



**ERMAKSAN**

METAL FABRICATING MACHINERY

*innovative technologies.*

# EVOLUTION II

Hybrid Press Brake



NEW

# EVO II

Hybrid Press Brake

Demand for Economical Machines is increasing due to rising Global energy prices. Ermaksan recognizes that customers are becoming more aware of their social responsibility. Customers require eco-friendly manufacturing that is both beneficial to the environment and their profit margins.

With this in mind, Ermaksan has used its 30 years' experience in press brake manufacturing to present to you; the new generation Evolution II hybrid press brake series.

# Less energy, more power...

Delem DA66T with 3D visualization,  
17" touch screen control panel.

### Less energy, more power;

In conventional  
press brakes there is  
continuous full energy  
consumption but at  
EVO-II series energy  
consumption is 95%  
less at stand-by mode.

ECO - FRIENDLY Durable Body.

The new integrated hood provides  
high protection and safety.



# Advantages

- **The Fastest: 0,78 in/sec**

It is a fast operating press brake using servo motors and highly efficient pump.

- **The Most Accurate: 0,0003 in**

The new generation Evolution series press brake has high bending accuracy between +/- 0,0003 inch.

- **Eco – Friendly**

The new series press brakes are eco-friendly using comparably less energy than a standard pressbrake.

- **65% Energy Saving**

An average 65% energy saving when used in comparison to standard press brakes.

- **Reduced oil level: 95%**

The amount of oil used within the machine has been reduced by 95% in comparison to standard hydraulic pressbrakes of the same spec. This again helps to reduce manufacturing costs.

- **Bending efficiency**

Highest bending efficiency is achieved as no pressure is lost through proportional valves.

- **Quietest in its class: 63db**

Noiseless (63db). The lowest noise level among its competitors. (TÜV-SÜD certified).

- **3x longer system life time**

System and pump have 3 times longer lifespan due to high quality components and smart running technology.

- **No need to change oil for 7000 working hours**

New generation press brakes are developed to require fewer oil changes. You are not required to change the oil for 7000 working hours.

- **Oil does not heat up**

Oil is more durable than ever because the oil does not heat up thanks to the pumping system which does not run when the machine is at stand-by mode.

- **Flawless bending**

Provides flawless bending for small parts at different points.

- **Ease of maintenance**

Y1 and Y2 axes have stand-alone oil tanks. Maintenance is conducted only when required making the machine easy to maintain.



Rapid | Silent | Sensitive | Eco friendly | Energy saving

## Energy Consumption

- 95% less while idle between bends.
- 50% less during free fall.
- At least 50% saving when bending. (energy consumption increases as sheet thickness increases.)
- If delay time at end of bend is composed, then it is 84% less.
- 70% less consumption during return of the upper beam.



EVOLUTION Series press brakes provide accurate bends even for small parts at different points thanks to high repeatability and bending precision.





## Standard Controller



## Delem DA-66T

### General Features:

- Windows operating system
- 3D simulation of applications before bending
- Standard onboard network connection
- 4 Mb memory product team
- up to 7 digits programming capacity
- Max. repetition of 9999 program
- 17" high-definition LCD coloured screen
- Max. 25 steps in a program (sequence)
- Max. 99 steps repeatability
- mm/inch - T/Kg convert
- Extra USB keyboard and USB mouse connection
- Error messages
- Machine time and stroke counter
- Working as tandem machine
- Delem modular compatibility
- Motorised front support system
- Laser angle measurement
- Dynamic crowning

# Closed Circuit Hydraulic System

- No proportional valve.
- No hydraulic pipeline system.
- No oil leakage.
- Maintenance free.
- 4,74 gal. oil.
- 5 years oil life time.

