CHOOSE YOUR POWER

EVOLUTION
Hybrid Press Brakes

ERMAKSAN

EVOLUTION

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ERMAKSAN combining its 30 years press brake manufacturing experience with latest technologies, presents new generation Evolution series hybrid press brakes.

Fast, silent, precise, environmentally friendly and energy saving EVOLUTION series press brakes provides faultless bending of small parts even at different points by its high repetition and bending precision features.

Hydraulic pistons are being driven by AC servo motors without proportional direction valves on Evolution series hybrid press brakes. No need to positioning valves means more precision and less maintenance. And there is no pressure loss. While the pump is working continuously all the day on ordinary press brakes, there is only energy consumption when the operator pushes the foot pedal and moves the top beam for bending on Evolution series hybrid press brakes. As there is no pressure loss, energy i.e. bending power is at highest level. Oil level is also reduced 80%. There is no oil heat up and the oil has long life-time.

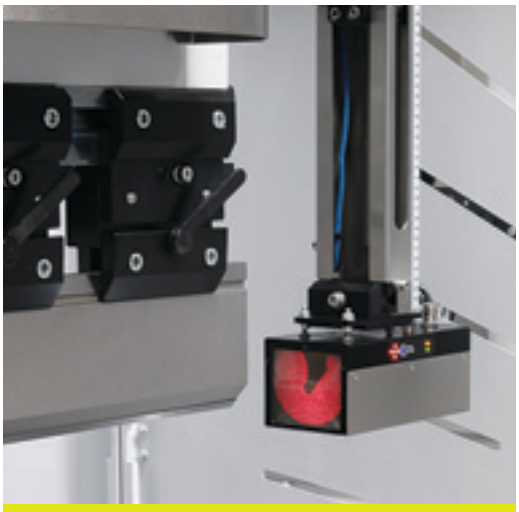

ERMAK
EVOLUTION

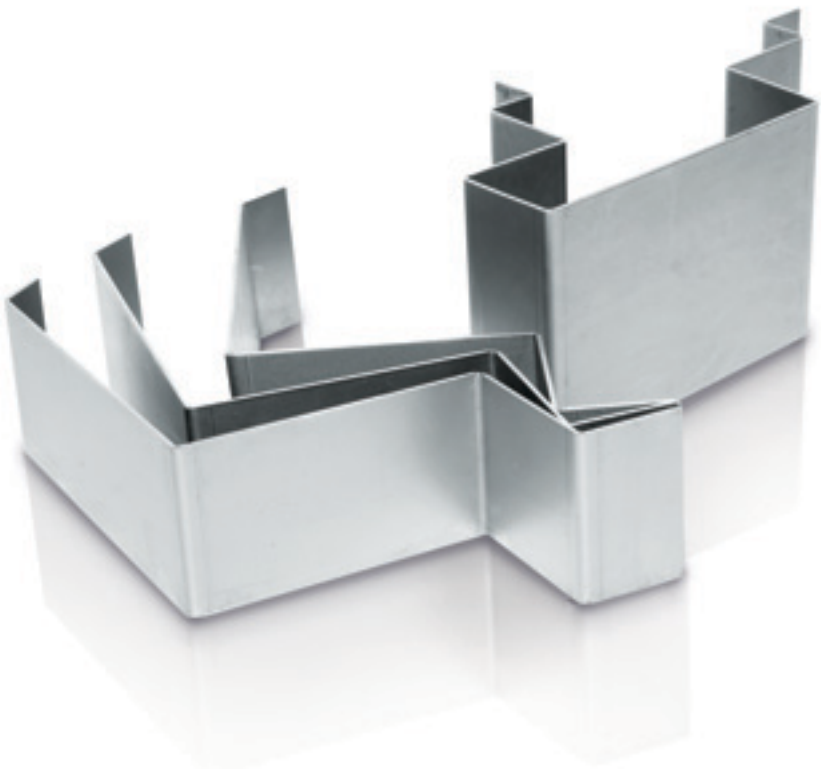
Less energy, more power

- Near silent working (63dB). Most silent one amongst the sheet metal bending machines.
- Minimum 60% average active energy save and energy loss minimized sheet metal bending machine.
- Energy consumptions:

- 95% less while standing ready for bending
- 95% less while free fall movement of the beam
- Minimum 50% less while bending. When the thickness of sheet decreases, energy saving increases. Furthermore when the resistance of sheet has been overcome during bending, energy consumption reduces immediately.
- 84% less while ironing if waiting time described in the bending program
- 70% less while return movement of the beam

- As the oil doesn't heat up, super accurate repeatability feature maximized press brake.
- High bending precision ±0.01 mm.
- Faultless bending of small parts even at different points.
- 80% less oil volume and less frequent oil changes. Moreover there is no need to change oil at least 5 years.
- 3 times longer life-time for system and pomp. High quality equipments and system's working during only motion guarantee this.
- Fast and rapid working press brake by servo motor and high efficiency pump dynamism.
- There is no continuous oil circulation as the pump doesn't work all the day, thus the oil doesn't heat up.
- Bending power is at highest level by no pressure loss as there are no proportional valves.
- Y1 and Y2 axes have independent oil tanks. Thus, the maintenance will be realized at only one side if any brake-down appears. Therefore, servicing will be easier.





ER90

CNC Bending Simulations Work Center

Graphic Multi-axes numeric control with advanced 3D features.

Another important feature of ER90 is the environment dedicated to the Production Managing, its simple and friendly GUI is furthermore increased in value by an high resolution LCD 17" Touch screen.

