

Innovative Technologies | www.ermaksan.com.tr | Punch Press Series



ETPSeries
CNC Turret Punch Press





www.ermaksan.com.tr

Ermaksan, after half a century, is moving confidently into the future

Ermaksan is proudly leaving 48 years of bright history behind and becoming, with its R & D and technological investments, one of the World leaders in its field with an innovative perspective for the 21st Century.

Ermaksan is a pioneer in the industry with strong R & D, an 80,000m² modern production facility, a highly qualified team of 700 staff, manufacturing high quality, high-tech machinery for the sheet metal processing sector.

Our factory is equipped with the latest technology and precision CNC machines, under the supervision of expert engineers, it is able to manufacture 3,000 units of sheet metal processing machines annually. Ermaksan are one of the World's leading companies in the industry and Ermaksan machines are represented by exclusive dealers with strong technical support in 70 countries.

Ermaksan manufactures and designs high technology, value added, environmentally friendly and energy efficient machines by continually following new trends and customer expectations, using resources efficiently and effectively moving forward confidently towards sustainable growth.

High Tech
CNC Machines
manufactured by
Ermaksan;

- New Generation Fiber Laser
- CO₂ Laser
- Press Brake
- Servo Motorized Hybrid Press Brake
- Plasma Cutting Machine
- Punch Press
- Shear Cutting
- Iron Worker

CNC PUNCH MACHINE MODEL ETP

Your partner for presentation of the needs

ETP

CNC Turret Punch Press

ERMAKSAN is a leading brand within the punching market place due to its experience and quality standards. ETP CNC Turret Punch Press combines the world's best brands in hydraulic, electronic and mechanical compounds in one machine.

Specifically designed to meet customer requirements; its rigid steel structure + mono block frame allows you to punch up to 6 mm thick sheets.

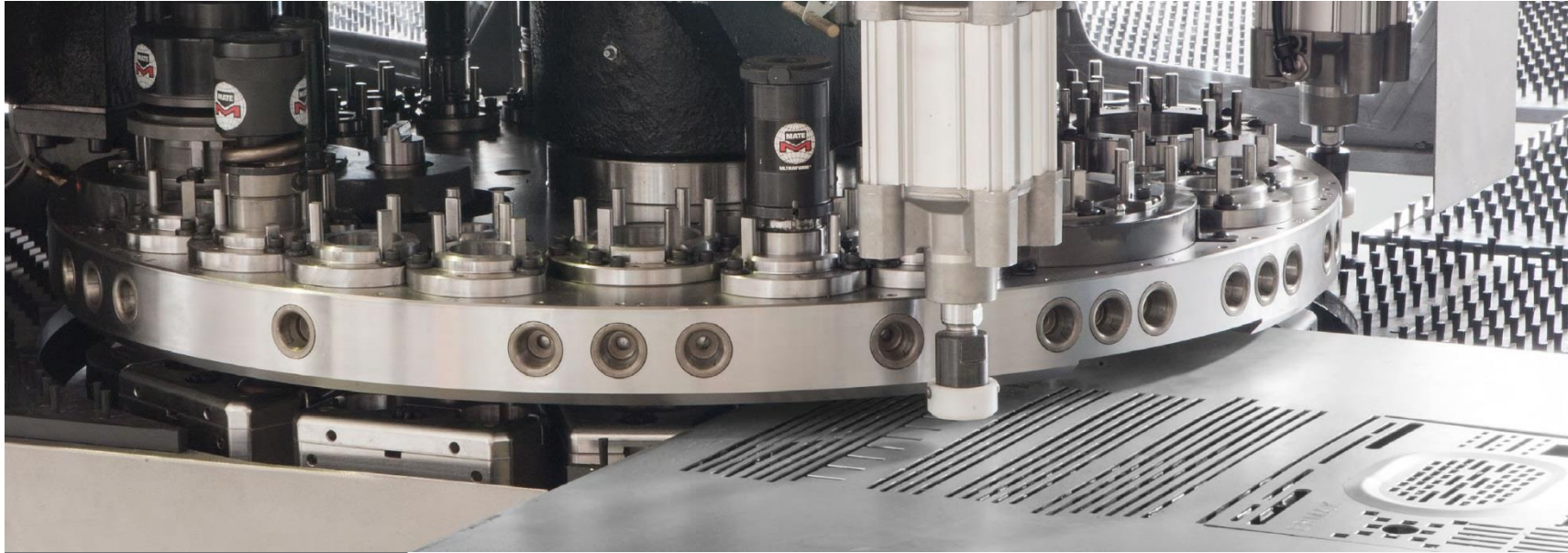
High speed with
maximum accuracy.