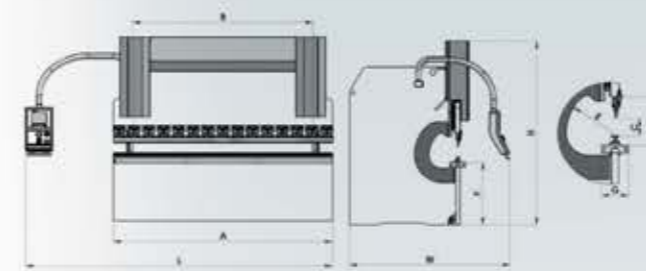
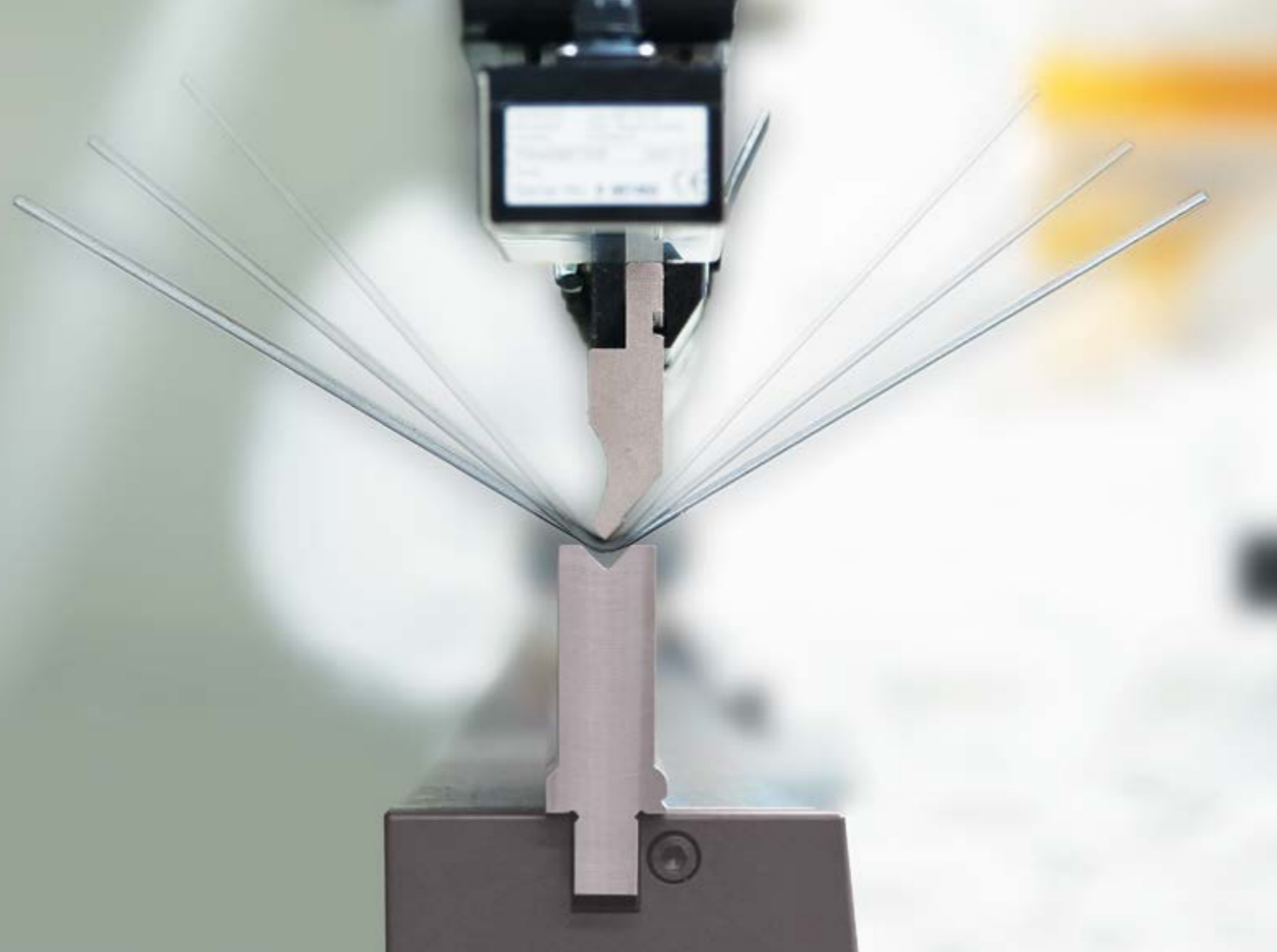
## Highest repeatability advantages;

Evolution series hybrid hydraulic press brakes have the highest repeatability advantage because no heating of the oil keeps oil viscosity constant.

## Hydraulic system in Evolution series:

Hybrid hydraulic press brakes are driven by AC servo motors without the need of proportional directional valves. Having no proportional valves means a greater precision and less maintenance and at the same time no pressure losses occur.





## Technical Features

## Rolleri Tool / Clamping Systems



### Rol-1

With patented balled type upper top tools, the tools can be inserted or removed vertically; ROL-1 clamping system eliminates difficulty of removing tools by sliding along the beam.



### Rol-1 KDS

Double-sided Roll 1 tool clamping system allows tools to be inserted in reverse.



### Rol-1 PN (Pneumatic)

Pneumatic clamping systems; air pressure forces the tools to fasten and centre themselves. An excellent solution for shortening set up time on press brakes.



