

ETP Series

CNC Turret Punch Press





innovative technologies.

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

With 49 years of technological investment and our innovative R&D department, Ermaksan has become one of the world's leading companies in the sheetmetal fabrication machinery industry.

Ermaksan is a pioneer in the industry with strong R&D department, 80.000 m² modern production facility, highly qualified team of 700 staff dedicated to high quality manufacturing of our machine tools.

Our factory is equipped with the latest industry leading precision CNC machines. Under the supervision of expert engineers, the factory manufactures 3,000+ machines annually. Ermaksan is one of the world's leading companies in the industry represented by exclusive dealers around the world with strong technical support in 70 countries.

Ermaksan designs and manufactures durable, productive, and value based machinery. We do this by, continuously meeting customer demands and exceeding industry standards towards sustainable growth.





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.





TURRET HEAD

Ermaksan's ETP Turret Punch Machine has two alternatives of 33 and 27 stations; in 33 stations models three of them indexable D stations and may include 8A or 3B or 1C multi-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. Pushes scraps down and avoids heating up of tools during working.

STANDARD Features

- 3 automatic repositioning clamps and loading switches.
- Tool lubricating system (Airblow).
- 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, MOVIC).
- Work chute.
- Stainless steel table with ball bearing support.





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 axles, 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.

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 workmanship 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.

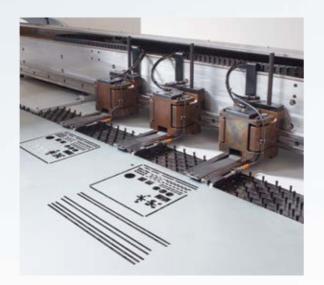


Work Chute (Optional)

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.

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.



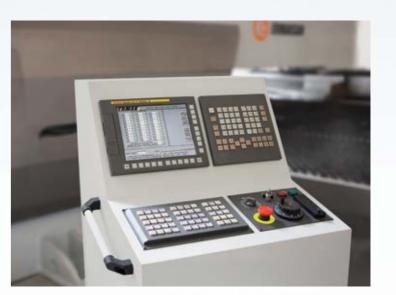






CNC Controller GE FANUC 31i-PB

- Part programme memory 2 mb.
- Memory C, FROM 16 mb, SRAM 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...



SOFTWARE





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

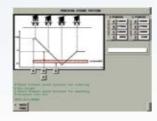
Integrates part design, nesting and manufacturing technology in just one programme. This integration reduces the time and effort required to generate numerical control programmes.

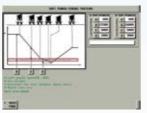
Benefits

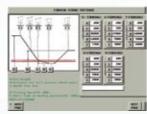
Excellent integration reduces data entry significantly. Excellent nesting features including best sheet selection reduces scrap. Excellent costing and time calculation including all consumable and raw material, improves efficiency and allows accurate scheduling. Integration into the sheets database allows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

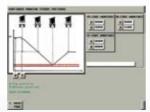


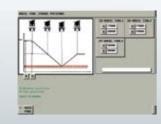


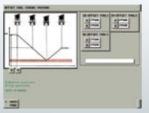














High quality on forming...