Control Panel
Refined quality and technology with user friendly GE Fanuc controller.

Rigid Structure
Processed with high precision, dynamic and statically provides a strong frame.

Brush and/or Ball Bearing Type Table
Brush and/or ball bearing type table for easy sheet loading.



TURRET HEAD

Ermaksan's ETP Turret Punch Machine has 33 stations; 3 of them indexable D stations and may include 8A or 3B or 1C stationed tools upon request. Therefore the tool quantity may be increased up to 54.

Hardened steel coated tool adaptor system assures maintenance free long life working.

Several forming operations are possible with the functional tools perforating different diameters and shapes.

33 STATION TURRET TOOLING PERMUTATION

- 15 x A station 1/2" fixed 1,6-12,7 mm round
- 12 x B station 1-1/4" fixed 12,8-31,7 mm round
- 2 x C station 2" fixed 31,8-50,8 mm round
- 1 x D station 3-1/2" fixed 50,9-88,9 mm round
- 3 x D station 3-1/2" index 50,9-88,9 mm round

27 STATION TURRET TOOLING PERMUTATION

- 11 x A station 1/2" fixed 1,6-12,7 mm round
- 10 x B station 1-1/4" fixed 12,8-31,7 mm round
- 1 x C station 2" fixed 31,8-50,8 mm round
- 2 x D station 3-1/2" fixed 50,9-88,9 mm round
- 2 x B station 1-1/4" index 12,8-31,7 mm round
- 1 x C station 2" index 31,8-50,8 mm round



Automatic Index Stations

Different contours at required angles can be punched with 3 automatic index stations. These stations may include 8A or 3B or 1C station tools upon customers request and so a wide range of tooling combinations are possible. Index positioning accuracy is 0,01°.



Speed and Accuracy

Maximum punch stroke for 1 mm step movements on X and Y axes processing 1 mm thick mild steel is 1100 per minute and marking speed is 2000 stroke/min. X + Y dependent velocity 120 m/min. Positioning accuracy is ± 0,01 mm. Repetition accuracy is ± 0,05 mm.



Airblow

Provides automatic tool lubrication and extends tool life. Avoids pick up of scrap and heating up of tools during working.

CNC PUNCH MACHINE MODEL ETP

Your partner for presentation of the needs

STANDARD Features

- 3 automatic repositioning clamps and loading switches.
- Tool lubricating system (Airflow).
- Free standing control panel.
- Control with foot pedal.
- 1 software (Lantek or Metalix).
- User manual and maintenance catalogue.
- 15 x A station 1/2" fixed 1,6-12,7 mm round
- 12 x B station 1-1/4" fixed 12,8-31,7 mm round
- 2 x C station 2" fixed 31,8-50,8 mm round
- 1 x D station 3-1/2" fixed 50,9-88,9 mm round
- 3 x D station 3-1/2" index 50,9-88,9 mm round
- Digital oil temperature indicator.
- Software for using wheel and forming tools.
- Scrap box.
- Chain protection around the machine (safety system).
- Hydraulic oil cooling system.

