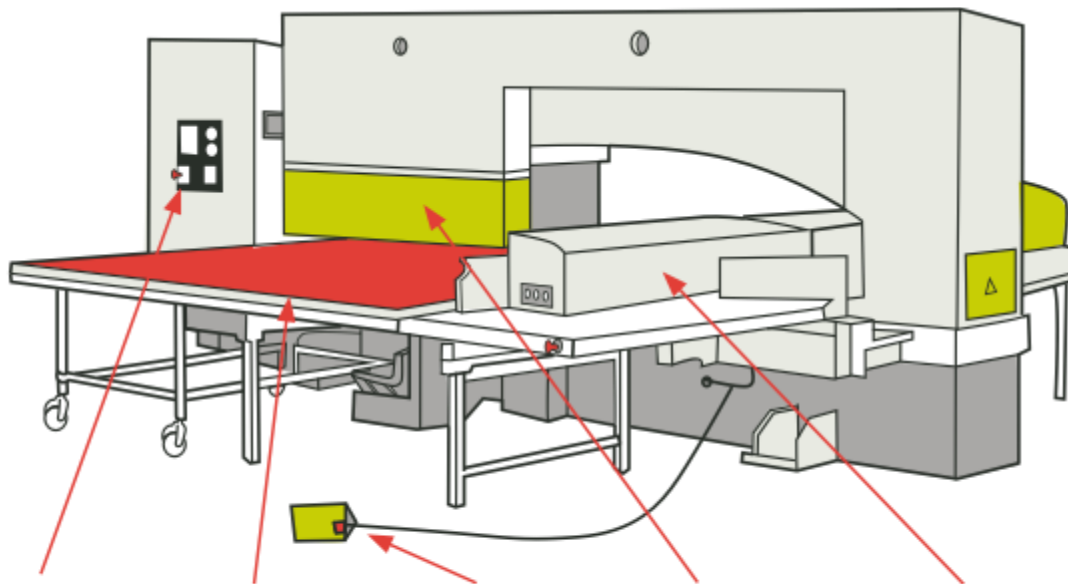




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ELECTRIC SERVO CNC TURRET PUNCH MACHINE EP20 – 1500 × 4000



Control
panel

Table to support
sheet metal

Covered
pedal

Tool
magazine

Assembly which
clamps and moves
workpiece

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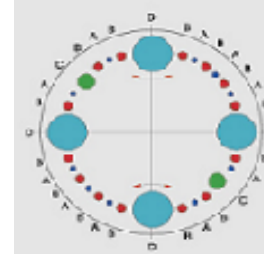
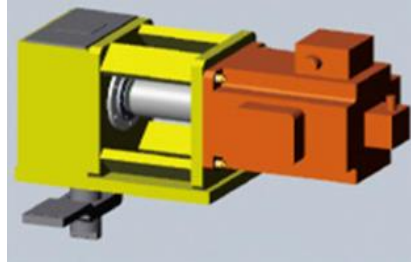
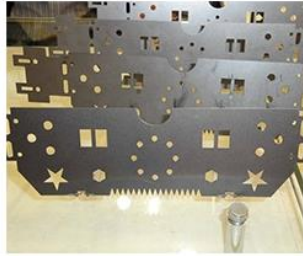
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MACHINE FEATURE:

1. Main driven device consists of big torque servo-motor connecting the crank link rod. The machine automatically selects punching stroke for special punching such as louver, knockout. Constant punching force realizes high quality workpieces with auto overload protection. Main servo-motors are at standby status during sheet metal loading and unloading, which saves power by 40%.
2. The punch is of FANUC OiPD control system with complete sheet punching software and convenient operation.
3. Index tooling stations are of worm and wheel structure with max. Punching diameter of $\Phi 88.9$.
4. Dual ductile iron turret is of long sleeve, ensuring coaxiality of the punch and die, which gives long life to the tool and turret.
5. Imported pneumatic and hydraulic components guarantee reliability of the machine.
6. Imported ballscrews with long travel and linear guide ways ensure transmission precision.
7. The worktable with hard brush and steel ball reduces noise and shock of the machine, and protects surface of the work piece.
8. The machine is straight-side frame, which is annealed for eliminating inner stress.
9. The clamps with auto protection function, in the protective zone, only excise movement without punching action for continuous operation.
10. Central lubrication device provides lubricant oil to the desired points to reduce friction of pairing elements for long machine life.
11. Tool station layout consists of A、B、C、D, which is convenient for the customer and save the tool cost.
12. Common requirement is for site foundation preparation and machine installation is simple.



