



Technical Specification

GUANGDONG HOLD MACHINERY

TEL: +86 757 27733222 E-mail: samho@fshold.com

ADD: Lian-Fu 1st Rd, Fu-An Industry Park Leliu, Shunde Dist., Foshan City, Guangdong Province, China

HOLD Machinery was founded in 2004, focusing on the development of a full range of furniture machinery equipment and wooden door machinery, providing solutions of whole factory planning and automatic production lines, providing excellent quality, efficient and stable products and high-quality service to customer.

HOLD Machinery has served customers in more than 50 countries and won good reputation.

HOLD Machinery is a national high-tech enterprise. HOLD staff focuses on the research and development of advanced woodworking machinery. More than 80 patents have been authorized and applied for, including more than 10 invention patents and more than 60 utility model patents.

In an era of rapid change, we firmly believe that breakthroughs and innovations are important forces in promoting social development. In a volatile market, we firmly believe that continuous innovation is the foundation of a company's foothold. Focusing on products, achieving excellence, and constantly improving the value of products to customers, are spirits of HOLD!

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CNC DRILLING MACHINE (2 Work-stations) HB622GP



(Ref. Only)

Stability: bus control system, 2 work-stations, dual channels.

Convenience: One machine with multi-screen technology, synchronous operation and synchronous display at different workstations.

Intelligent: single station 4 drilling packages, double station 2 drilling packages, the working mode is automatically determined according to the width of the plate.

Safety: predicting collision interference and adopt real-time avoidance algorithm

Main tech

- After artificial annealing and aging treatment, it has good long-term use stability;
- After overall precision processing in a large gantry machining center, the accuracy is high;
- Double working stations, equivalent to two six-sided drills, doubling the efficiency.
- The drill package is specially designed with 12 vertical drill bits, and the reasonable layout improves work efficiency. The minimum distance is 64mm when two drilling packages are drilling at the same time;
- Minimum workpiece size: 120*30mm;

- Maximum processing width of plate: left work-station $\leq 650\text{mm}$, right work-station $\leq 1210\text{mm}$.
- The bottom drilling package has an independent floating platform to ensure the accuracy of drilling.
- The main air-floating table reduces the friction between workpiece and table, making the surface of the workpiece less likely to be scratched.
- Extra-large pressure-stabilizing gas storage tank makes the working pressure more stable.
- Compressed air booster keeps the pressure stable and makes the drilling depth more accurate.
- Two large press shoes increase the stability of the material pressing and make drilling of the drilling package more accurate.
- Intelligent side-aligner system automatically measures the width of the workpiece and promptly corrects placement errors.
- Intelligent measuring device automatically measures the length of the workpiece to prevent errors caused by incorrect labeling.
- Adopting precision rack and pinion transmission, the rack accuracy is DIN6 level, and it is ground by a precision grinder. High precision, no special refueling and maintenance required;
- Using Hold own brand CNC drilling package and high-grade grinding gear transmission, it has high precision and good stability;
- Double gripper servo control for material grabbing, accurate positioning. When the gripper moves quickly, the lower gripper plate sinks to prevent the gripper from hitting the plate when moving. At the same time, the gripper has an air blowing function, which can blow off the dust on the gripper and avoid pinching the board.
- There are dust suction devices in each processing part;
- In view of the fact that lots of workpieces for angle cutting and engraving, a double dust collection drawer is designed at the bottom of the machine to facilitate the collection of small pieces of wood.

- Simultaneous drilling; simultaneous grooving on front and bottom sides; double plate processing;
- Supports importing DXF files for processing after drawing with CAD software;
- Automatic marking of dimensions, docking with the order dismantling software, displaying the information of the four-sided edge banding and thick book, making it easy to place the board;
- Supports simulation function, which can check processing actions in advance to avoid misprocessing;
- Data analysis, statistics of the number of processing times of each drill bit reaches the set number of uses, prompting to change the drill bit;
- Processing statistics function: Statistics of the QR code information of each panel, processing start time, end time, time spent, and the time interval between placing upper and lower panels to facilitate employee performance management;
- Distinguished display of processing and to-be-processed files, making it easy to check whether any missing panels are missing;
- Multi-axis CNC system and multi-channel technology. When processing workpieces, the machine pre-scans multiple boards to be processed and queues them up to reduce the time spent on scanning. At the same time, multi-channel control technology is used for discharging and processing control, so that the boards can be easily controlled from the gripper. After disengaging, you can quickly return to the material receiving position for material receiving processing;
- The network realizes remote services, remote machine updates and backups, and bus communication technology can more conveniently provide various alarm information in detail and better connect with the alarm interface of the MES system.

