

Tetra-Motion — Every which way but loose

Office & Workshop

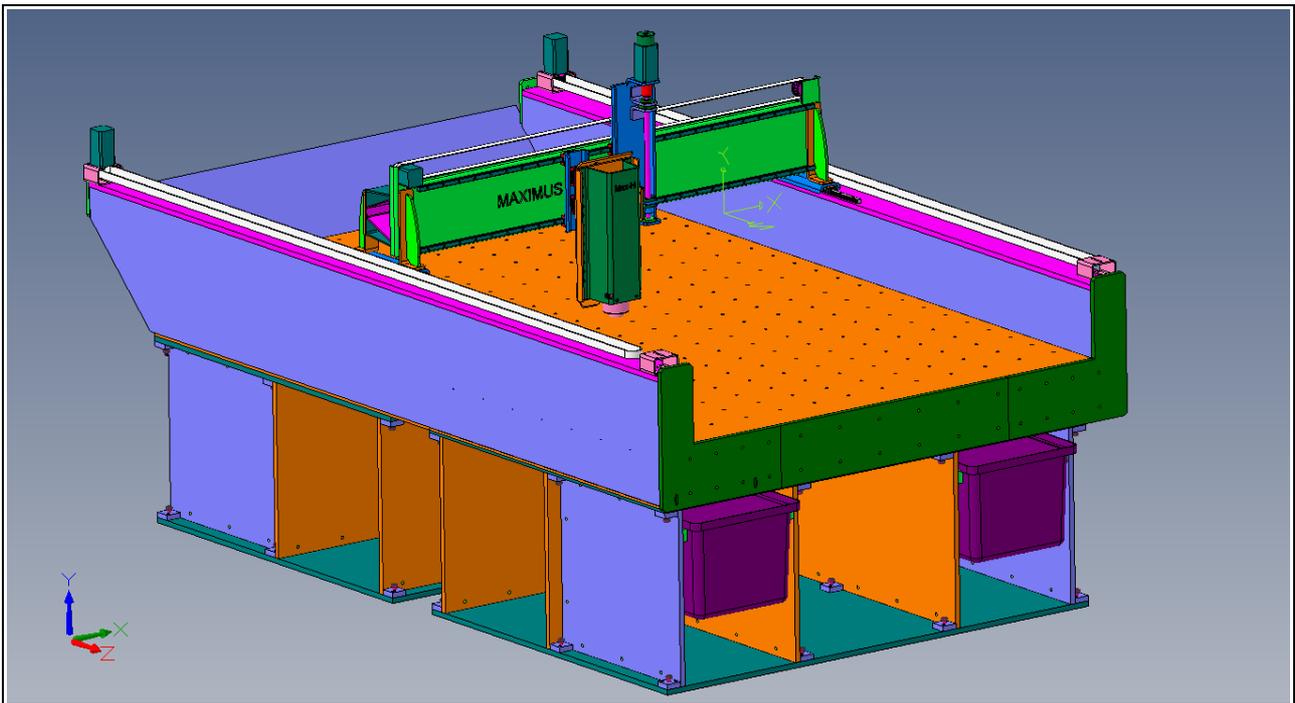
1020 Kyogle Road, Dum Dum NSW, 2484

02 6679-4001

Contact: Peter Schwarzel peter@cncrouterkits.com.au

see also www.cncrouterkits.com.au

Maximus-M



Maximus-M is a Maker grade CNC router. Its intended for large scale DIY Creative projects. It speedily and easily cuts soft materials such as timber, plywood, plastic, MDF and foam. Its bed accepts a full sheet of metric or imperial plywood with 150mm margin for clamping and fixtures.

For hard materials choose the 10:1 gearbox option. If its foam or very soft materials you need cut in a hurry choose the 5:1 gearbox option. The stand and base is up to the Maker. The Maker can build it in half sheet size or very long as well just adjust the bench and rail lengths to suit your application.

Construction

Maximus is mainly made from laser cut stainless steel. The Maker can build a metal or timber bench depending on their work requirements. Plans for a timber stand and bench are in the price list.

