

WORKSHOP TABLE ARCHIVAL STUDIES

Workshop Table_Manual



The Workshop Table is a sturdy and functional workbench built by the same principles as our plywood furniture that aims to reinvent the joinery, structure, and proportions of traditionally-crafted Chinese and Japanese joinery through contemporary materials and digital fabrication techniques. Made entirely of pine plywood, all pieces are joined by bolts and nuts, abstaining from glueing, foregrounding modular furniture pieces that can be taken apart, fixed or renewed.

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Dimensions

1200 x 1200 x 950 mm

Materials

Plywood

2 Sheets of pine plywood 2500 x 1250 x 21 mm

1 Sheet of pine plywood 2500 x 1250 x 12 mm

Table Fasteners

6 Countersunk bolts M6 x 35 mm (for 21 mm tabletop)

12 Countersunk bolts M6 x 40 mm (for 12 mm shelves)

18 Barrel nuts M6 x \varnothing 10 x 20 mm (for tabletop and shelves)

36 Bolts M6 x 65 mm (for stretchers)

36 Barrel nuts M6 x \varnothing 10 x 20 mm (for stretchers)

36 Washers M6

64 Dowels \varnothing 8 x 30 mm (for leg assembly)

110 cm of dowel \varnothing 10

Wheel Base Fasteners

16 Screw-in bushings M6 x 20 mm

16 Bolts M6 x 20 mm

16 Washers M6

8 Dowels \varnothing 8 x 30 mm

16 Woodscrews 5 x 90 mm (predrill into table legs)

4 Tente wheels 100 mm (113477010)

If other wheels are used, the placement of the holes for screw-in bushings might need to be changed to fit the new wheels.

Workshop Table_Parts Overview

The Workshop Table is constructed entirely from pine plywood. All components are CNC-milled from two 21 mm and one 12 mm thick sheets.

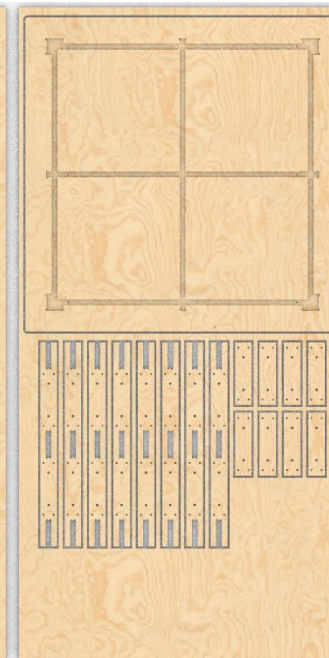
Plywood Parts

1 Tabletop	1200 x 1200 x 21 mm
2 Shelves	1038 x 1038 x 12 mm
18 Base stretchers	1040 x 100 x 21 mm
8 Table leg outer parts	780 x 63 x 21 mm
8 Table leg inner parts	240 x 63 x 21 mm
4 Wheel base top part	105 x 105 x 21 mm
4 Wheel base bottom part	105 x 105 x 21 mm

21mm_sheet1



21mm_sheet2



12mm_sheet1



Workshop Table_Required Tools

The Workshop Table is designed for CNC production and can be assembled using basic hand tools. For optimal production, access to the following machines and tools is recommended. Alternatively, you can collaborate with a local cabinet maker or makerspace to have the parts fabricated.

Required Tools

Stationary machines

CNC machine with router bits

Tools

Screwdriver

Screwmachine

Appropriate bits for screws and bolts

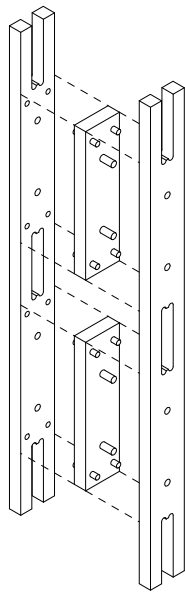
Drillbits for pre-drilling wheel base to legs