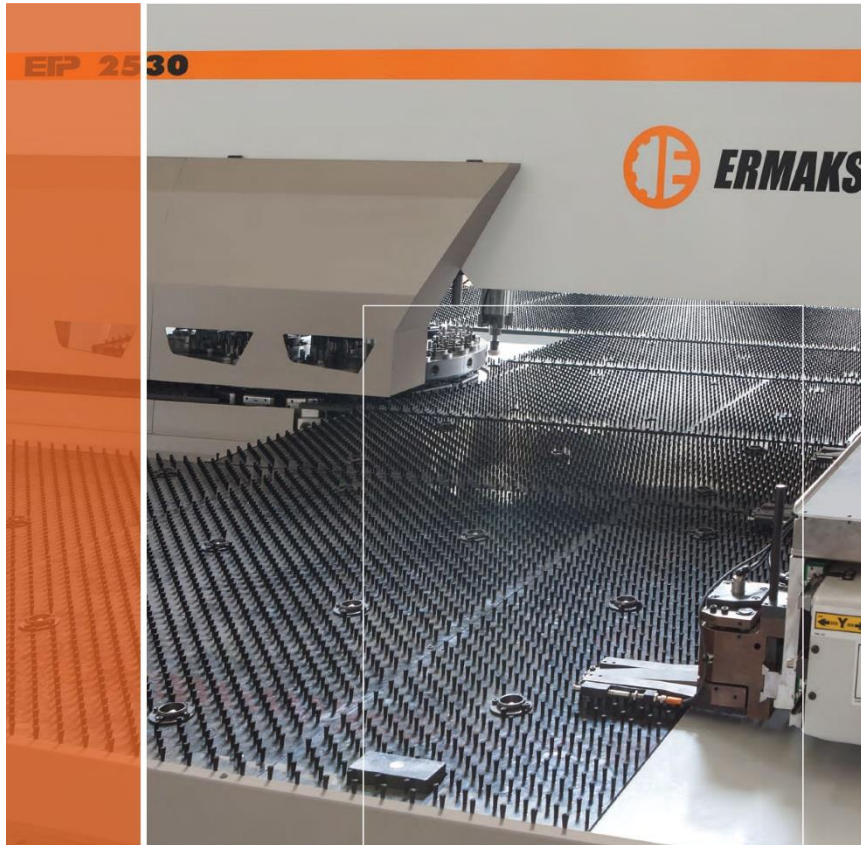
OPTIONAL Features

- Notching and forming tools for various dimensions and forms.
- Light barrier (for CE standard machines).
- Additional sheet holding clamps.
- Multi tools of 3,6,8 stations.
- Adaptors for various stations (B, C, D).
- Special coated tools for notching stainless materials (TiN, TiCN, TiCN Plus, MVMC).
- Work chute.
- Stainless steel table with ball bearing support.



CNC PUNCH MACHINE MODEL ETP

Your partner for presentation of the needs



Companies looking to increase profits, should pay special attention to time saving, low cost and just-in-time delivery. ETP CNC Turret Punch will help you to achieve these goals by effective and efficient production.

Low price and maintenance cost,
High efficiency and profitability...



Sheet Clamping System

The area of sheet in the clamp zone during punching cannot be punched, the control automatically repositions this area to be punched at the end of the process. Three clamps operating with pneumatic pressure and clamping the sheet without causing any deformation thanks to spherical shaped holders. Clamp safety check system prevents collisions between clamps and tools by comparing the clamp positions with part programme.



Work Chute (Optional)

Parts that are notched or punched from the main sheet are collected in a scrap box by the part removal system, so scrap will not be on the main sheet and this therefore avoids damage to the desired parts.

Brush and/or Ball Bearing Type Table

A 2500 x 1500 mm processing table, brush and/or ball bearing type for easy sheet feeding.

Programme automatically controls axis acceleration based on material weight.

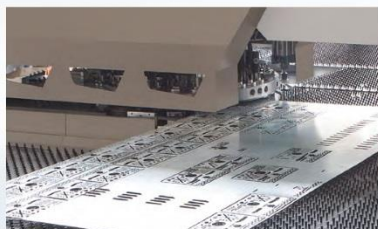
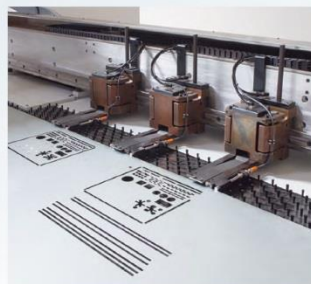
Precision linear bearings, guides without gaps, precision screw axes, dynamic servo motors and intelligent drivers are used on X and Y axes. The dynamic buffer designed with this equipment doesn't compromise on precision even at high speeds.

