



高速精密 钻铣攻牙中心

HIGH SPEED HIGH PRECISION
TAPPING CENTER

CT SERIES 系列



CT SERIES 系列



CT500
CT700
CT1000
CT1500

高速精密钻铣攻牙中心

HIGH SPEED HIGH PRECISION TAPPING CENTER

CT Series

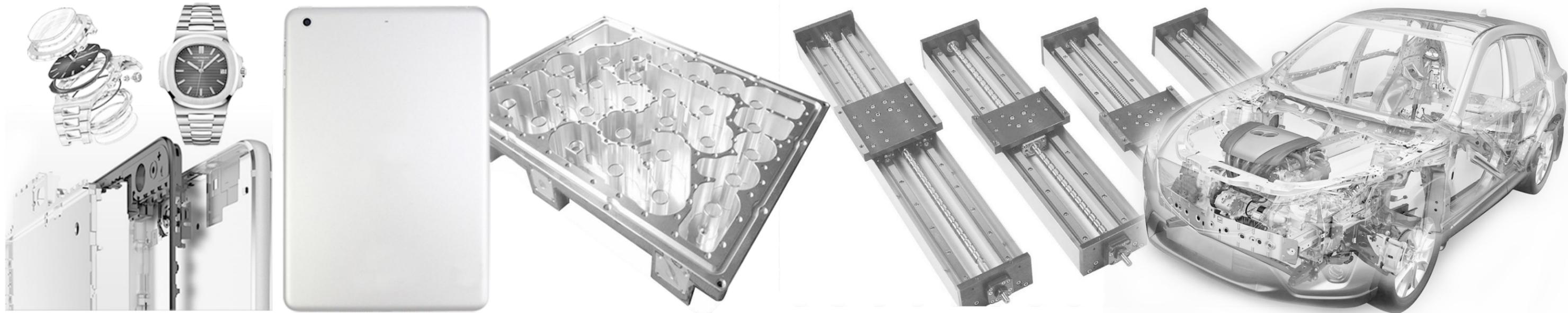
CT500/CT700/CT1000/CT1500

丰富的系列产品满足各种加工需求

A Wide Range of Products to Meet A Variety of Processing Needs

提供3-5轴+铣车复合的CT系列产品，适合大批量零部件的高生产效率加工

Providing CT series of 3-5 axis + mill lathe, suitable for high efficiency machining for mass production parts.



CT500



CT1500



CT1000



CT700

CT500



機械座標
X -328.459 M (0)
Y -202.640 S 0 RPM
Z -449.900 T (15)
FC 0.000 mm/min

• 世界级领先 C80 系统

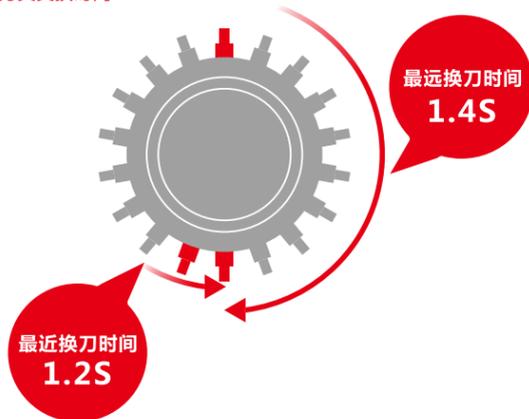
自主品牌，内部功能扩展开放
Own brands, the internal function expansion are opening up

新的旋转结构 The new rotating structure

无停顿分割方式的运用新型的旋转结构，刀具交换时间大幅缩短。
伺服马达的控制使得刀库动作更加流畅。

Using the separate ways without pause The new rotating structure, the ATC time is significantly shortened.
The control of servo motor makes the tool action smoother.

21把伺服刀具交换时间ATC times



缩短非切削时间

SHORTEN NON-CUTTING TIME

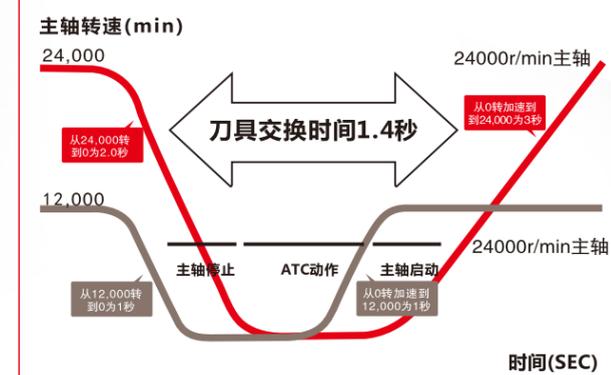
所有停顿时间的减少，非切割时间的大幅度降低。
All the pause time is reduced, the non-cutting time is drastically shorten.

高速主轴 • High-speed spindle

高加减速主轴马达的采用使主轴能在短时间内启动和停止。在Z轴不停的状态下完成刀具的交换。

The adoption of high acceleration and deceleration of the spindle motor can make the spindle start and stop in a short time. It can complete the change of the tool without the Z-axis stop.

从主轴最高转速开始ATC动作再到主轴最高转速为止的时间
The time from the beginning of ATC action of highest spindle speed to the pause time of the highest spindle speed

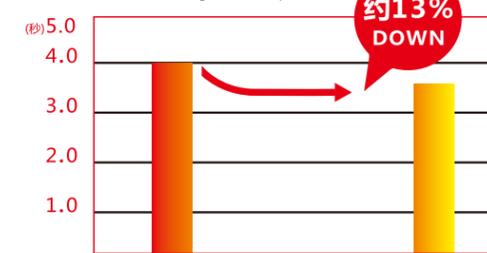


快速移动速度 Rapid speed

三轴快速移动速度为60×60×60m/min，伺服马达的高性能降低了刀具的振动，实现了速度的提升和振动的降低。
Three-axis rapid speed are 60×60×60m/min, the high-performance of servo motor reduces the tool vibration to achieve the speed enhancement and vibration reducing.

快速移动速度：60×60×60m/min

非切割时间的比较
The non-cutting time compare



1.4G加速度



切削能力

CUTTING ABILITY

机器刚性的提升

Enhance the rigidity of machine

改良构造形状的配置并优化，提高了机器的刚性。床身和立柱的外形和结构的优化都是经过CAE解析后的最合适形状。外部看不到的各种改良措施，体现出来主轴转速无法显现出的稳定的切削能力。

Improve the form of structure and optimize the allocation to enhance the machine's rigidity. The shape of machine tool and column and the allocation optimization are the most suitable shape through CAE analysis. The various improved measures which are invisible outside are reflecting a stable cutting ability which the spindle speed cannot show.

