

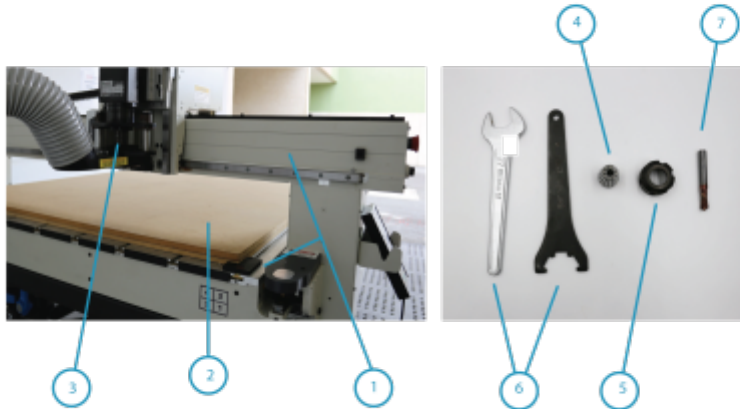
Main parts on CNC machine

SLQ Wiki Fabrication Lab 2026/05/31 22:09

Main parts on CNC machine

- Machine bed - with vacuum suction
- Steel Gantry - X axis
- Machine head - Y and Z axis
- Spindle - routing bits and collets spins at 16000rpm average
- Controller panel - Manually control the gantry and load jobs
- Inverter enclosure- DO NOT OPEN! High Voltage. Main on/off switch is located here.
- Vacuum Pump manifold - four sections can be isolated to increase vacuum.

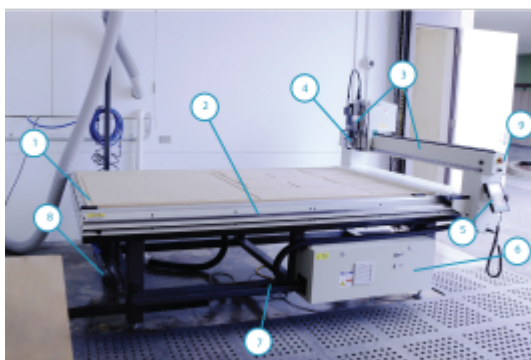
CNC COMPONENTS



COMPONENTS & TOOLS

- 1 x and y axis gantry rails - check for dust and debris
- 2 Waste board- check over waste board for flatness. Use scour pad to clean
- 3 Threaded Spindle- check spindle for corrosion/rust and clean with steel wool
- 4 Collet
- 5 Collet Nut
- 6 Collet Wrenches
- 7 Routing Bit

CNC COMPONENTS



COMPONENTS

- 1 Vacuum Bed
- 2 Travelling Steel Gantry contains x axis
- 3 Machine Head contains y and z axis
- 4 Location of cutting spindles
- 5 Operators Console
- 6 Inverter enclosure- High Voltage
ADMC Controller/Brake/DC - High Voltage
Power Box Motor/ONOFF - High Voltage
- 7 Machine Frame
- 8 Air Supply for Vacuum pressure gauges
- 9 Emergency Stop