Saw to cut ø10 dowel to size

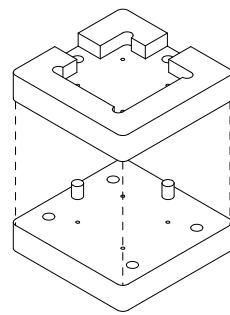
Hammer

Clamps to use in glue-up of legs and wheel bases

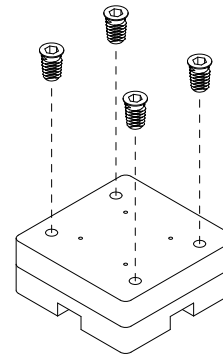
Workshop Table_Assembly Guide



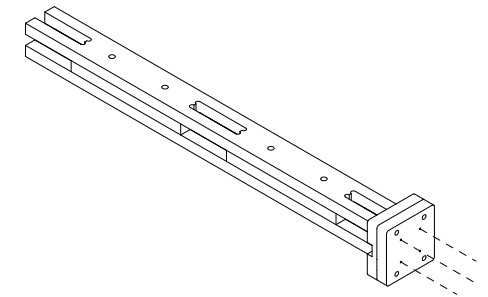
Step 1
Glue together the four pieces of each leg using dowels for proper alignment. Clamp them together and repeat for all four legs.



Step 2
Glue together the two pieces of each wheel base using dowels for proper alignment. Clamp them together and repeat for all four bases.

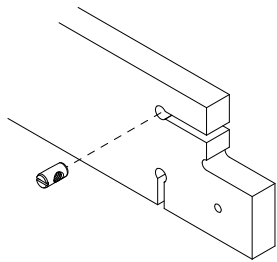


Step 3
Countersink the holes in each wheel base and screw in four bushings. Repeat for all four bases.



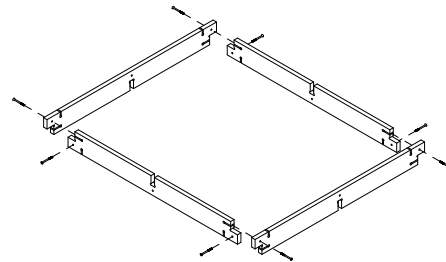
Step 4
Pre-drill through the wheel base into the bottom of the table legs to prevent the plywood from splitting when screwing in the wheel base.

Workshop Table_Assembly Guide



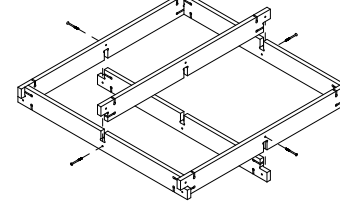
Step 5

Prepare all the stretchers by placing barrel nuts into the appropriate $\varnothing 10$ holes.



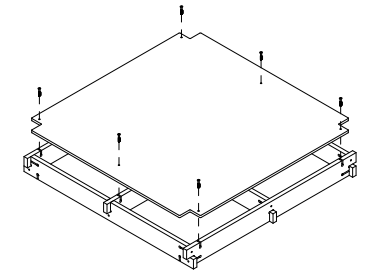
Step 6

Assemble the top and bottom frames of the table, connect four stretchers to form an outer frame and secure them with M6 x 65 mm bolts into the matching barrel nuts.



Step 7

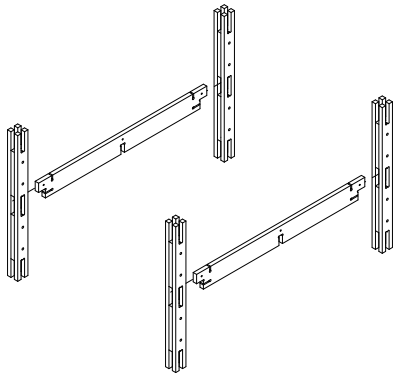
Add the middle stretchers and fasten them with M6x65mm bolts into the matching barrel nuts.



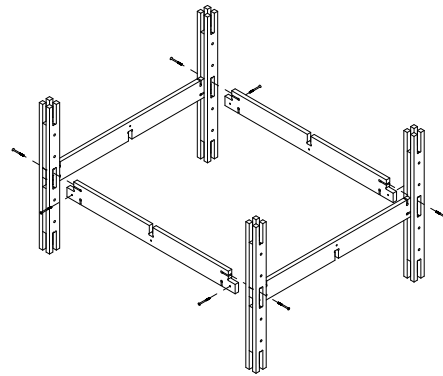
Step 8

Place a shelf onto the bottom stretchers and fasten it with M6 x 40 mm bolts into the matching barrel nuts.