立柱 Column

人字形设计，大跨距，较大安装支撑面，显著提高稳定性，增强抗弯扭强度。

Herringbone design, large span, large mounting support surface, significantly improve stability and enhance bending and torsional strength.

工作台 Worktable

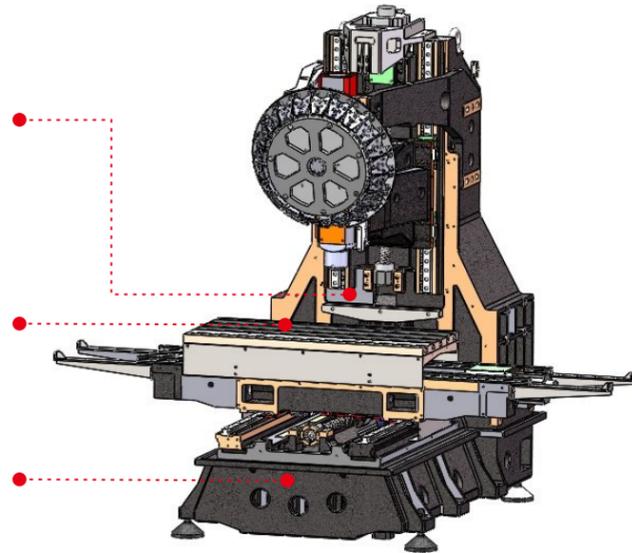
合理的滑块跨距，受力均匀。表面淬火，硬度提高。

Reasonable slider span and even force. Surface quenching and hardness increase.

床身 Machine body

梯形截面，增强抗扭强度。较大导轨跨距，较低重心，加工稳定高精。

Trapezoidal section for enhanced torsional strength. Large guide rail span, low center of gravity, stable and high-precision machining.



高速/高扭矩主轴

High speed / High torque spindle

高扭矩主轴

High torque spindle | 标配 Standard: CT700/CT1000/CT1500

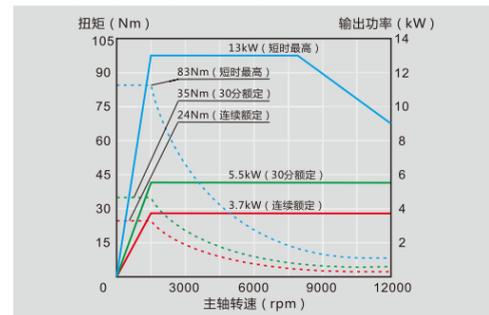
最高转速12000rpm，最高扭矩83Nm，实现对应铝、铁、钢等的高效加工。

Max. rotating speed is 12000rpm, Max. torque is 83Nm, achieve high-efficiency processing of aluminum, iron, steel, etc.

主轴转速 Spindle speed	12000rpm
主轴功率 Spindle power	13kW (短时最高) 5.5kW (30分额定) 3.7kW (连续额定)
主轴扭矩 Spindle torque	83Nm (短时最高) 35Nm (30分额定) 24Nm (连续额定)



12000rpm主轴功率/扭矩图
12000rpm spindle power/torque



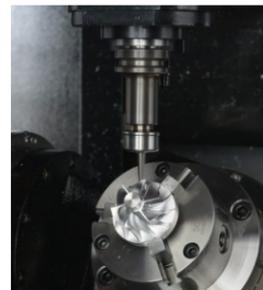
高速主轴

High speed spindle | 标配 Standard: CT500

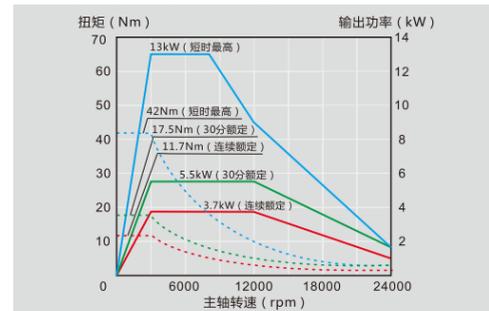
最高转速达到24000rpm，实现对应铝、铁等的高效加工。

Max. rotating speed is up to 24000rpm, achieve high-efficiency processing of aluminum, iron, etc.

主轴转速 Spindle speed	24000rpm
主轴功率 Spindle power	13kW (短时最高) 5.5kW (30分额定) 3.7kW (连续额定)
主轴扭矩 Spindle torque	42Nm (短时最高) 17.5Nm (30分额定) 11.7Nm (连续额定)



24000rpm主轴功率/扭矩图
24000rpm spindle power/torque



* 短时最高 Short time Max.: S3, 15%, 30sec
* 30分额定 30min rated: S3, 60%, 30min

五轴联动铣车复合

5 AXIS LINKAGE AND MILL LATHE

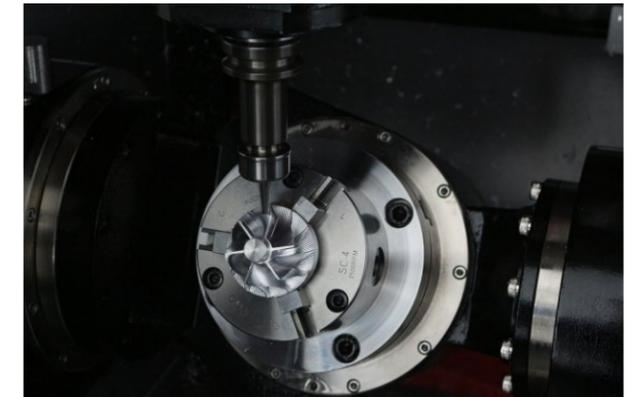


2000rpm高效转台， 实现高效高精车加工

2000rpm high-speed rotate table, achieve efficient and precise lathe machining

本产品为一款力矩电机直接驱动的精密高速五轴，盘面大小为Φ160mm，应用于数控机床中，起到五轴车铣复合轴作用，具有高速、高精、稳定可靠、操作方便等优点。

The torque motor directly driven precision high-speed five-axis, the plate size is Φ160mm, used in CNC machine with lathe mill five-axis function, with high-speed, precision, reliable, easy to operate and other advantages.