Simulations of Machine body, Punch, Dies, Punch and Die holders, barriers doors, floor, backgauge, sheet pieces, real time bending screen. ER90 is a real onboard machine cam. In fact graphic creation of tool and 2D/3D parts, importation of 3D parts from EBS CadCam simulation and 2D/3D reproduction, in real time, all of the bend phases are only some of the available basic performances.

ERMAK Bending CAD /CAM Simulation Software

- Metal sheet bending simulation CAD/CAM for Ermak press brake systems. ER90 (Windows98SE / ME / NT4 / 2000 / XP)
- Languages: English, french, italian, german, spanish, japanese.
- Working with several measurement units
- Contextual online help
- Material managment

HARDWARE FEATURES:

CPU card: Standard module ETX, Pentium M 1.1 GHZ, 512MB DDR RAM

Monitor: Renkli LCD 17" SVGA, Dokunmatik ekran.

HDD: 60 GB

Serials: COM1: RS232, COM2: RS422/RS232

USB: 3 adet 2.0

NetCard: TCP/IP protokol ile birlikte 10-100 tabanlı Ethernet.

Program Configuration

- Automatic machine tooling based on part characteristic.
- Fractionate tools management
- Part and tools archives feature
- Loading / saving default tooling
- Advanced manual machine tooling functions
- Flat part view with measurement feature.

3D EDITOR

- 3D part view
- Import function from flat DXF part
- Import function from 3D DXF part
- Import function from İGES/STEP solid part.
- Integrated part editing function.

3D Simulation

- Automatic best bending sequence search.
- Estimation of part realization time.
- Advanced collision detection system between part with machine and tools.
- Export function on flat DXF part for cutting.

Production Viewer (new) Production Management Software

Data visualization
Advanced search and filtering on working list
Detailed report generation of selected working
Graphs and statics of working load for each machine
EBS Config Machine and updates management software
Machine transfer/copy between archives
Machines backup/restore
Machine import from ER90 CNC floppy
Machine creation composing profiles generated with TOOLS EDITOR
Remote activation and upgrade managment even through internet
Characteristic machine data modifying feature.

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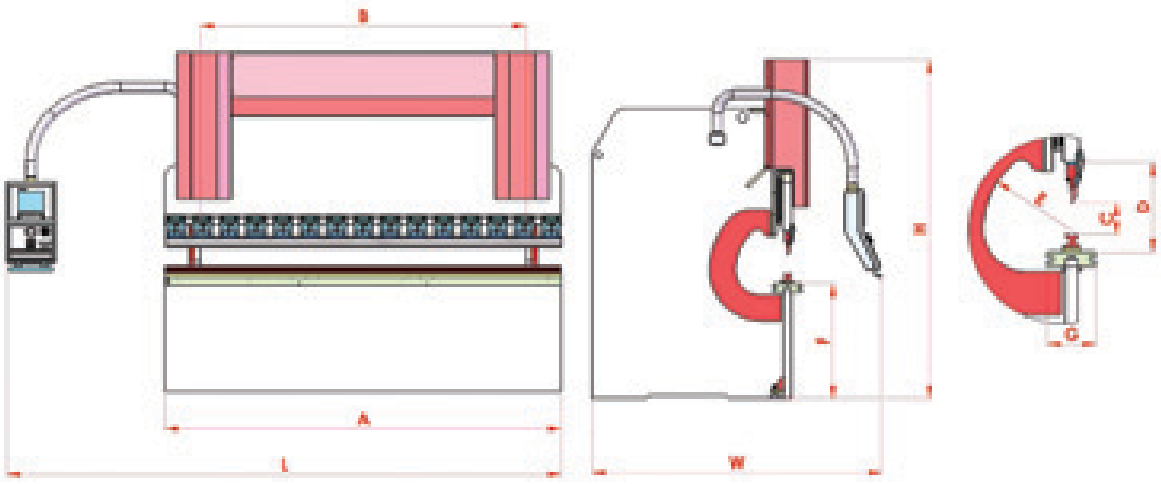
Technical Features



BENDING LENGTH (A)	3100	mm
MAX. POWER	135	ton
MAX.BENDING CAPACITY (42 kg/mm2)	6 mm	V=50
AXIS NUMBER OF MACHINE	Y1, Y2, X, R	
FREE DOWN SPEED	200	mm/s
BENDING SPEED	12	mm/s
RETURN BACK SPEED	190	mm/s
STROKE (C) (Y1 , Y2)	275	mm
BACK GAUGE STROKE (X AXIS)	800	mm
BACK GAUGE STROKE (R AXIS)	250	mm
DISTANCE BETWEEN HOUSING (B)	2600	mm
CROWNING	MANUAL	
THROAT DEPTH (E)	410	mm
TABLE HEIGHT (F)	900	mm
TABLE WIDTH (G)	90	mm
DAYLIGHT (D)	550	mm
PLANT VOLTAGE	380	V
IP	54	
MAIN MOTOR	2 x 4,7	kW
BACK GAUGE MOTORS (X , R)	2 x 2,4	Nm
PLANT TEMPERATURE	0-50	°C
MAX. NOISE	70	dB
OIL CAPACITY	2x20	lt
MAX. PRESSURE	265	bar
MACHINE LENGTH (L)	4250	mm
MACHINE WIDTH (W)	2050	mm
MACHINE HEIGHT (H)	2800	mm
WEIGHT	8700	kg

* Working speed should be max. 10 mm / sec. at CE certified machines according to the EN12622 norm.