

# HMC1500

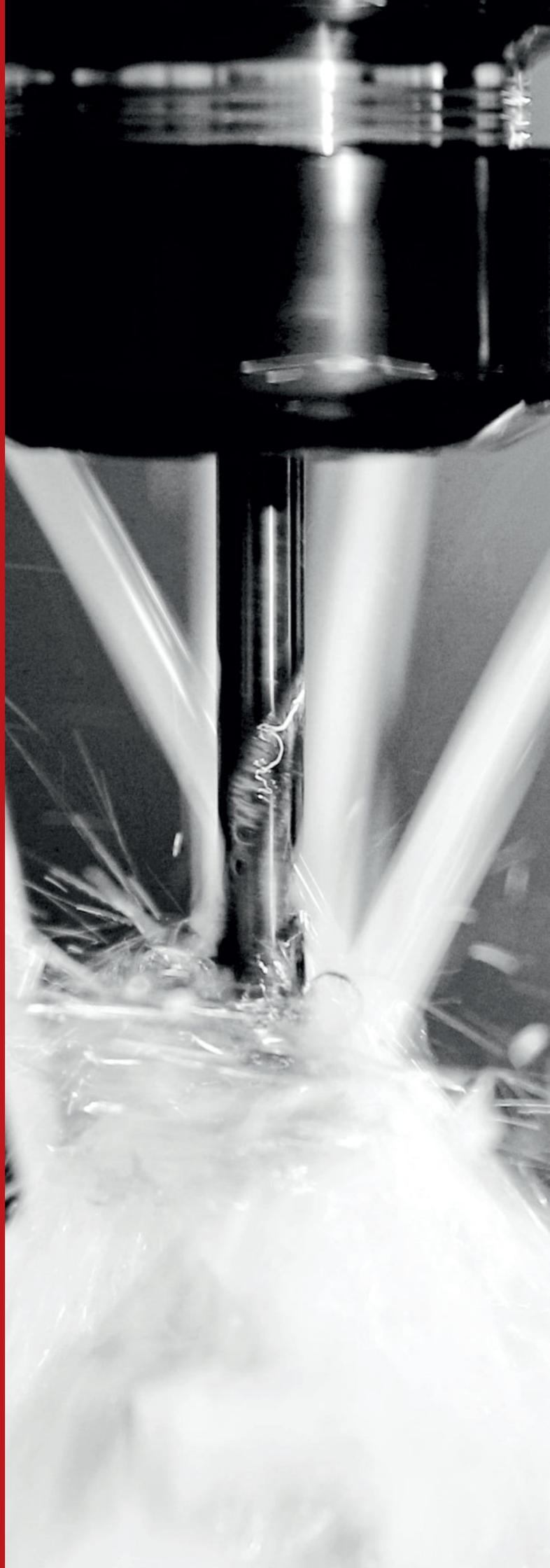
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## MACHINERY

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Расточной горизонтально  
фрезерный станок HMC1500



# HMC1500 Horizontal Machining Center



## Общее описание

### 1.1 Structure of machine tool

The inverted "T" structure is adopted. It is a regular reinforced horizontal machining center structure, and the vertical column is a moving column structure sliding left and right. The table slides forward and backward. This structure has the advantages of high precision, strong rigidity and long life.

**1.2** The base of the machine, column, spindle box, rotary table and other basic parts are all made of high-strength lost mold casting technology, and the internal metallographic organization is stable to ensure the high stability of the basic parts.

### 1.3 high rigidity, high precision spindle

(1) the spindle motor is driven by the high-torque toothed synchronous belt, which does not slip and can greatly reduce the transmission noise and heat generation.

(2) the spindle adopts the precision NSK bearing of Japan, with high speed and high precision, which can be heavily cut.

(3) the spindle box adopts 1:1 nitrogen balance balance, which is more reliable, stable, high-speed and noiseless. Make the spindle in high speed operation, avoid resonance phenomenon, to ensure the best machining accuracy.

**1.4** Adopt Taiwan LTM C3 high precision, high strength ball screw. Using imported high-precision lock nut, ball screw after pre-stretching, greatly increase the transmission rigidity and eliminate the impact of thermal deformation caused by the movement, thus ensuring the positioning accuracy and repeated positioning accuracy of the machine tool.

**1.5** X, Y, Z axis adopts the original Taiwan HIWIN /PMI roller heavy duty guide rail, the line rail slide seat is widened and enlarged processing, especially the Z axis slide seat. Heavy-duty roller rail can meet the requirements of high speed and high precision of customers, but also can be strong cutting, but also increase the service life of machine tool rails and other characteristics.

**1.6** The machine is equipped with sealed guide rail protection cover, effectively protect guide rail and lead screw, prolong its service life.