Tech parameter (HB622GP) :

Slotting spindle	Total power	45KW
	Power of main spindle	6kw x 4
	Rotation speed of main spindle	18000rpm
Maximum positioning speed	Speed of X/U axis	130m/min
	Speed of Y axis	100m/min
	Speed of Z axis	30m/min
	Speed of A axis	60m/min
	Speed of V axis	100m/min
	Speed of W axis	30m/min
Drilling combination device	Upper vertical drilling bit	12pcsx2
	Upper horizontal drilling bit	X direction: (2+2)x2 Y direction: (2+2)x2
	Lower vertical drilling bit	9pcsx2
Size range of processing	Min. Width of panel	30mm
	Max. Width of panel	Left work-station≤650mm Right work-station≤1210mm
	Min.Length of panel	120mm
	Max.Length of panel	3100mm
	Min.Thickness of panel	9mm
	Max.Thickness of panel	55mm
Other parameter	Vacuum suction port	Upper φ 200mmx2 Lower φ 150mmX2
	Equipment size	About 5950X4780X2500mm
	Net weight	About 6000kg

Main configuration:

Control system



Drilling package



Servo control system



Switch



AC contactor



rack and pinion

Lanhai/Leadrack

Configuration instructions:

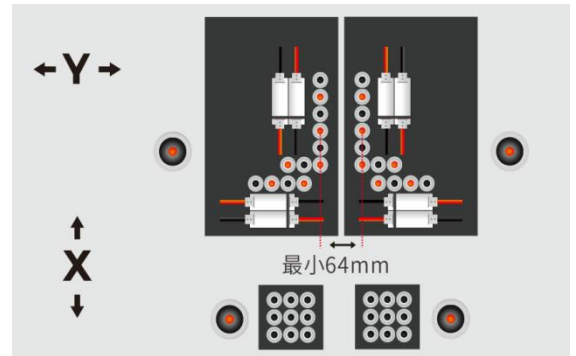
1. Dual work-station

The two work-stations can work at the same time without stopping the machine, doubling work efficiency.

Maximum processing width of plate : left station $\leq 650\text{mm}$, Right station $\leq 1210\text{mm}$.

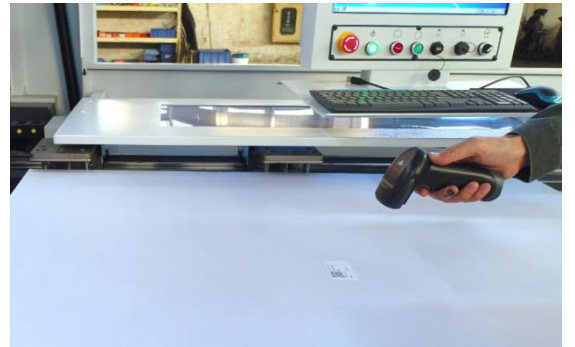


2. Drill package layout



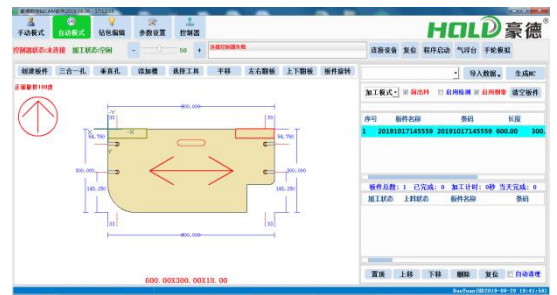
3. Scanning system

Supporting code scanning function, automatically loads processing graphics files and production NC programs. Seamlessly connect domestic and foreign splitting software data.



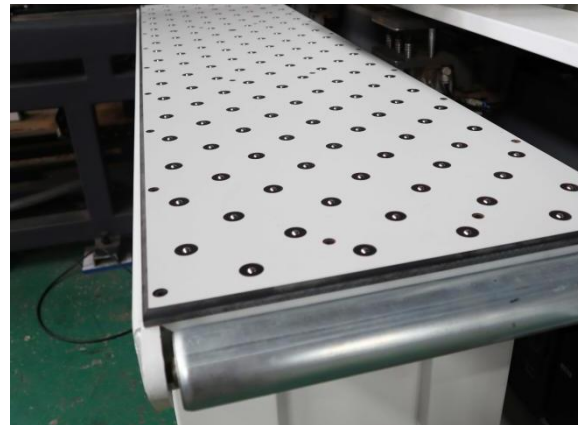
4. Operation interface

The Windows-based operating software is powerful, easy to operate.