Specifications

Bed Size	1525mm wide x 2600mm long
Machine footprint	1800mm x 2900mm
Cutting envelop	Y1250mm x X2450mm x Z250mm
Standard Apron cutting depth	50mm
Mechanical accuracy	+/-0.005mm 10:1 gearbox
Mechanical accuracy	+/-0.010mm 5:1 gearbox
Resolution (software)	+/-0.010mm
10:1 gearbox max axis force	57kgf
Z axis max plunge force	200kgf
10:1 axis speed	13m/min
5:1 axis speed	26m/min

Total weight with timber bench approxiamately 300kg

Power input 240V or 110V

Features

- Z Drive is a 1610 ball screw with Nema23 4Nm motor and electric brake
- The X&Y Drives use a heavy duty 25mm wide steel wire belt
- The Maker can select the grade and price of the standard parts. From economy bearings to high performance it's up to you and your budget
- All motors are high torque Nema 23 and use precision gearboxes with 14mm diameter shafts
- The large gantry is exceptionally stiff and all structures have been structurally analysed and optimised using finite element analysis
- Maximus is a third generation machine based on Tetra Motions in-depth testing and machine development program.

Shopping List

Tetra-Motion supplies mechanical and structural components for CNC machines. We stock hard to get parts and we stock the parts we manufacture ourselves. All other standard parts can be supplied by bearing outlets, electronic stores and your local hardware. Tetra Motion provides a standard part specification and shopping list with expected costs so you can easily cost and source the parts for your machine wherever you are.

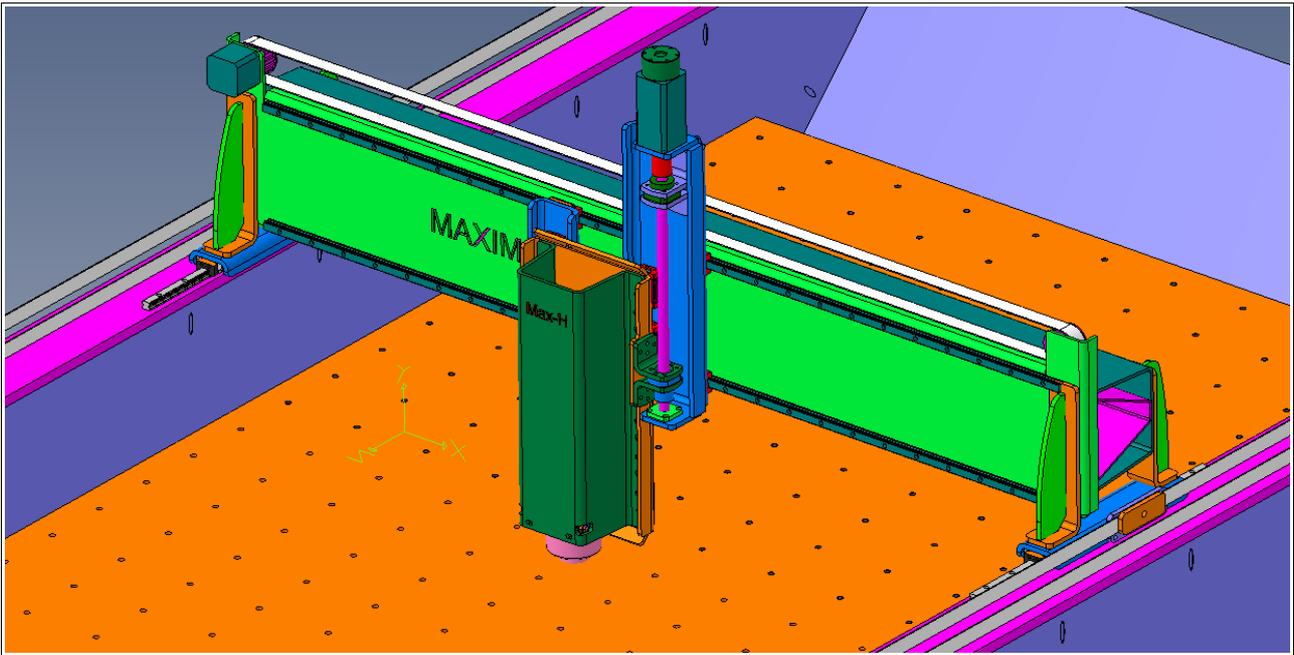
Tetra Motion does not sell machine "kits" we sell individual parts. We have found that every CNC machine builder is different and requires different parts or is at a different stage in their build. By selling individual parts we help solve your build issues faster. The Maker gets what they need in a no fuss manner.