**1.7** When the machine is equipped with three-dimensional full protection, the machine is guaranteed not to vibrate when strong chip cutting. Exterior protection adopts side operating system position. Convenient for customers to operate and greatly protect the safety of the operator. The exterior protection is controlled by four doors. The front part is designed to open the door, which is convenient for customers to change the workpiece quickly. The front part of the hair protection and the operation position contain two anti-skid pedal design, which greatly improves the operation of the equipment.

**1.8** The front of the machining center is designed with double control buttons, including emergency stop button control to improve the safety of the operator, including the cycle start and stop button to facilitate the operator to operate quickly and efficiently to reduce the labor intensity of the operation, including the water gun switch button to facilitate the rapid cleaning of the workpiece to ensure the workpiece finish.

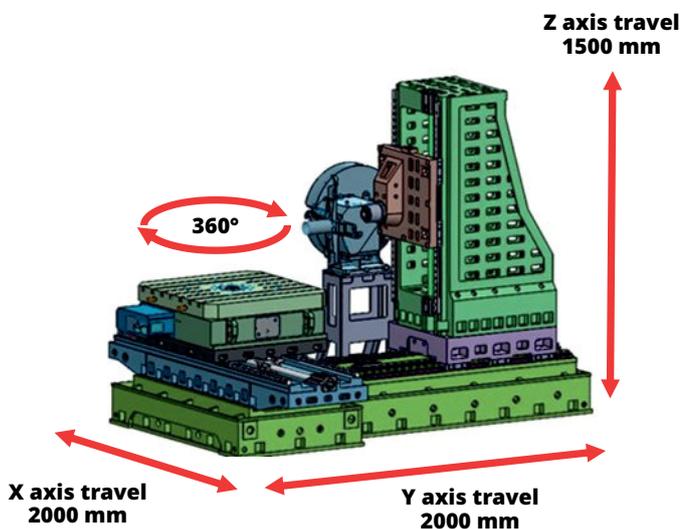
**1.9** Equipped with Taiwan SANJET chain knife library, this knife library is Taiwan original imported first-line brand knife library, knife library capacity is 24 pieces.

**1.10** The position of the knife storehouse is fully enclosed built-in knife storehouse. When the knife needs to be changed, the knife storehouse will be opened automatically and quickly for rapid tool change, and the knife storehouse will be closed quickly after the tool change. The design of the fully enclosed knife storehouse improves the service life of the knife storehouse and the tool

**1.11** Numerical control system USES Japan SIEMENS control system, The control system has the advantages of high stability, high speed, smooth surface and high precision. It has the function and machining ability of the manufacturing mold.

**1.12** Equipped with control oil circuit system: adopting the original active hydraulic oil supply system: we directly controlled by the operating system, automatic assignment of oil supply, according to the sports demand precise control oil supply parts with oil, greatly reduces the waste lubricating oil and avoid the pollution due to oil cooling fluid, greatly extended the use of coolant length and guarantee the balance of the oil and lubrication.

**1.13** High precision pitch compensation, each drive shaft adopts high precision laser laser detection and optimization compensation to make the positioning accuracy of each shaft more accurate, more suitable for processing high precision parts. At the same time, the advanced ball instrument is used to optimize the analysis and processing, to ensure the precision of the machine tool in the process of circle and surface.



## Характеристики

Name	Project	Parametr
Table	NC rotary table	HMC-1500
	Table size	1500*1250mm
	Max. table load	5000kg
	Max. speed of the table	2,5rpm
	T slot width	22
	Rotary table indexing	0,001°
Spindle	Spindle speed	50~6000 mm/min (Max. 1500RPM after speed change of gearbox)
	Distance spindle axis to table	0-1500mm
	Spindle nose to table surface	100-2100mm
	Spindle taper	BT50-190mm
Motor	Spindle motor	30KW Rated torque191NM, (764NM after gearbox change) High torque wide area motor
	Spindle reducer changes speed	1:4 automatic switch between two gears
	X and Y servo motors	30N.m The Y-axis contains a clutch brake
	Z servo motor	30N.m
	B servo motor	30N.m
Box way	X axis travel	2000mm
	Y axis travel	1500mm
	Z axis travel	2000mm
	X/Y axis rapid feed	16m/min
	Z axis rapid feed	16m/min
	Cutting feed speed	1-4000mm/min
	X roller heavy duty line rail	2*55mm Roller overloading type
	Y roller heavy duty line rail	2*65mmRoller overloading type 1*55mm Roll ball type
	Z roller heavy duty line rail	2*65mm Roller overloading type 2*55mm Roll ball type
Automatic tool changer	Tool changer type	Disc type
	Standard tool number	24pcs
	Maximum tool diameter	full tool $\Phi$ 120mm
Cooling system	Spindle workpiece cooling system	Spindle ring spray function Two water and one gas
Cooling system	Body cooler	Environment-friendly fully sealed water tank