TECHNICAL PARAMETER:

Model	: EP20
Brand Name	: YANGLI
Nominal force	: 200 KN
Work piece size (repositioning once)	: 1500 × 4000 mm
Max work piece weight	: 210 Kg
Max work piece thickness	: 6.35 mm
Max punch diameter	: Φ88.9 mm
Number of stations	: 30
Working accuracy	: ±0.1 mm
Strokes per minute	: 600 HPM
Workpiece speed	: 106 m/min
Turret speed	: 30 r/min
Frame construction	: Closed type
Throat depth	: 1275 mm
Number of control axis	: 5 axes (X, Y, T, C, Z)
Max rotary station punch diameter	: Φ88.9 mm
Lubrication type	: Automatic
Repeat positioning accuracy	: 0.02 mm
Number of clamp	: 2
Clamp type	: Pneumatic floating
Heat treatment of the frame	: Annealing treatment
Tool type	: Thick turret type
Turret construction	: Thick turret long insert type
Power capacity	: 50 KW
Air pressure	: 0.55 Mpa
Machine dimension (L*W*H)	: 5700 x 4200 x 2100 mm
Machine weight	: 18000 Kg
Brand New	: China



Main Imported Components List

1	Control system	1 set	Japanese FANUC OiPD
2	Servo unit and motor	4 set	FANUC
3	Main motor and drive	1 set	ESTUN
4	Ballscrew	2	THK
5	Linear guideway	4	THK
6	Supporting bearing for ballscrew	8	Japanese NSK
7	Supporting bearing for turret	4	FAG
8	Pneumatic component	1 set	Japanese SMC
9	Connector	1 set	AIRTEC
10	Coupling	10 set	German KTR
11	Main electronic elements	1 set	Imported

FAUNC OiP Control



1. System configuration

- Step punch function, graphic function, applicable program and data of CNC memory and definition 0.1 μ m.
- Simple international G code for operation.
- Standard RS232 interface with the PC.
- Advanced AC servo system and servo motor modular design for easy maintenance.
- Outstanding MMC dialogue function between the machine and operator.
- Color TFT 10.4" display.
- Programming on line and background programming.
- Distance diagnosis function.

2. System functions

- Linear axis: X-axis, Y-axis; Rotary axis: T-axis, C-axis.
- Self-diagnosis function.
- International G code programming.



- d.) Soft limit protection function and repositioning function.
- e.) Pitch compensation function and reverse gap compensation function.
- f.) Different operation modes such as Auto, Manual, Semi-auto, etc.
- g.) Clamp protection function.
- h.) Parameter programming function and subroutine recall function.
- i.) Quick positioning function.
- j.) Various M functions and other supporting function.
- k.) Absolute, incremental programming; conditional and non-conditional skip function.
- l.) Warning indication for overload, overflowing, over-travel and various mechanical and electronic faults.
- n.) The control system is special for CNC turret punch.

Supply Range

1. **One CNC turret punch (include 30 pair of standard Chinese tools).**
2. **Accessories with the machine:**

1	Foundation iron block	SDJZ-250	4
2	Adjusting bolts	M42×2	4
3	Foot pedal	YDTF-11	1
4	Operation station		1

3. **Tools for machine installation and maintenance**

1	Philips screwdriver		1
2	Spline screwdriver	M6	1
3	In-line screwdriver		1
4	Socket hexagon spanner	1.5-14	1 set
5	Open spanner		1
6	Adjustable wrench	12"	1

4. **Spare parts with the machine:**

1	Brush/steel ball		20 each
2	Toothed plate of clamp		1 pair

5. **Documents with the machine:**

1	Packing list	1	
2	Quality certificate	1	
3	Instruction manual (mechanical)	1	
4	Instruction manual (electronic)	1	



5	Foundation drawing	1 set	Deliver to the user upon the contract takes into effect.
6	Electrical diagram	1 set	
7	System documents	1 set	

6. 30- Station layout

Station type	Dimension range	Stations for each type
A	φ3 – φ12.7	10
B	φ12.7 – φ31.75	14
C	φ31.75 – φ50.8	2
D	φ50.8 – φ88.9	4 (include 2 index station)

Note: Above-mentioned 30- station standard tools are of square, rectangle, circle and oval shapes. Additional payment is for special tools.

7. Environment Conditions for the Machine

1. Power: 440V ± 10%, 60HZ
2. Temperature: 5 - 38°C (for machine operation)
3. Relative Humidity: 20 – 80%RH
4. Far away a strong shock source and electromagnetic source.
5. Free from harmful and corrosive gas and dust.