Bespoke Parts

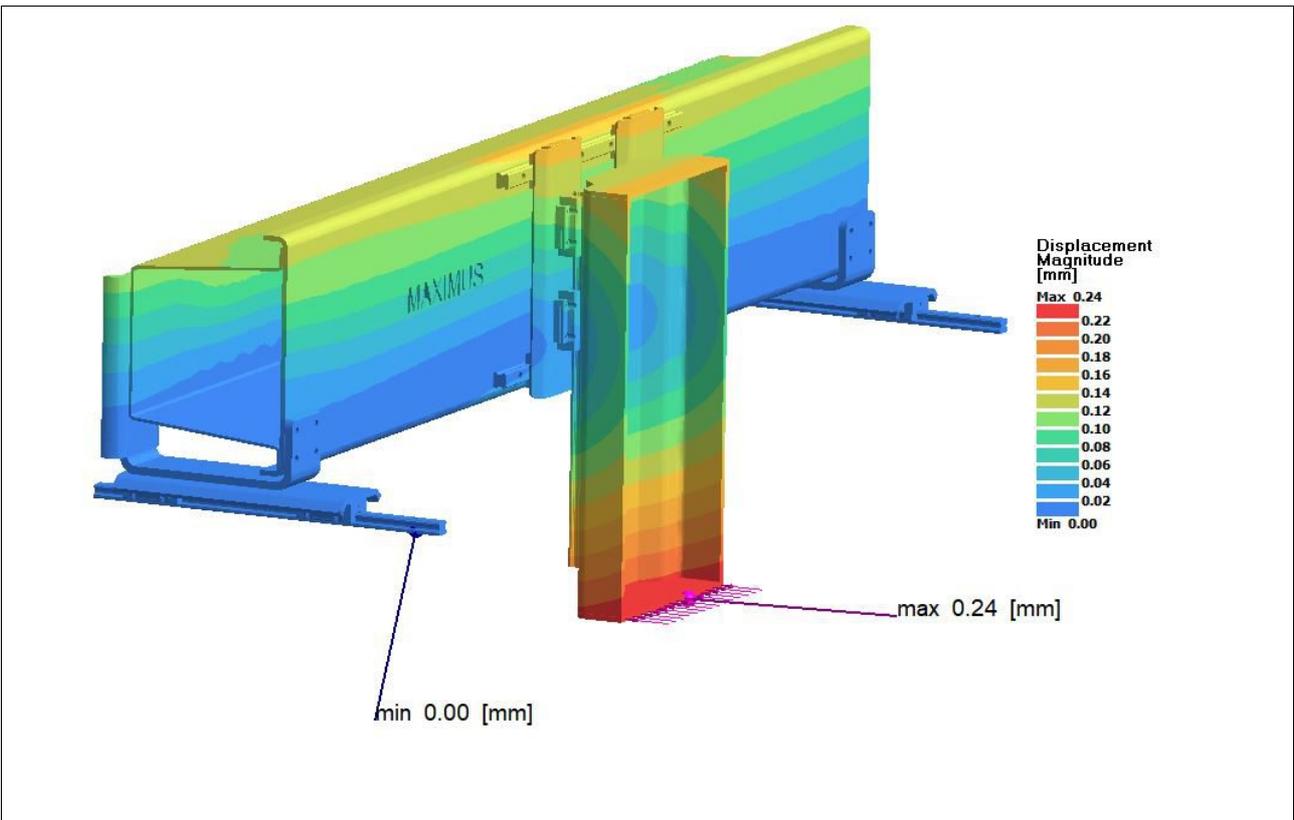
Because Tetra Motion is regularly ordering various parts we are very happy to quote on the supply of bespoke machine parts from one off to production OEM quantities. Just snail mail that napkin sketch to us and we will digitise it quick sticks! :)

Maximus-HD

Maximus-M too lightweight for your job? Look at Maximus-HD its a heavy duty stainless steel machine. Good luck with your build!



Gantry close up



Finite element development of machine design

Tetra Motion is here to help so any questions you may have please ask.