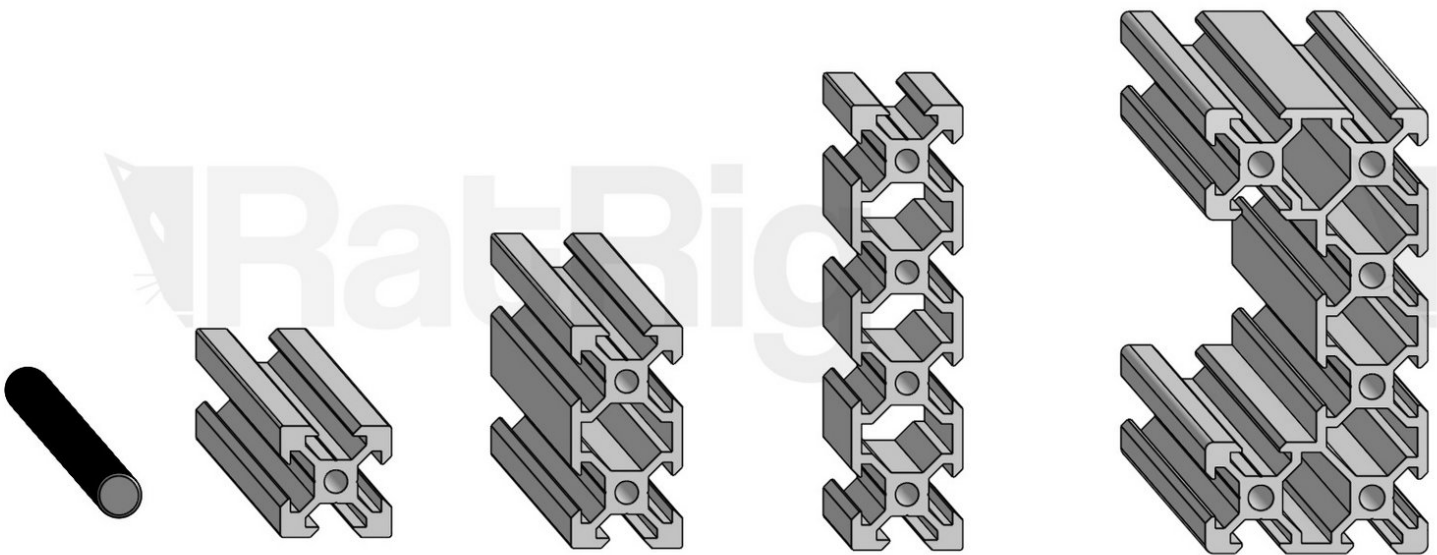


Rat Rig

Identify your Lead CNC variant

Written By: Rat Rig



INTRODUCTION


[Bill of Materials](#)

[STL Files for Printed Parts](#)

Step 1 — Workable Dimensions & Spoiler Board Dimensions

RatRig Model	OpenBuilds Equivalent	Work Area
500x500	7575	480x560 mm
750x750	1010	730x810 mm
1250x750	1510	730x1310 mm
1250x1250	1515	1170x1250 mm

RatRig Model	Spoil Board
500x500	576x775
750x750	826x1025
1250x750	826x1525
1250x1250	406 x 1473 (3x)

 Previously all Lead CNCs were named after their machine footprint, at this moment all kits and guides follow the RatRig model notation (which refers to the work area).

- Start by determining which Workable space you need, to understand which Lead CNC size is adequate for you.
- Spoiler board is not included in the kit and needs to be sourced locally.

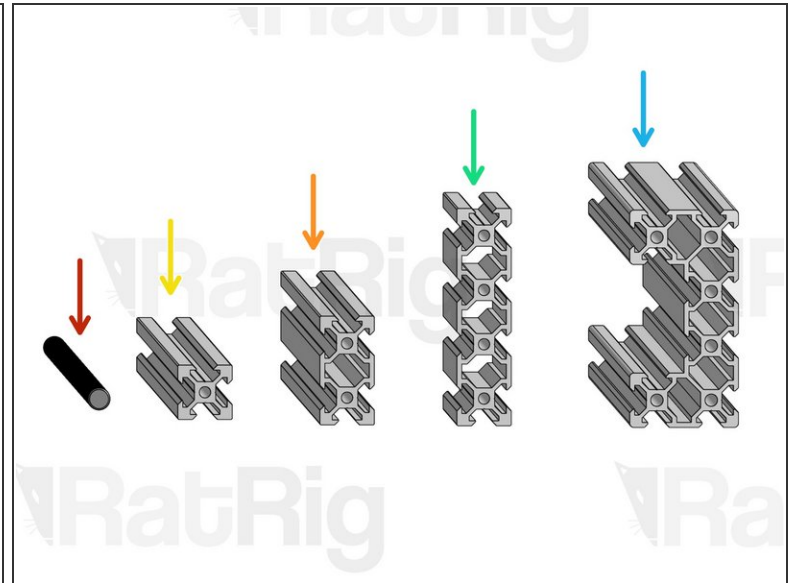
Step 2 — Cutting depth

RatRig Model	Z height
500x500	~47 mm
750x750	~47 mm
1250x750	~47 mm
1250x1250	~63 mm
High-Z mod	~203 mm

- Take into account the maximum cutting depth (Z height) of the machine when choosing the appropriate CNC for your application.
- ① The High-Z upgrade is available for all Lead CNC variants except the 1515.

Step 3 — Organize your profiles and Lead Screws

Lead CNC Variant (X/Y)	Lengths (mm)					
	500x500	Qty	750x750	Qty	1250x750	Qty
X-Gantry C-Beam	750	1	1000	1	1000	1
X-Gantry 2020 (Tapped)	750	1	1000	1	1000	1
Y C-Beam	750	2	1000	2	1500	2
X Base 2040 (Tapped)	712	2	962	2	962	2
Y Spoiler Support 2040	735	3	985	3	1472	3
X Lead Screw	790	1	1040	1	1040	1
Y Lead Screw	790	2	1040	2	1557	2



- i** Since there are multiple Lead CNC variants, our guides won't mention profile and lead screw lengths, as these vary. Instead, the guide will refer to each profile and lead screw by the names described on the table. You may want to label/group these parts right now to prevent assembly mistakes and make your job easier.
- i** For the High-Z Mod, you should use the [Lead CNC 500x500; 750x750; 1250x750](#) as your main guide, but instead of following chapters 1.3 and 1.4 on that guide, follow chapters 2.3 and 2.4 of the [Lead CNC 1250x1250](#) guide.

- Lead Screw
- V-Slot 2020 Profile
- V-Slot 2040 Profile
- V-Slot 2080 Profile
- C-Beam Profile