规格参数 Specifications

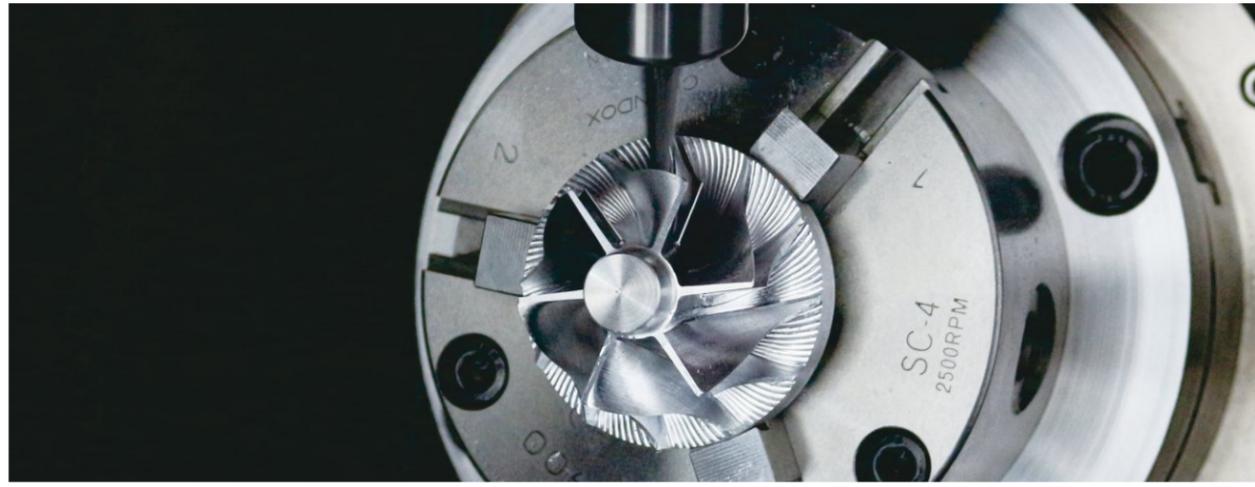
CT500-5C16

工作台尺寸 Worktable size	Φ160mm
承载重量 Max. table load	40/20kg (在水平/在倾斜)
A轴摆幅 A-axis tilting angle	±110°
C轴旋转 C-axis tilting angle	360°
最大扭矩 A/C-axis Max. torque	184/25Nm
最大转速 A/C-axis Max. rotating speed	250/2000rpm
A/C定位精度/重复定位精度 A/C positioning precision/ repeat positioning precision	A ±20/±4sec C ±10/±2sec



高速高精加工

HIGH PRECISION PROCESSING



实现高速高精加工的系统功能 High speed/High-precision NC function

高精度平滑性 (SPA)

Smooth precision advanced. Pr3808

此功能分为0~9级，第9级的精度最高，而第1~8级在补偿伺服落后误差的同时，还给予加工路径适当的平滑性。

This function has 0~9 levels, the 9th level is the highest precision, while the 1st~8th level compensates the servo backward error, and gives the processing path proper smoothness.

使用方法：参数3808
Instruction: Parameter 3808

开启SAP
Open SAP



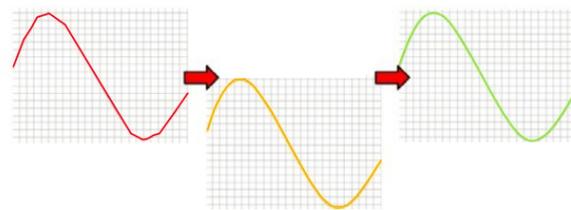
关闭SAP
Close SAP

高精度轨迹轮廓控制 (HPCC)

High precision contour control. HPCC: G05 P10000

CAD/CAM软件生成的线性刀轨，其非连续的刀路轨迹，影响加工精度和速度，HPCC以合适曲线将线性刀轨拟合为连续轨迹，提高了加工质量。

The linear tool path generated by CAD/CAM software, its non-continuous tool path, affects the machining accuracy and speed. HPCC fits the linear tool path into a continuous track with a suitable curve, which improves the processing quality.



高速高精立体加工。

High speed high-precision 3D processing

高速主轴规格中，三维圆弧补间加工控制，可以预读2000条程序段，平滑路径修正实现高速高精立体加工。

The high-speed spindle, the 3D arc machining control can pre-read 2000 blocks and smooth path correction for high-speed and high-precision machining.

高速主轴
High speed spindle

最高转速
Max. rotating speed
24000rpm

高速高精模式
High speed spindle

预读程序段
Read-ahead block
2000条 blocks



加工能力

PROCESSING RANGE

加工实例

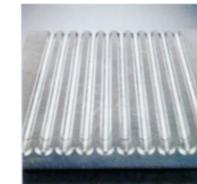
Processing products



立铣加工 (槽)
切削量: 150cm³/min
被削材: S45C



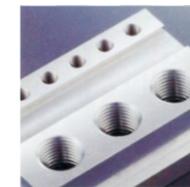
镗孔加工
圆度5um (直径34mm)
被削材: A2017



深孔加工
D2×100mm被削材: A2017
D6×180mm被削材: A2017
D6×120mm被削材: S45C



铣面加工
粗加工
切削量: 700cm³/min
精加工
加工面粗糙度: 0.17mRa
切削材: A2017
(使用D64铣面副切)



