construction of a 750 x 750mm screw driven version of the WorkBee.

Step 2 — Machine Size

The Ooznest Original WorkBee CNC Extrusion Sizes					
500 x 500mm	750 x 750mm	750 x 1000mm	1000 x 1000mm	1000 x 1500mm	1500 x 1500mm
20x40 x 415mm (2)	20x40 x 665mm (2)	20x40 x 665mm (2)	20x40 x 915mm (2)	20x40 x 915mm (2)	20x40 x 1415mm (2)
20x40 x 495mm (2) (T)	20x40 x 745mm (2) (T)	20x40 x 745mm (2) (T)	20x40 x 995mm (2) (T)	20x40 x 995mm (2) (T)	20x40 x 1495mm (2) (T)
20x40 x 500mm (1) (T)	20x40 x 750mm (1) (T)	20x40 x 750mm (1) (T)	20x40 x 1000mm (1) (T)	20x40 x 1000mm (1) (T)	20x40 x 1500mm (1) (T)
20x80 x 460mm (2)	20x80 x 710mm (2)	20x80 x 960mm (2)	20x80 x 960mm (3)	20x80 x 1460mm (3)	20x80 x 1460mm (4)
C-Beam x 250mm (1) (T)	C-Beam x 250mm (1) (T)	C-Beam x 250mm (1) (T)	C-Beam x 250mm (1) (T)	C-Beam x 250mm (1) (T)	C-Beam x 250mm (1) (T)
X-Axis C-Beam x 500mm (1) (T)	X-Axis C-Beam x 750mm (1) (T)	X-Axis C-Beam x 750mm (1) (T)	X-Axis C-Beam x 1000mm (1) (T)	X-Axis C-Beam x 1000mm (1) (T)	X-Axis C-Beam x 1500mm (1) (T)
Y-Axis C-Beam x 500mm (2) (T)	Y-Axis C-Beam x 750mm (2) (T)	Y-Axis C-Beam x 1000mm (2) (T)	Y-Axis C-Beam x 1000mm (2) (T)	Y-Axis C-Beam x 1500mm (2) (T)	Y-Axis C-Beam x 1500mm (2) (T)

ⓘ Please use the table to identify your extrusions checking the colour of Anodise against the list along with Quantity (Number) and also Tapping (T)

● This manual has been written for the construction of a 750 x 750mm screw driven version of the WorkBee.

　● If you have a larger version, everything is exactly the same, except you will be working with longer V-Slot extrusions and ACME Lead screws.

　● Use the table to convert V-Slot dimensions in this manual to the sizes for your machine.

Step 3 — Spoiler Board Support Extrusions

- The spoiler board support extrusions are not resting on the workbench, instead they span from front to back

  - There will be two 20x40 extrusions that are used to support the 20x80 spoilerboard support extrusions.

  - Machine sizes with an X-Axis of 1000mm or greater have more than two spoiler board support extrusions, therefore there will be 1 or 2 spoiler board support extrusions that you cannot carry out this process.

- ⓘ We recommend placing the supported spoiler board supports in the following configurations.

  - 500mm x 500mm & 750mm x 750mm & 750mm x 1000mm Screw Drive Machines: Supported - Supported.

  - 1000mm x 1000mm & 1000mm x 1500mm Screw Drive Machines: Supported - Unsupported - Supported.

  - 1500mm x 1500mm Screw Drive Machines: Supported - Unsupported - Unsupported - Supported.

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Before you get into the build, we just wanted to thank you for purchasing one of The Ooznest Original WorkBee CNC Machines! We hope you enjoy this journey and we're here to help you every step of the way! Without further ado, let's get started!