### Rol-5 System

Standard Promecam type tools can be inserted or removed vertically; ROL-5 clamping system eliminates difficulty of removing tools by sliding along the beam.

TYPE	8,53' - 121	10,17' - 121	10,17' - 187	10,17' - 275	12,34' - 187	12,34' - 275	13,45' - 187	13,45' - 275	14,01' - 187	14,01' - 275
BENDING LENGTH (A) - (inch)	102,4	122,0	122,0	122,0	148,0	148,0	161,4	161,4	168,1	168,1
BENDING POWER (Ton)	121	121	187	275	187	275	187	275	187	275
STANDARD V-DIE OPENING (V)-(inch)	1,97	1,97	1,97	4,72	1,97	4,33	1,97	4,33	1,97	4,33
SHEET METAL THICKNESS (Pm=42kgf/mm²) (t)-(in)	0,24	0,22	0,26	0,47	0,24	0,43	0,23	0,39	0,23	0,39
DISTANCE BETWEEN COLUMNS (B) (in)	86,6	102,4	102,4	102,4	128,0	128,0	141,7	141,7	148,8	148,8
Y RAPID SPEED (inch/s)	7,87	7,87	7,09	5,51	7,09	5,51	7,09	5,51	7,09	5,51
Y WORKING SPEED * (inch/s)	0,47	0,47	0,47	0,43	0,47	0,43	0,47	0,43	0,47	0,43
Y RETURN SPEED (inch/s)	7,48	7,48	7,48	5,31	7,48	5,31	7,48	5,31	7,48	5,31
CROWNING (STANDARD)	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized
TRAVEL IN X AXIS (inch)	31,50	31,50	31,50	31,50	31,50	31,50	31,50	31,50	31,50	31,50
SPEED OF X AXIS (inch/s)	19,69	19,69	19,69	19,69	19,69	19,69	19,69	19,69	19,69	19,69
TRAVEL IN R AXIS (inch)	9,84	9,84	9,84	9,84	9,84	9,84	9,84	9,84	9,84	9,84
SPEED OF R AXIS (inch/s)	13,78	13,78	13,78	13,78	13,78	13,78	13,78	13,78	13,78	13,78
BACKGAUGE FINGER BLOCKS	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.
NUMBER OF SHEET SUPPORT (Sliding front arms)	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.	2 pcs.
OIL CAPACITY (gallons)	2x2,38	2x2,38	2x3,96	2x5,28	2x3,96	2x5,28	2x3,96	2x5,28	2x3,96	2x5,28
STROKE (C) - (inch)	10,83	10,83	10,83	10,83	10,83	10,83	10,83	10,83	10,83	10,83
DAYLIGHT (D) - (inch)	20,87	20,87	21,65	21,65	21,65	21,65	21,65	21,65	21,65	21,65
THROAT DEPTH (E) - (inch)	16,14	16,14	16,14	16,14	16,14	16,14	16,14	16,14	16,14	16,14
TABLE HEIGHT (F) - (inch)	35,43	35,43	35,43	35,43	35,43	35,43	35,43	35,43	35,43	35,43
TABLE WIDTH (G) - (inch)	3,54	3,54	3,54	8,66	3,54	7,87	3,54	7,87	3,54	7,87
LENGTH (L) - (inch)	147,6	167,3	167,3	179,1	192,9	200,8	200,8	202,8	207,9	209,4
HEIGHT(H) - (inch)	110,2	110,2	110,2	114,2	110,2	118,1	112,2	118,1	112,2	118,1
WIDTH (W) - (inch)	76,8	76,8	84,6	92,5	84,6	92,5	84,6	92,5	84,6	88,6
WEIGHT (Ibr)	16538	18302	21168	33516	24476	35501	26681	37265	27563	38588

OPTIONAL										
SPEED OF TRAVEL X1,X2 AXIS (inch/s)	19,69	19,69	19,69	19,69	19,69	19,69	19,69	19,69	19,69	19,69
SPEED OF TRAVEL R1,R2 AXIS (inch/s)	13,78	13,78	13,78	13,78	13,78	13,78	13,78	13,7	13,78	13,78
SPEED OF TRAVEL Z1,Z2 AXIS (inch/s)	39,37	39,37	39,37	39,37	39,37	39,37	39,37	39,37	39,37	39,37

\* Working speed should be max. 0,39 in / sec. at CE certified machines according to the EN12622 norm. Ermaksan reserves the right to make changes on technical specs without prior notice.



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