

FINN-POWER

PUNCHING

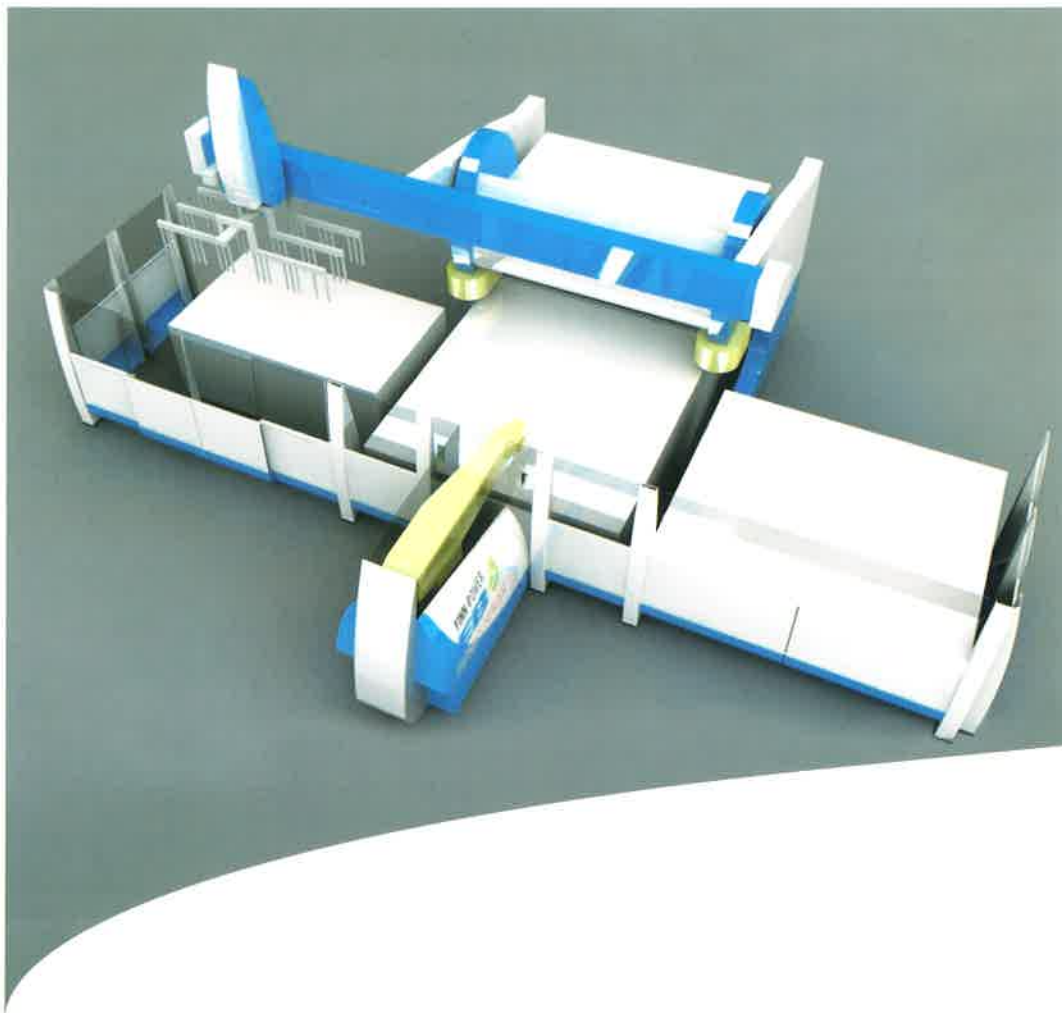
LASER CUTTING

▶ **BENDING**

INTEGRATED PUNCHING & SHEARING

INTEGRATED PUNCHING & LASER CUTTING

FLEXIBLE MANUFACTURING SYSTEMS



FINN-POWER EBe
– A NEW SOLUTION FOR
HIGH-QUALITY BENDING

Servo electric technology for better bending and improved operation economy

Well known for advanced bending technology and innovative servo electric applications, FINN-POWER has combined them in the new automatic bending cell EBe. EBe automates the bending process of high-quality sheet metal components.

