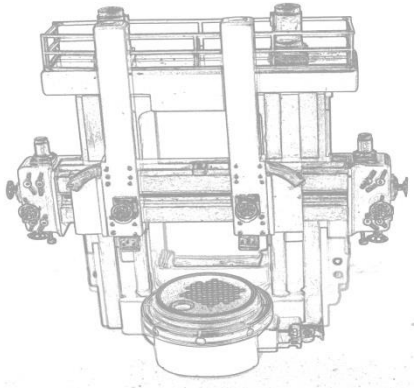
Dual Post Vertical Lathe/Boring Mill

Kit number HO/V2PL/m



Assembly Instructions

There are 8 main components that need to be assembled to make this machine. The colour of choice is at your discretion. We recommend acrylic paints, as this allows for added detailing with enamel paints afterwards. Colour suggestion – light greys, a dark blue grey or a Lister green. These need to be mixed to make up these colours. This model can be permanently glued with superglue, or it can be assembled to be animated in different static displays.

1. **Drilling** of all holes and spacers supplied for attachment of wheels and feed shafts to be done according to instruction manual on this. **N.B.** This needs to be done before any actual assembly and any main colour painting begins.

2. **Cleaning and preparing** –once the holes have been drilled and spacers added for the attaching of the wheels, the machines can be cleaned and surfaces filled (if necessary) and prepared for painting.

3. **Assembly** - Remember that the styrene rods and spacers need to have been prepared and in place prior to assembly. Main colour painting needs to have been done.

4. **Main body detailing** (all in colour of choice) – levers, gauges, electrical box, conduits, handles, hinges, main switch lights in red, orange and green, 2 cover plates on bottom inside rear chuck housing, 2 vertical bed ways, bolts, shafts sticking out of 2 bearing housings, left and right electrical motors with connection boxes, access doorways on left and right hand sides of the main body, gearbox and speed adjustment housing on front of the machine offset to the right below the chuck.

Main bridge slide (3 parts) detailing – mounting bolts along the top and down one side.

Main bridge detailing – top and bottom bed ways, lead screws, bridge stop section with bolts, 2 drive motors and levers.

Main quill housing detailing (left and right) – outer bedway, bolt and cover plate housings, 2-tool post holders on the bottom of the quills

Chuck – painted in a steel colour along with jaws to hold job in place on chuck, lead screw holes highlighted.

All fine feed and adjustment brass-etched wheels – painted in red generally (suggestion only)

These can now be glued in place before final assembly takes place.

Excess shafts sticking out of the end of the brass-etched wheels can be nipped off and touched up with colour of choice.

5. You are now ready to assemble the machine with either Prestik or superglue depending on your layout/choice as mentioned before.

Assembly

6. Assemble bridge (2) vertically onto main body (1) and position the height to suit the requirements of your job in the chuck, i.e. tube sheet plate (included) or as in pictures shown in main document available on website, a bearing housing for a main turbine driveshaft.

7. Assemble the left and right tool post quills (3) to the bridge (2), set horizontally, again to suit your job requirement.

8. Assemble the tool bit holders (4) into the bottom of the left and right quills and set to the correct diameter to be machined.

9. Assemble the top bridge motor main housing (5) with **overhang facing forward**. This prevents the bridge from going off the top of the machine. DO NOT FORCE THIS. It only fits one way.

10. The chuck (6) can now be placed into the base of the machine with the tube sheet (7) job locating in the centre of this. Jaws (8) can be added to suit.

(Actual size of chuck – 109” or 9ft or 2.8m. Actual size of tube sheet job in chuck – 96” or 8ft or 2.4m with a plate width of 13” or 330mm) Sizes given have been rounded off excepting the inch sizes which are exact sizes.

11. Your model is now fully assembled.

12. Suggested paints – Humbrol Metal cote colours (Polished Steel no. 27003 or Gunmetal no 27004)) especially for the bed ways and chuck. These two colours are exact simulations of steel, one being hardened steel and the other normal free-machining steel. This needs to be polished with a soft cloth after drying and will look like the real thing once dried and polished. I recommend that you try this on scrap stryrene card stock first and then polish to suit. You will see what I mean!

Parts of the dual post vertical lathe

Parts list

Item	Description	Quantity
1.	Main body	1
2.	Main bridge and slide	1
3.	Quill housing (left and right)	2
4.	Tool bit holder	2
5.	Top bridge motor main housing	1
6	Chuck	1
7.	Tube sheet	1
8.	Adjustable jaws	4
9.	2.2mm x 1mm thick shaft spacers	12
10.	Brass-etched wheels	9 x 5.4mm
11.	Styrene rod 210 (.030”/0.75mm) x 30 mm long	2 lengths

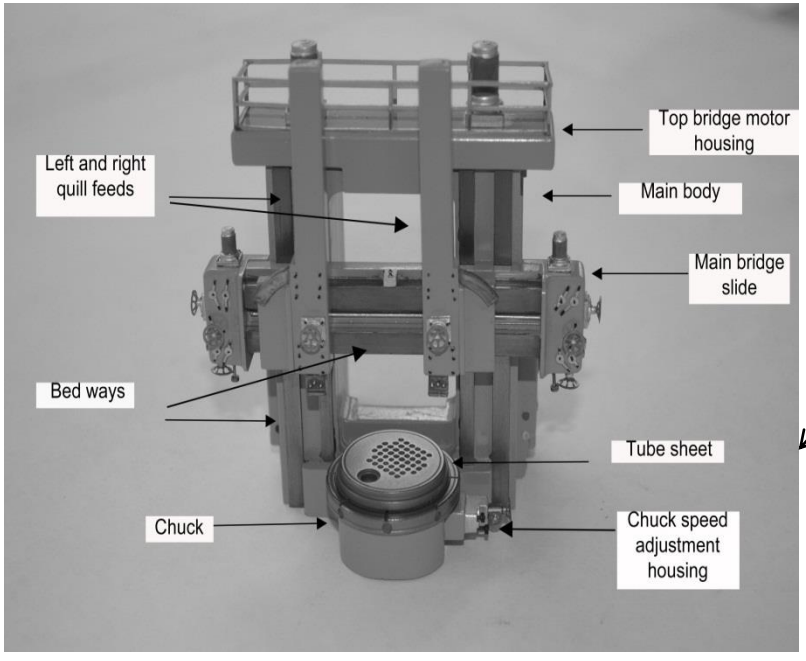
Parts not included, but available to be purchased separately will be the brass-etched access walkways.

The top bridge motor housing has a machined recess to suit the Plastruct Hand Rail HR4/HRS4, Walthers 2013 p.897/ 57090682/Plastruct 90472. This is not readily available to us and is not economical for us to supply this.

Hand- and walkway railways to be painted yellow as a safety feature.

When ordering replacement parts, please specify kit number, item number and description.

Suggestion - EZ line (Berkshire Junction – www.bershirejunction.com) can be used and purchased to super detail the electrical supply cables to the various motors on the machines.



Pictures showing positioning of the adjustment wheels