高速钻孔
(M3×P0.5, S4000)
被削材: A2017



大孔径加工
孔径: 18.5mm
进给: 0.1mm/rev
被削材: S45C

加工产品举例

The example of processing products

汽车产业 Automobile industry



新能源车壳体
New energy battery housing



发动机壳体
Engine housing



变速箱壳体
Gearbox housing



离合器壳体
Clutch housing



气缸体
Cylinder block



EPS壳体
EPS housing



凸轮相位器
Cam phaser



缸盖
Cylinder head



连接杆
Connecting rod



减震器
Shock absorber



传动轴承
Transmission bearing



后气缸
Rear cylinder

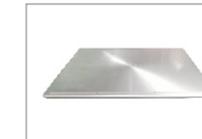
3C产业 3C industry



手机
Mobile phone



穿戴手表
Watch



笔记本电脑
Laptop



通讯腔体
Communication cavity

军工产业 Military industry



叶轮
Impeller



航空座架
Aviation frame

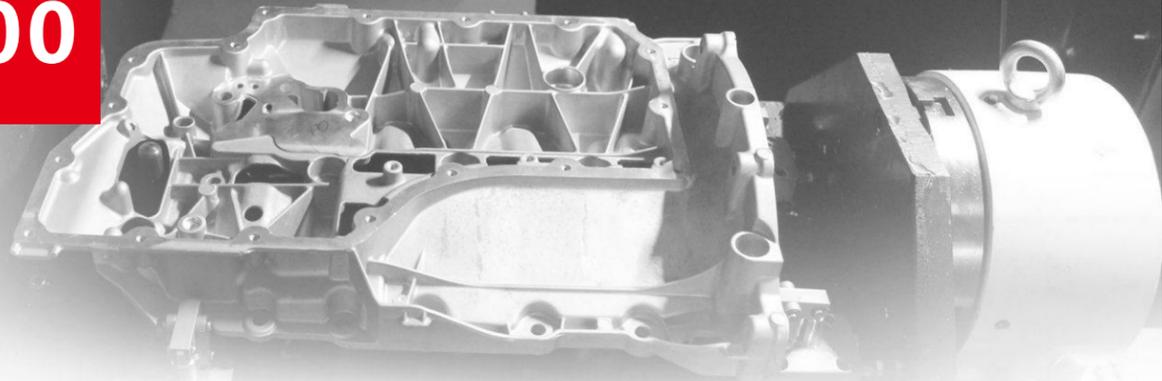


闭门器壳
Door closer



后轮固定座
Rear wheel mount

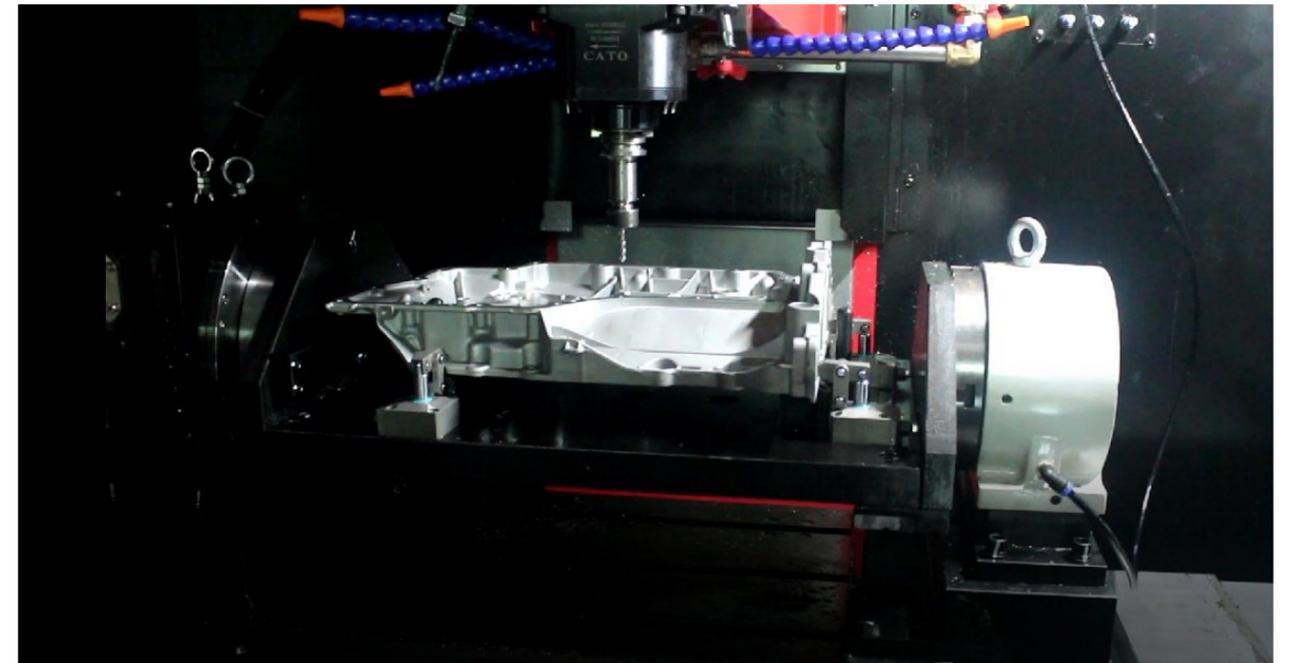
CT700



- 高扭矩主轴
High torque spindle 12000rpm(选配: 24000rpm高速主轴)
(Optional: 24000rpm High speed spindle)
- 快移速度 (X/Y/Z)
Rapid speed of X/Y/Z axis 60/60/60m/min
- 刀库装刀数量
Number of tool in ATC 21把tools
- 刀具换刀时间 (刀具对刀具)
Tool changetime (tool to tool) 1.2-1.4秒sec.



四轴选配 4 AXIS OPTIONAL

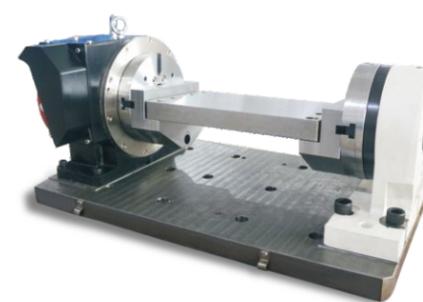


DDR/DDRT四轴 (选配) DDR / DDRT 4 axis (Optional)

● DDR四轴 DDR 4 axis



● DDRT四轴 DDRT 4 axis



高速/高精度转台 High speed/High precision turntable

电机直接驱动负载, 无减速机, 无背隙, 低噪音, 结构紧凑。高倍过载能力(4x), 高速(相较于传统齿轮传动形式), 伺服响应快。标配绝对式编码器(20bit以上), 可进行高精度分割。电机中心孔贯穿, 便于接线, 配管。
Direct connection to the load, gearless, backlashless, low noise, high over-load capacity(4x), high speed, high servo-response. Standard absolute encoder(20bit at least), high precision, hollow-shaft structure, easy wiring and piping.

其它选配: 滚子凸轮四轴
Other optional: Roller cam 4 axis



规格参数 Specifications

项目 Item	DDR-170	DDR-250	DDRT-170	DDRT-250
驱动方式 Drive mode	电机直接驱动 Direct motor drive			
转盘直径 Turntable diameter	170mm	250mm	170mm	250mm
最大切削扭力 Max. cutting torque	184Nm	480Nm	184Nm	480Nm
最大转速 Max. rotating speed	250rpm	150rpm	250rpm	150rpm
定位精度 Position precision	±10秒 arc-sec			
重复精度 Repeat precision	±4秒 arc-sec			
刹车方式 Brake type	气压活塞式 Pneumatic			
容许负载重量 Max. load weight	30kg	60kg	40kg	75kg
总重量 Total weight	48kg	100kg	154kg	250kg

CT1000

- 高扭矩主轴
High torque spindle
12000rpm(选配: 24000rpm高速主轴)
(Optional: 24000rpm High speed spindle)
- 快移速度 (X/Y/Z)
Rapid speed of X/Y/Z axis
48/48/48m/min
- 刀库装刀数量
Number of tool in ATC
21把tools
- 刀具换刀时间 (刀具对刀具)
Tool changetime (tool to tool)
1.2-1.4秒sec.