Name	Project	Parametr
CNC system	SIEMENS 828D	10.4 inch display Program prefetch function Support four axis four linkage function Bell-shaped acceleration and deceleration before interpolation High speed and high precision function β series drive motor
Chip conveyor	Automatic chip removal unit	There are 4 screw chip removal machines in the body Transverse 1 chain chip extractor Crawler chain structure in water tank Large capacity chip car
Accuracy	Indexing angle	0,001°
	Indexing accuracy	±15"
	Accuracy of repeated indexing	±4"
	X/Y/Z positioning accuracy	300mm/±0.0075mm
	X/Y/Z accuracy of repeated positioning	300mm/±0.005 mm
Weight and Size	Net Weight	36000kg
	Overall Dimension (about)	6600*6900*4500mm

## Стандартная конфигурация

№	Name	№	Name
1	Work-piece cooling system (two water and one gas)	8	Rigid tapping
2	24V safety working lamp	9	Internet interface and USB function
3	X/Y/Z guide rail stainless steel shield	10	Anchor bolt and pad
4	Simple oil water separator	11	Electrical box cooling system
5	Holding a gun	12	Safety lock of distribution box
6	Automatic lubrication system	13	Double helix type chip cleaner
7	LED red, yellow and green warning lights		

## Комплектация

№	Project	Quantity	Project
1	SIEMENS 828D	1 set	SIEMENS
2	NC rotary table	1 set	DAHUA
3	Spindle servo motor and driver	1 set	SIEMENS
4	X, Y, Z ,B servo motor	Each 1 set	SIEMENS
5	X, Y, Z, B drives	Each 1 set	SIEMENS
6	X, Y, Z axis screw bearing With lock nut	Each 1 set	JAP NSK
7	X, Y, Z axis ball screw φ63mm*12mm	Each 1 set	TAIWAN LTM
8	X axis roller heavy rail 55mm Z and Y axis roller heavy duty guide rail 65mm	Each 1 set	TAIWAN HIWIN/PMI

№	Project	Quantity	Project
9	hydraulic pressure station	1 set	CHINA
10	Spindle unit	1 set	TAIWAN KENTURN
11	Main pneumatic components	1 set	Air TAC
12	Main electrical components	1 set	FRANCE SCHNEIDER
13	A knife cylinder	1 set	CHANGZHOU GUODING
14	Synchronous belt wheel and synchronous belt	1 set	With Taiwan spindle matching
15	Cutting fluid pump	1 set	JANYANG
16	Automatic lubricating oil pump	1 set	JAP. HEGU
17	Oil metering unit	1 set	JAP. HEGU
18	Electrical cabinet cooling system	1 set	SHANGHAI
19	Transformer	1 set	SHANGHAI
20	Electronic hand wheel	1 set	JUTAI
21	Internal screw-type chip cleaner	1 set	HAITE
22	External Screw-type chip cleaner	1 set	HAITE
23	Peripheral guardrail type footstep operation platform	1 set	HAITE
24	Disk manipulator tool library BT50-24	1 set	TAIWAN SANJET
25	Spindle reduction box	1 set	ITALIAN BF

## Комплектация

№	Name		Quantity	Note
1	Screw thread cutter		1 set	CHINA
2	Socket wrench	4, 5, 6, 8, 10, 19	1 set	TAIWAN KENTURN
3	BT40 handle		1 set	Air TAC
4	Handle press knife wrench		1 set	FRANCE SCHNEIDER
5	The handle clip	6, 8, 10, 12, 16, 20	1 set	CHANGZHOU GUODING
6	Adjust the pad iron		1 set	Adjustment of foundation
7	Adjust pad bolt		1 set	Adjustment of foundation

## Комплект поставки

1	Instruction manual (machinery)	4	Packing list
2	Catalogue of spare parts	5	Data of numerical control system
3	Instruction manual (electrical)	6	Certificate of conformity

## Условия доставки:

**Самовывоз** Удмуртская республика, Завьяловский р-н, поселок Первомайский, ул. Кольцевая 8.

**Срок поставки:** 120-150 дней

## Условия оплаты:

Предоплата	50%
По факту готовности станка на заводе-изготовителе	40%
По факту поступления оборудования на склад «ТС Профиль»	10%

В указанные цены не входят шеф-монтажные работы, для их проведения требуется заключение отдельного договора, стоимость таких работ определяется по договоренности.

## Реквизиты:

**Общество с ограниченной ответственностью ТехноСтудия «Профиль» (ООО ТС «Профиль»)**

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