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

iechnicai realu	100	ETP 1500x2500	ETP 1500x3000	ETP 1250x2000	ETP 1250x2500
MAXIMUM TONNAGE	Ton	30	30	20	20
MAXIMUM CAPACITY (Thickness X,Y)	mm	2500×1500	3000×1500	2000×1250	2500×1250
STATION NUMBER OF THE TURRET	Pieces	33	33	27	27
MAXIMUM PUNCH DIAMETER (Sheet is 1mm thickness) (single tool)	mm	Ø88,9	Ø88,9	Ø88,9	Ø88,9
X AXIS TRAVEL	mm	2500 + R	3000 + R	2000 + R	2500 + R
X AXIS VELOCITY	m/min	80	80	100	100
Y AXIS TRAVEL	mm	1500	1500	1250	1250
Y AXIS VELOCITY	m/min	80	80	100	100
X + Y DEPENDENT VELOCITY	m/min	114	114	141	141
TURRET ROTATION VELOCITY	Rpm	20	20	27	27
AUTO INDEX ROTATION VELOCITY	Rpm Stroke/min	65 2000	65 2000	65 1500	65 1500
MAXIMUM PUNCH STROKE For Marking 1 mm Stroke MAXIMUM PUNCH STROKE Per minute					
For * 1mm step X Movement ,1 mm step Y axes Movement MAXIMUM PUNCH STROKE Per minute	Stroke/min	900	900	900	900
For * 25 mm step X movement, 25 mm step Y axes Movement	Stroke/min	600	600	350	350
MAX. CUTTING THICKNESS WITH FIX STATION	Mild steel	6,35 mm	6,35 mm	6,35 mm	6,35 mm
WAY. OUTTING THIONNESS WITH IX STATION	Stainless steel	3 mm	3 mm	3 mm	3 mm
MAX. CUTTING THICKNESS WITH AUTO INDEX STATION	Mild steel	4 mm	4 mm	4 mm	4 mm
	Stainless steel	2,5 mm	2,5 mm	2,5 mm	2,5 mm
REPITITION ACCURACY	mm	± 0.05	± 0.05	± 0.05	± 0.05
POSITIONING ACCURACY INDEX POSITIONING ACCURACY	mm	± 0,1 0.01 °	± 0,1 0.01 °	± 0,1 0.01 °	± 0,1 0.01 °
MULTITOOL CHANGE TIME	sec.	3	3	3	3
MAXIMUM SHEET WEIGHT	Kg	200	200	125	125
MOTOR	kW	11	11	7,5	7,5
OIL CAPACITY	lt lt	300	300	180	180
AIR PRESSURE	Bar	6 - 7	6 - 7	6 - 7	6 - 7
MAXIMUM STROKE	mm	40	40	40	40
SHEET CLAMPING (AUTOMATIC LOCATION CHANGEABLE)	Pieces	3	4	3	3
SHEET CLAMPING FORCE	kg	1200	1200	1200	1200
POWER SUPPLY	kVA	25	25	25	25
AIR SUPPLY	Liters/min	2,5	2,5 c 31i-PB	2,5	2,5 c 31i-PB
CONTROLLER (ERMAKSAN HMI SOFTWARE)		Part Program Memory, 256 KB Memory C, FROM / SRAM, 16 MB / 1 MB CPU CARD, PENTIUM, DRAM 16 MB Inch/Metric Conversion Workpiece Coordinate System Reader/Puncher Interface 1 External Message Cutter Compensation C Part Program Memory, 256 KB Registered Programs, 125 Extended Part Program Editing Run Hour & Parts Count Display Graphic Display Multi-Piece Machining Multiple Tool Control Safety Zone Check Clamp Zone Avoidance Function Safety Zone Area Expansion		Part Program Memory, 256 KB Memory C, FROM / SRAM, 16 MB / 1 MB CPU CARD, PENTIUM, DRAM 16 MB Inch/Metric Conversion Workpiece Coordinate System Reader/Puncher Interface 1 External Message Cutter Compensation C Part Program Memory, 256 KB Registered Programs, 125 Extended Part Program Editing Run Hour & Parts Count Display Graphic Display Multi-Piece Machining Multiple Tool Control Safety Zone Check Clamp Zone Avoidance Function Safety Zone Area Expansion	
POSITION CONTROL		Voith Turbo H+L Hyd.		Voith Turbo H+L Hyd.	
SERVO AXES	X,Y	All axes absolute Ballscrew with Fanuc servo motor	Y1+Y2 axes Ballscrew Fanuc servo motor X Axes Rack Pinion Fanuc servo motor	All axes absolute Ballscrew with Fanuc servo motor	All axes absolute Ballscrew with Fanuc servo motor
INDEX AXES		Absolute Fanuc servo motor + Harmonic drive gearbox	Absolute Fanuc servo motor + Harmonic drive gearbox	Absolute Fanuc servo motor + Harmonic drive reductor	Absolute Fanuc servo motor + Harmonic drive reductor
WORKING HEIGHT	mm	950	950	950	950
TABLE TYPE		Brushed Ball	Brushed Ball	Brushed Ball	Brushed Ball
MACHINE LENGTH	mm	Brushed+Ball 5520	Brushed+Ball 5520	Brushed+Ball 5140	Brushed+Ball 5140
MACHINE WIDTH	mm	5000	6660	4290	5000
MACHINE HEIGHT	mm	2220	2220	2220	2220
WEIGHT	Kg	18500	20000	14000	15000
CAD/CAM Software		Lantek - Metalix	Lantek - Metalix	Lantek - Metalix	Lantek - Metalix
Standard Manual Nesting (1 pieces soft, 1 pieces dongle)	License	One license, Postprocessor	One license, Postprocessor	One license, Postprocessor	One license, Postprocessor

TURRET (33 STATIONS) 15 pcs. A stations 1/2" fixed 1,6-12,7 mm round
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

11 pcs. A station 1/2" fixed 1,6-12,7 mm round 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