加工范围 PROCESSING RANGE

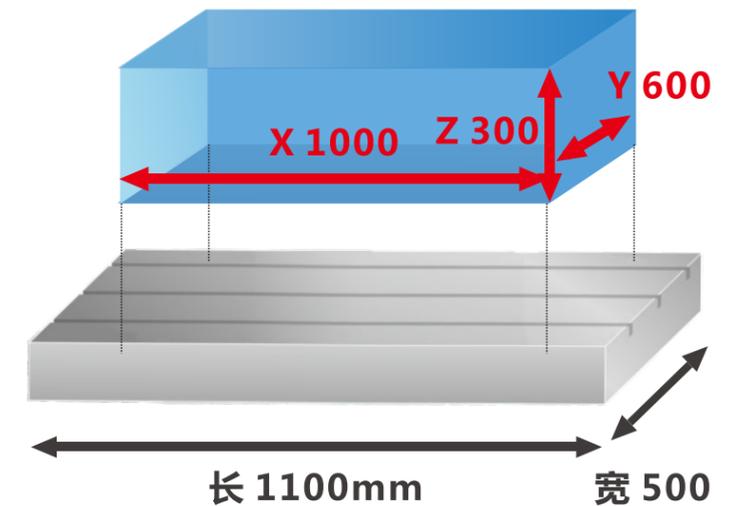
工作台和行程范围 Work table and travel range

CT1000扩大了X,Y,Z轴行程和工作台大小, 使得BT30设备也能实现大工件的加工。
Ct1000 is expanded X,Y,Z axis travel and table size, enabled BT30 equipment to process large workpieces.

X,Y,Z轴行程 Axis travel
1000×600×300mm

工作台大小 Table size
1100×500mm

最大负载重量 Max. table load
500KG



可搭载大型夹具 Equipped with large fixtures

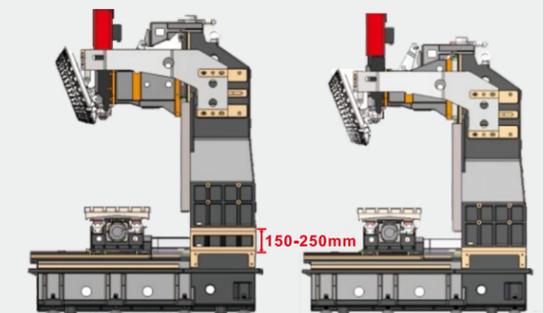
工作台的扩大, 使得可搭载大型夹具, 另外可选配立柱加高150-250mm。
The expansion of the work table makes it possible to carry large fixtures, and optional with column heightening 150-250mm is possible.

可搭载大型夹具 Equipped with large fixtures



选配Optional

CT1000可选配立柱加高150-250mm。
CT1000 optional column heightening 150-250mm.



CT1500

- 高扭矩主轴
High torque spindle **12000rpm**(选配: 24000rpm高速主轴)
(Optional: 24000rpm High speed spindle)
- 快移速度 (X/Y/Z)
Rapid speed of X/Y/Z axis **48/48/48m/min**
- 刀库装刀数量
Number of tool in ATC **21把tools**
- 刀具换刀时间 (刀具对刀具)
Tool changetime (tool to tool) **1.2-1.4秒sec.**



加工能力 PROCESSING RANGE

机器刚性的提升 Enhance the rigidity of machine

改良构造形状的配置的优化, 提高了机器的刚性。床身和立柱的形状和配置的优化都是经过CAE解析后的最合适形状。外部看不到的各种各样的改良措施, 体现出了主轴转速无法显现出的稳定的切削能力。

Improve the form of structure and optimize the allocation to enhance the machine's rigidity. The shape of machine tool and column and the allocation optimization are the most suitable shape through CAE analysis. The various improved measures which are invisible outside are reflecting a stable cutting ability which the spindle speed cannot show.

立柱 Column

人字形设计, 大跨距, 较大安装支撑面, 显著提高稳定性, 增强抗弯扭强度。

Herringbone design, large span, large mounting support surface, significantly improve stability and enhance bending and torsional strength.

工作台 Worktable

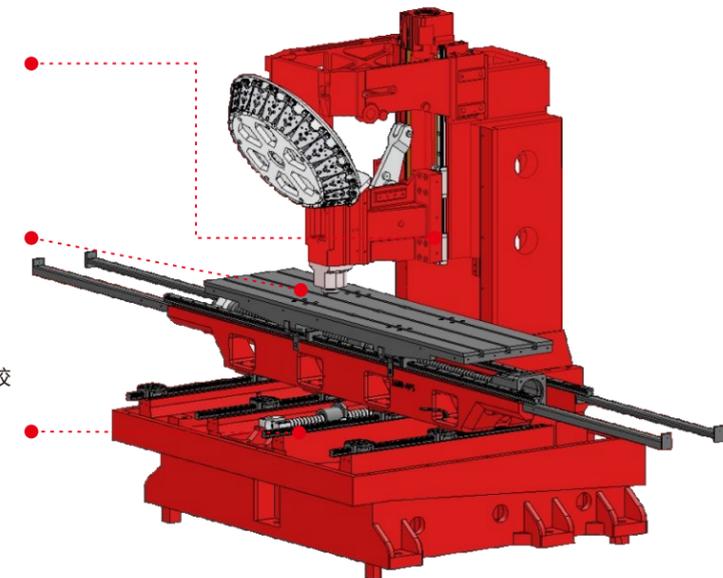
合理的滑块跨距, 受力均匀。表面淬火, 硬度提高。

Reasonable slider span and even force. Surface quenching and hardness increase.

床身 Machine body

Y轴四条导轨设计, 梯形截面, 增强抗扭强度。较大导轨跨距, 较低重心, 加工稳定高精。

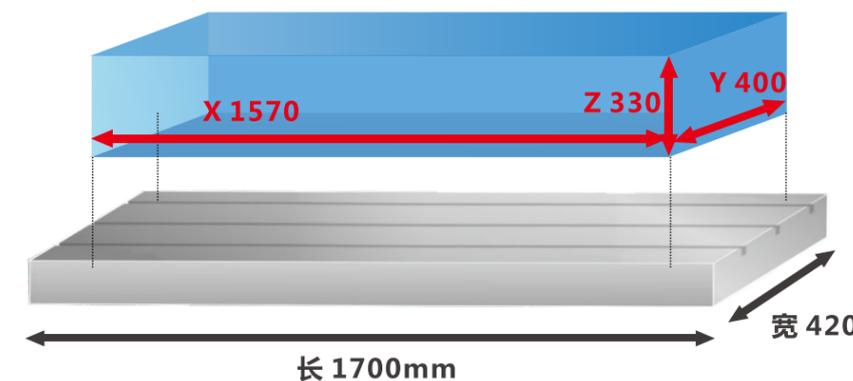
Y-axis four guide rail design, Trapezoidal section for enhanced torsional strength. Large guide rail span, low center of gravity, stable and high-precision machining.



工作台和行程范围 Work table and travel range

CT1500扩大了X,Y,Z轴行程和工作台大小, 使得BT30设备也能实现大工件的加工。工作台的扩大, 使得可搭载大型夹具。

CT1500 is expanded X,Y,Z axis travel and table size, enabled BT30 equipment to process large workpieces. The expansion of the work table makes it possible to carry large fixtures.