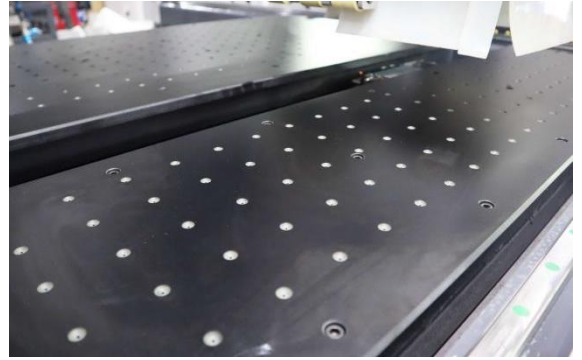
5. Air floating loading and unloading platform

Steel ball air-floating table makes loading materials easily and avoids scratches.



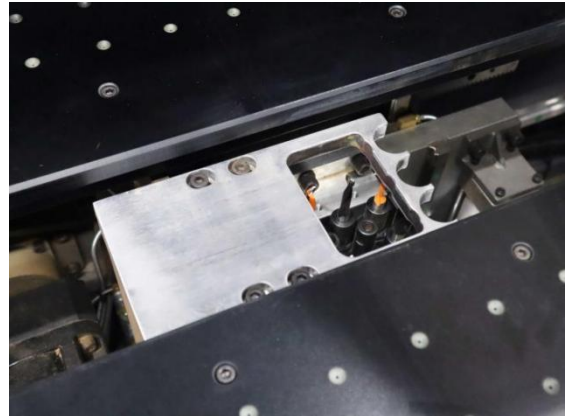
6. Main air-floating table

Reducing the friction between workpiece and table, making the surface of the panel less likely to be scratched.



7. Independent floating support platform

Floating support plate, the plate is evenly stressed to ensure processing accuracy.



8. Intelligent side-aligner support

Automatically measure the width of the workpiece and correct placement errors in a timely manner.



9. Double linkage gripper

Double grippers are controlled by servo, accurate positioning. When the gripper moves quickly, the lower gripper plate sinks to prevent the gripper from hitting the plate when moving. At the same time, the gripper has an air blowing function, which can blow off the dust on the gripper and avoid pinching the board.



10. Large pressure-stabilized gas storage tank

Make work pressure more stable.



11. Compressed air booster

Keep the pressure stable and make the drilling depth more accurate.



12. Large pressing device

Increasing the stability of the pressing and make the drilling effect more accurate.



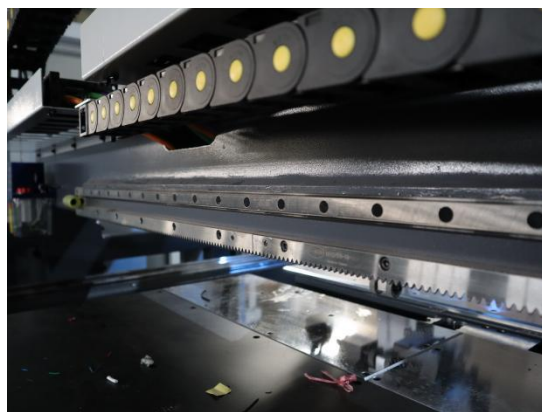
13. Precision guide rail

The guide rail mounting surface is integrally processed by a large gantry machining center with CNC drilling. It has high precision and strong load-bearing capacity, which can better ensure operational stability and lifespan during high-speed processing.



14. High-precision rack and pinion

The 2M rack has large specifications, large contact surface, strong load-bearing capacity and stable transmission.



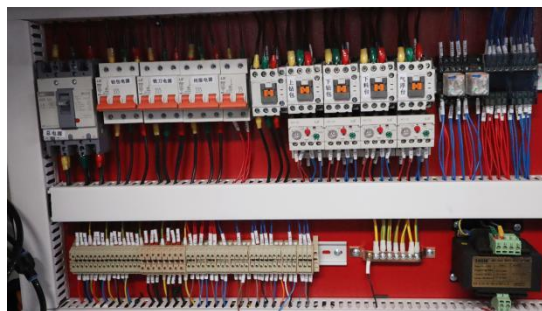
15. Automatic oil lubrication system

Adjustable automatic oil lubrication prolongs the service life of the equipment.



16. Circuit control system

Choose a well-known brand of low-voltage electrical appliances with strong anti-interference ability to ensure smoother and more stable operation of the equipment.



17. Servo control system

High-performance bus servo drive, absolute value motor, strong anti-interference, no need to return to the origin, and avoid accuracy errors caused by interference of the origin switch.