CNC PUNCH MACHINE MODEL ETP

Your partner for presentation of the needs

ADVANTAGES

- 33 stations.
- Suitable for 1500x3000mm sheets.
- H+L Voith branded 20 and 30 tons high speed cylinder.
- Auto repositioning clamps.
- 3 clamps.
- O type body structure.
- Backlash sensor on X axis.
- Punch 2000 strokes per minute.
- Brushed table with automatic ball bearing.
- Clamp safety check system.



CNC Controller GE FANUC 31i-PB

- Part programme memory 2 mb.
- Memory C, FROM / SRAM, 16 mb / 1 mb.
- CPU CARD, Pentium, Dram 16 mb.
- Inch / metric conversion.
- Workpiece coordinate system.
- Registered programmes 1024.
- Graphic display.
- Clamp zone avoidance function.
- Safety zone check.
- Multiple tool control.
- Punch simulation.
- Run hour, part count & number of strokes display.



Rigid & Strong...



CNC PUNCH MACHINE MODEL ETP

Your partner for presentation of the needs

SOFTWARE

lantek
Sheet Metal Solutions



Easy to Learn

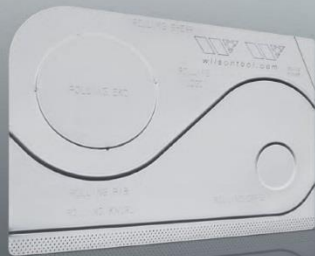
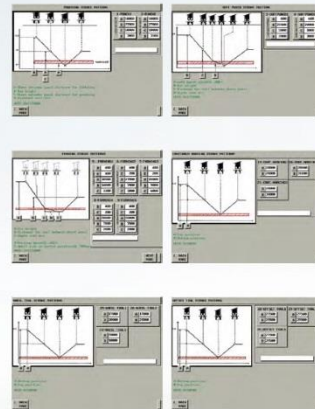
Designed to reduce learning time to a minimum. Simple, user-friendly menus guide users at all times, enabling them to produce parts from the first day.

Integration

Integrates part design, nesting and manufacturing technology in just one programme. This integration reduces the time and effort required to generate numerical control programmes.

Benefits

Excellent integration reduces data entry significantly. Excellent nesting features including best sheet selection reduces scrap. Excellent costing and time calculation including all consumable and raw material, improves efficiency and allows accurate scheduling. Integration into the sheets database allows efficient tracking and control of inventory. Advanced machining options allow for very efficient machining. Fully automatic tooling saves on setup times.



High quality on forming...

High quality forms can be achieved by adjustable stroke option, end of the punch time delay, also short length bending can be achieved by precision adjustment.

Operator can adjust punching, forming and table speeds separately through the programme.

All special functions of notching and forming can be easily done with wheel tools.