X,Y,Z轴行程 Axis travel
1570×400×330mm

工作台面大小 Table size
1700×420mm

最大负载重量 Max. table load
300KG

控制系统

CUTTING ABILITY

C80系统

C80 system

Windows系统

Windows system

全球一流工业控制系统，率先使用Windows系统；高速高精，并多达16轴控制；标配256MB硬盘档案储存。

The global first-class industrial control system, takes the lead to use the Windows system; The high speed, high precision, and supported 16 axis control; The sign matches 256MB of the hard disk machine file storage.



多种数据传输方式

Multiple data transmission way

PC卡，移动硬盘，U盘数据备份，实现一次编程，批量重发；以太网程序输入。

The PC card, the removable hard disk, the data backup of U disk, achieved one time programming, and the batch reproduction; Enter the program in the internet.



自主品牌, 内部功能扩展开放

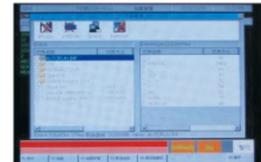
Own brands, the internal function expansion are opening up

程序控制

Program control

双项节距，前馈补偿，光学尺双回路控制，500block/秒的程序执行速度，实现高速度，高精度。

The double pitch, the forward feed compensation, optics ruler double return route control, the 500block/second program execution speed, achieve high speed, high precision.



系统检查画面

System checked picture

I,O,C,S检查画面，Ladder即时显示，自动寻找元件，PLC可发中英文警报讯息；可快速检查机床各类故障，第一时间排除，操作简单，用户能随时了解机床状况。

The I,O,C,S inspection picture, Ladder displayed immediately, Auto. searched components, PLC could send the Chinese and English warning news; It could inspect and each kind of machine breakdown rapidly, the first time elimination, the operation is simple, the user could know the condition of machine in anytime.



系统规格参数 System specifications		
系统型号 System model	C80	
同时控制轴数 Control number of axes at the same time	定位 Positioning	5轴 axis (X, Y, Z, A, B)
	补偿功能 Compensation function	直线: 4轴 (X, Y, Z, 附加轴1轴) Straight line: 4 axis (A, Y, Z, additional 1 axis) 圆弧: 2轴 螺旋/锥形插补: 3轴 (X, Y, Z) Arc: 2 axis spiral / cone interpolation: 3 axis (X, Y, Z)
最小设置单元 Min. setting unit	0.001mm, 0.0001 inch, 0.001"	
最大指令值 Max. instruction value	±9999.999mm, ±999.9999inch	
显示 Display	12.1英寸彩色液晶显示屏 12.1-inch color LCD display	
外部通信功能 External communication function	USB 以太网 Ethernet	
程序容量 Program capacity	512MB (程序和数据库的总和) (The sum of the program and the database)	
可注册程序 Registerable procedure	2000条 procedures (程序和数据库的总和) (The sum of the program and the database)	
程序格式 Program format	NC语言, 对话方式 (参数切换) NC language, dialogue mode (parameter switching)	
	对话程序 (NC程序可切换) Dialogue procedure (NC program can be switched)	

系统功能 System functions		
绝对/增量 Absolute/increment	工具长度测定 Tool length measurement	扩张工件坐标系 Expanding the workpiece coordinate system
英制/公制 Imperial / metric	工具寿命管理/备用刀具 Tool life management / spare tool	定标 Target
角度C/角度R Angle C / Angle R	背景编辑 Background compilation	镜像 Mirror
坐标回转 Coordinate rotation	程序轨迹描圈 Program trace	菜单编程 Menu programming
同步攻丝 Synchronous tapping	子程序 Subroutine	程序补偿输入 Program compensation input
坐标系设置 Coordinate system setting	螺旋/圆锥插补 Spiral/cone interpolation	工具半径补偿 Tool radius compensation
空运转 Dry running	自动断电 Automatic power off	宏程序功能 Macro program function
循环启动 Loop start	切削液自动关闭 Cutting fluid automatically closes	局部坐标系功能 Local coordinate system function
背隙补偿 Backlash compensation	机内灯自动断电 The internal light is automatically turned off	单向定位 One-way positioning
螺距误差补偿 Pitch error compensation	攻丝退功能 Tapping back function	纸带运行功能 Tape running function
快速进给倍率 Rapid feedrate	自动工具测量 Automatic tool measurement	动作程序 Action program
切削进给倍率 Cutting feedrate	波形表示 Waveform display	调度程序 Scheduler
报警记录 Alarm record	操作等级 Operating level	刀具自动选择 Automatic tool selection
状态记录 Status record	外部输入按钮 External input button	切削条件自动设定 Cutting conditions are automatically set
机床锁定 Machine lock	记忆容量扩大 (约500Mbyte) Memory capacity expansion	工具长度自动补偿 Tool length automatic compensation
内置PLC Built-in PLC	高精轨迹控制模式 (预读2000个程序段, 平滑路径修正) (Pre-read 2000 blocks, smooth path correction)	工具直径自动补偿 Tool diameter automatic compensation
按键记录 Key record		加工顺序控制 Processing sequence control
插入指令宏 Insert instruction macro		亚微米指令(0.0001mm, 0.00001 inch) Submicron instruction

特殊规格

SPECIAL SPECIFICATION

特殊规格

Special specification



侧边自动门
Side automatic door
(可选正面气动自动门)
Optional frontal pneumatic automatic door



对刀仪
Tool setting gauge
(刀具破损检测系统)
Tool breakage detection system



主轴中心出水
Spindle central water discharge
(中心出水压力15Bar)
Central water discharge pressure 15Bar



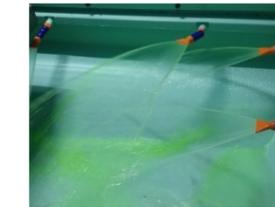
探头系统
Probe system
(可选雷尼绍或海克斯康)
Optional RENISHAW or HEXAGON



两侧螺旋排屑器
Screw type chip conveyor on both sides



横向链板排屑器
Chain plate type chip conveyor



内部四周冲屑装置
Flushing chip system
(内部四周增加冲水喷头, 减少积屑)
Increase the flushing nozzle around the inside, reduce chip accumulation.