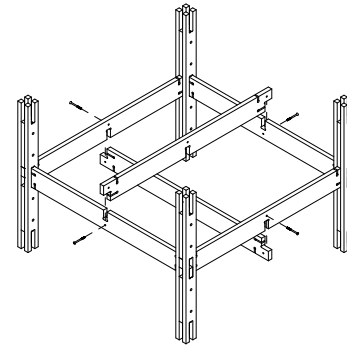
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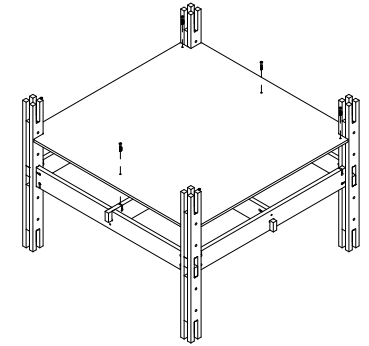
Step 9
Insert the first pair of stretchers into the through mortise in the middle of the table legs.



Step 10
Insert the second pair of stretchers into the through mortise in the middle of the table legs and fasten the frame with M6 x 65 mm bolts into the matching barrel nuts.

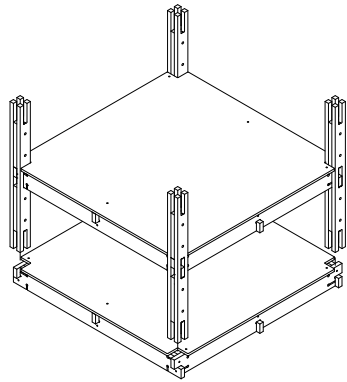


Step 11
Add the middle stretchers and fasten them with M6 x 65 mm bolts into the matching barrel nuts.

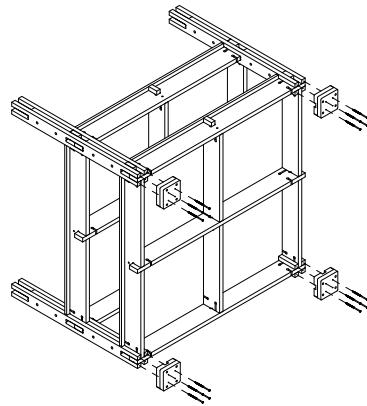


Step 12
Place a shelf onto the middle stretchers and fasten it with M6 x 40 mm bolts into the matching barrel nuts.

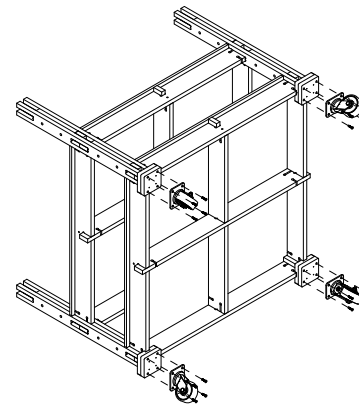
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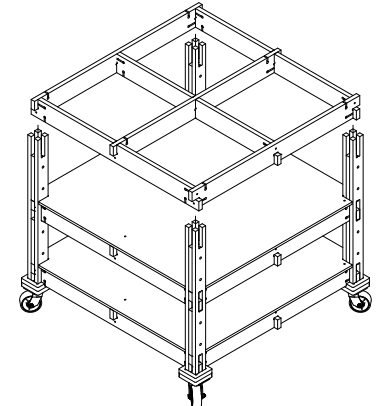
Step 13
Slide the legs and middle shelf onto the bottom shelf.



Step 14
Carefully flip the construction onto its side and fasten the wheel base to the table legs by screwing it on with 5 x 90 mm woodscrews. Repeat for all four legs.

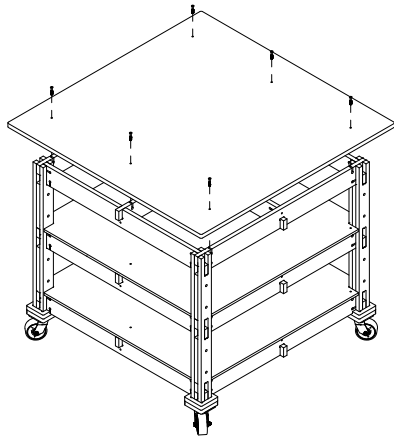


Step 15
Attach the wheels to the base by screwing them on with M6 x 20 mm bolts. Repeat for all four legs.



Step 16
Carefully flip the table back upright and slide the top frame down onto the legs.

Workshop Table_Assembly Guide



Step 17

Place the tabletop onto the top stretchers and fasten it with M6 x 35 mm bolts into the matching barrel nuts. Enjoy your new workshop table!