Technical Features

		ETPP 1500x2500 30 TONS	ETPP 1250x2000 20 TONS
MAXIMUM TONNAGE	Ton	30	20
MAXIMUM CAPACITY (Thickness X.Y)	mm	2500x1500	2000x1250
MAXIMUM PUNCH DIAMETER (Sheet & 1 mm thickness) (single tool)	mm	Ø88.9	Ø68.9
X AXIS TRAVEL	mm	2500 + R	2000 + R
X AXIS VELOCITY	m/min	80	120
Y AXIS TRAVEL	mm	1500	1250
Y AXIS VELOCITY	m/min	80	120
X + Y DEPENDENT VELOCITY	m/min	114	170
TURRET ROTATION VELOCITY	Rpm	20	27
AUTO INDEX ROTATION VELOCITY	Rpm	65	65
MAXIMUM PUNCH STROKE For Marking 1 mm Stroke	Stroke/min	2000	1500
MAXIMUM PUNCH STROKE Per minute For * 1mm step X Movement, 1 mm step Y axes Movement	Stroke/min	900	900
MAXIMUM PUNCH STROKE Per minute For * 20 mm step X Movement, 20 mm step Y axes Movement	Stroke/min	350	350
MAX. CUTTING THICKNESS WITH FIX STATION	Mild steel	6 mm	6 mm
	Stainless steel	6 mm	6 mm
	Mild steel	4 mm	4 mm
MAX. CUTTING THICKNESS WITH AUTO INDEX STATION	Stainless steel	2,5 mm	2,5 mm
REPETITION ACCURACY	mm	± 0.05	± 0.05
POSITIONING ACCURACY	mm	± 0.1	± 0.1
INDEX POSITIONING ACCURACY	"	0.01 "	0.01 "
MULTI TOOL CHANGE TIME	sec.	3	3
MAXIMUM SHEET WEIGHT	Kg	200	125
MOTOR	kW	15	7,5
OL CAPACITY	lt	280	180
AIR PRESSURE	Bar	6 - 7	6 - 7
MAXIMUM STROKE	mm	40	40
SHEET CLAMPING (AUTOMATIC LOCATION CHANGEABLE)	Places	3	3
SHEET CLAMPING FORCE	Kg	1200	1200
BLOWER SUPPLY	kVA	25	18
AIR SUPPLY	Liters/min	2,5	2,5
CONTROLLER (ERIMAKSAN HMI SOFTWARE)		GE Fanuc 311-PB. Hand panel. Button panel. Part Programme Memory, 2MB. Inch/Metric conversion. Registered Programmes, 1024. Run hour & Part count display. Graphic display. Multiple Tool Control. Clamp Zone Avoidance Function. Part Programme Transfer with Ethernet cable, usb or PC/MCI. Simulation of Sheet Metal Cutting. Software for using wheel and forming tools. Stroke Control Software. Reposition and Clamp Displacement Software.	GE Fanuc 311-PB. Hand panel. Button panel. Part Programme Memory, 2MB. Inch/Metric conversion. Registered Programmes, 1024. Run hour & Part count display. Graphic display. Clamp Zone Avoidance Function. Part Programme Transfer with Ethernet cable, usb or PC/MCI. Simulation of Sheet Metal Cutting. Software for using wheel and forming tools. Stroke Control Software. Reposition and Clamp Displacement Software.
POSITION CONTROL		Voith Turbo H + L Hydraulic All axes absolute Ballscrew with Fanuc servo motor	Voith Turbo H + L Hydraulic All axes absolute Ballscrew with Fanuc servo motor
SERVO AXES	X,Y		
INDEX AXES		Absolute Fanuc servo motor+ Harmonic drive gearbox	Absolute with Fanuc servo motor+ Harmonic drive reductor
WORKING HEIGHT	mm	950	950
TABLE TYPE		Brushed	Brushed
		Ball	Ball
		Brushed+Ball	Brushed+Ball
MACHINE LENGTH	mm	5520	5140
MACHINE WIDTH	mm	5000	4290
MACHINE HEIGHT	mm	2220	2220
WEIGHT	Kg	18500	14000
CAD/CAM Software		Lantek - Metalix	Lantek - Metalix
Standard Manual Nesting (1 pieces soft, 1 pieces dangle)	License	One license, Postprocessor	One license, Postprocessor
Optional Automatic nesting			
TURRET (33 STATIONS)	15 pcs. A stations 1/2"	fixed 1,6-12,7 mm round	TURRET (27 STATIONS)
	12 pcs. B stations 1-1/4"	fixed 12,8-31,7 mm round	
	2 pcs. C stations 2"	fixed 31,8-50,8 mm round	
	1 pc. D stations 3-1/2"	fixed 50,9-88,9 mm round	
3 pcs. D stations 3-1/2"	index 50,9-88,9 mm round		
TURRET (27 STATIONS)	11 pcs. A station 1/2"	fixed 1,6-12,7 mm round	TURRET (27 STATIONS)
	10 pcs. B station 1-1/4"	fixed 12,8-31,7 mm round	
	1 pc. C station 2"	fixed 31,8-50,8 mm round	
	2 pcs. D station 3-1/2"	fixed 50,9-88,9 mm round	
2 pcs. B station 1-1/4"	index 12,8-31,7 mm round		
1 pc. C station 2"	index 31,8-50,8 mm round		