水箱液位报警装置
Water tank liquid level alarm system
(切削液不足感应报警)
Cutting fluid insufficient induction alarm



油雾收集器
Oil mist gathering system



外置冲洗水枪
External flushing water gun



残屑清理毛刷
Scrap cleaning brush

C80系统功能特殊规格

C80 system function special specifications

- 工艺参数、工况等数据分配地址块
Data allocation address block for process parameters and working conditions.
- CNC系统局域网组建 (NC文件网络传输)
CNC system LAN grouping (NC file network transmission)
- 扩展i/o模块、传感器
Expand i/o modules, sensors
- 人机软件接口
Man-machine software interface

发那科系统选配

FANUC system optional



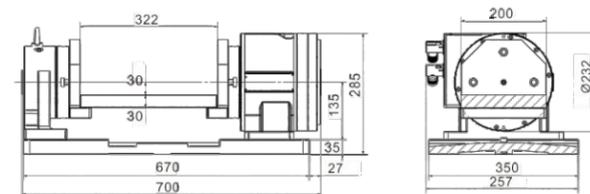
转台尺寸图

TURNTABLE SIZE

DDRT-170

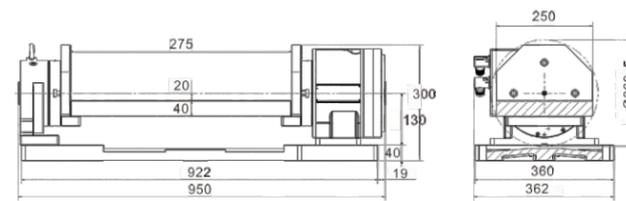
■ 配 Optional : CT500

X/Y/Z轴加工范围
X/Y/Z axis processing range 322/230/10-340mm



■ 配 Optional : CT700

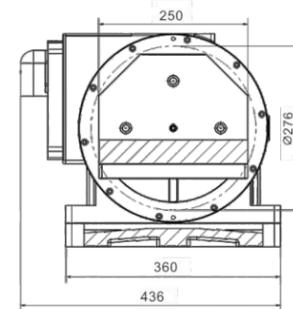
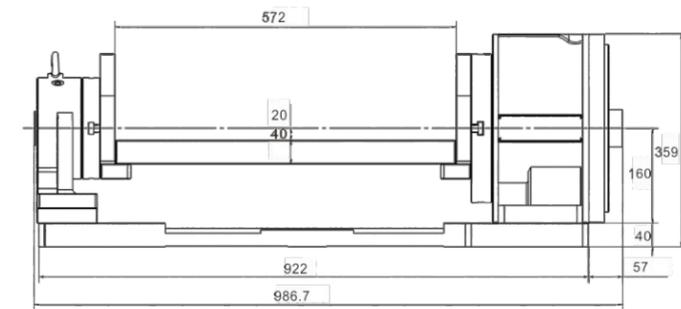
X/Y/Z轴加工范围
X/Y/Z axis processing range 275/220/0-325mm



DDRT-250

■ 配 Optional : CT700

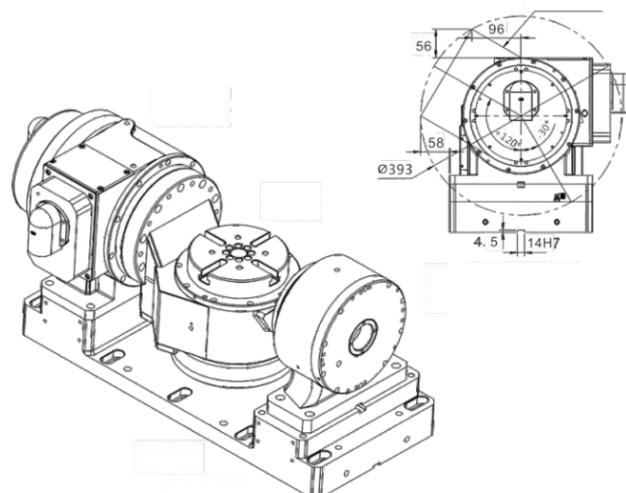
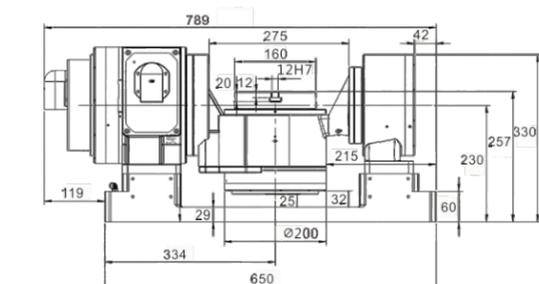
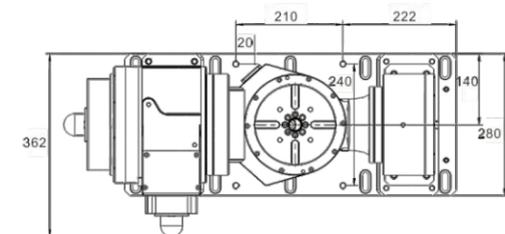
X/Y/Z轴加工范围
X/Y/Z axis processing range 572/220/0-300mm



5C16五轴转台 5 axis turntable

■ 配 Optional : CT500

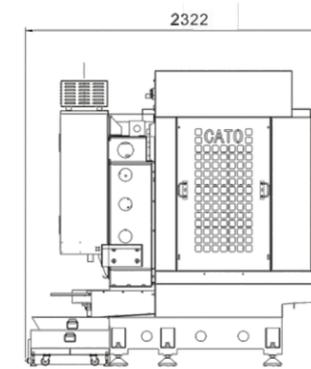
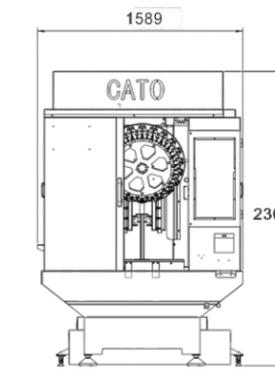
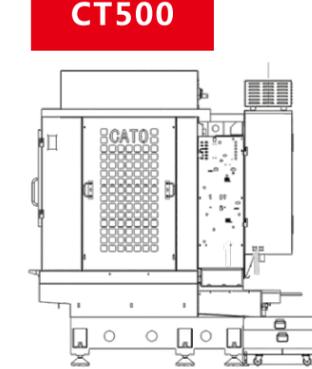
X/Y/Z轴加工范围
X/Y/Z axis processing range 275/173/223mm



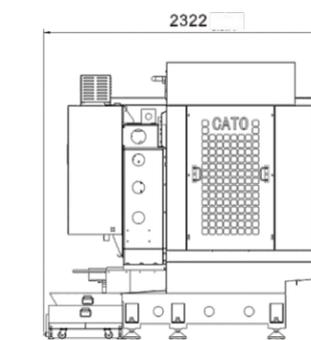
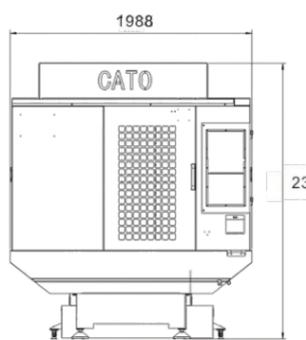
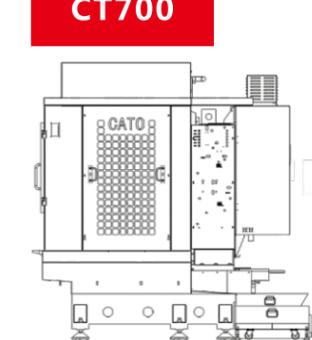
机床尺寸图

MACHINE SIZE

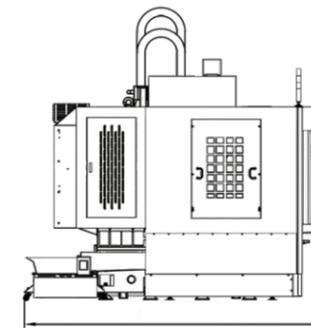
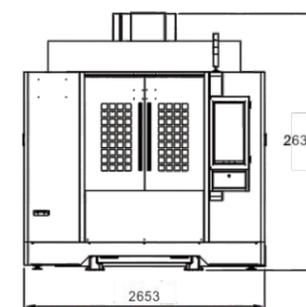
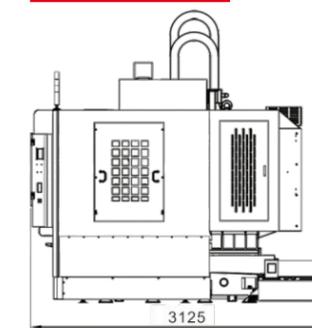
CT500



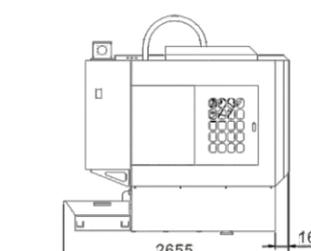
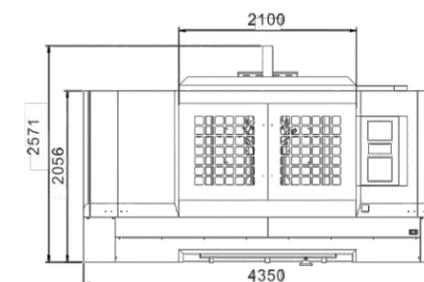
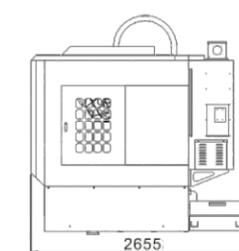
CT700



CT1000



CT1500



规格参数

SPECIFICATIONS

项目Project	CT500	CT700	CT1000	CT1500	
行程 Travel	X轴行程 X axis travel	500mm	700mm	1000mm	1570mm
	Y轴行程 Y axis travel	400mm	400mm	600mm	400mm
	Z轴行程 Z axis travel	330mm	330mm	300mm	330mm
	主轴端面至工作台中心距离 Spindle nose to table center	150-480mm	150-480mm	200-500mm	150-480mm
工作台 Table	工作台尺寸 Table size	650×400mm	850×400mm	1100×500mm	1700×420mm
	工作台最大负荷 Max. table load	300kg	350kg	500kg	300kg
主轴 Spindle	主轴锥孔 Spindle taper	BT30			
	最高主轴转速 Max. spindle speed	24000rpm	12000rpm	12000rpm	12000rpm
	主轴马达功率(持续/S3 60%)	8.2/12 kW			
	主轴电机扭矩(持续/S3 60%)	26/38 N.m			
进给速度 Feed rate	快移速度 (X/Y/Z) Rapid speed of X/Y/Z axis	60/60/60mm	60/60/60mm	48/48/48mm	48/48/48mm
	切削进给 Cutting feed	50-30000mm/min			
刀库ATC	装刀数量 Number of tool	21T			
	刀具最大刀径/长度	80/250mm			
	最大刀具重量	3kg			
	刀具总重量 Maximum tool weight	≤33kg			
	刀具换刀时间Tool changetime (tool to tool)	1.2-1.4sec.			
精度Precision	定位精度 Positioning precision	±0.005/300mm			
	重复精度 Repeating positioning precision	±0.003mm			
所需动力源 Power	电源容量 Power requirement	16.25 KVA	12.5 KVA		
	空压需求 Air pressure	≥6 kg/cm ²			
	空源流量 Air flowrate	≥0.5mm ³ /min			
机床尺寸 Machine size	机械净重 Machine weight	2.7t	2.9 t	4.8t	5.5t
	机械外形尺寸 (长×宽×高) (L x W x H)	1589×2322×2304mm	1988×2322×2304mm	2653×2635×3059mm	4350×2655×2571mm

配置表

CONFIGURATION TABLE

型号 Model	CT500	CT700	CT1000	CT1500
CATO C80系统 CATO C80 system	●	●	●	●
12000rpm, BT30, 直结式 Direct driven type	▲	●	●	●
24000rpm, BT30, 直结式 Direct driven type	●	▲	▲	▲
21把伺服式刀库 21 tools servo type ATC	●	●	●	●
LED工作灯 LED Working lamp	●	●	●	●
便携式动脉发生器 Portable manual Pulse Generator	●	●	●	●
LED三色警示灯 LED 3-Color Operation instruct light	●	●	●	●
自动注油器 Automatic lubrication system	●	●	●	●
全封闭式防护罩 Full cover	●	●	●	●
刚性攻牙 Rigid tapping	●	●	●	●
喷嘴切削液供给装置 Spray nozzle cutting compound supplying device	●	●	●	●
吹风装置 Cutting chip blowing device	●	●	●	●
工具及工具箱 Tools and tool box	●	●	●	●
技术手册 Operation manual	●	●	●	●
自动门 Automatic door	▲	▲	▲	▲
对刀仪 (刀具破损检测系统) Tool setting gauge (Tool breakage detection system)	▲	▲	▲	▲
主轴中心出水 Spindle central water discharge	▲	▲	▲	▲
探头系统 Probe system	▲	▲	▲	▲
两侧螺旋排屑器 Screw type chip conveyer on both sides	▲	▲	▲	▲
横向链板排屑器 Chain plate type chip conveyer	▲	▲	▲	▲
内部四周冲屑装置 Flushing chip system	▲	▲	▲	▲
水箱液位报警装置 Water tank Liquid level alarm system	▲	▲	▲	▲
外置冲洗水枪 External flushing water gun	▲	▲	▲	▲
残屑清理毛刷 Scrap cleaning brush	▲	▲	▲	▲
油雾收集器 Oil mist gathering system	▲	▲	▲	▲
电源稳压器 Automatic voltage regulator	▲	▲	▲	▲
空气过滤装置 Air filtering device	▲	▲	▲	▲

● : 为标配 ▲ : 为选配 — : 为不配
 ● : for the sign ▲ : for the match — : for does not match