The new EBe, featuring FINN-POWER's E-technology, offers outstanding benefits through

- a flexibility for small series production
- excellent bending quality as required by e. g. design products
- low overall operation cost due to
 - low energy consumption (- 50%)
 - low oil maintenance cost
 - very fast operation

Compared with all-hydraulic solutions, truly remarkable savings can be made in your component manufacturing.

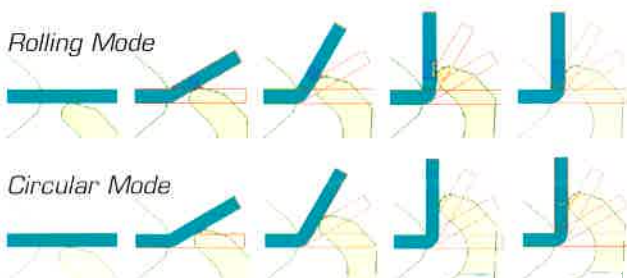
New construction

The new construction features actuation of the bending blade movements (vertical and horizontal) by servo NC-axes instead of hydraulic cylinders. The upper tool movements are made also by another NC servo-axis.

FINN-POWER EBe provides the high bending quality required in demanding applications such as component production for design products. This is achieved through precise control of bending axes, fast and smooth bending, open programmability, and the fact that the construction is immune to variation in thermal conditions.

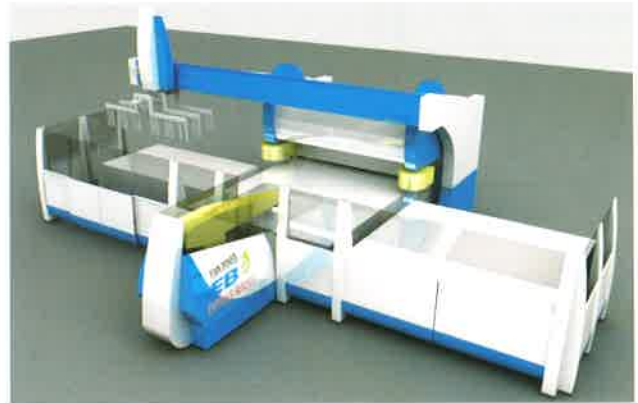
New bending principle – a major breakthrough

For optimum product quality, a new bending principle is now available. With this new principle, when the "rolling mode" is used, there is a wider contact surface between the blade and the sheet but no relative friction. Alternatively, when using a standard "circular mode", the contact point remains constant whereas the contacting point of the blade changes during the bending movement.



New industrial design – easy integration

FINN-POWER EBe has also been designed for the modern manufacturing facility, with carefully thought-out ergonomics through integrated safety covers.



Other features

- 1 Sophisticated software, including graphic parametric programming, and simulation at operator interface
- 2 Off-line programming
- 3 Programmable bending blade crowning
- 4 Reduced vibration
- 5 Very low noise level
- 6 Configurability with all FINN-POWER bending options
- 7 Upper pressure force automatically adjusted according to the material thickness and length
- 8 Automatic recording of bending parameters in material data base
- 9 Environmentally friendly

Technical Data

Max. bending length	2150 mm
Min. length between bends	350 mm
Min. width between bends	160 mm
Sheet length (min... max.)	370... 2450 mm
Sheet width (min... max.)	180... 1500 mm
Power: Average consumption	9.5 kWh
Voltage	400 V (50-60 Hz)
Max. bend height type	200 mm
Max. re-entering bend	55 mm
Max. stack height	220 mm
Max. panel diagonal	3000 mm
Max. material thickness	Fe 37 steel: 2.5 mm Stainless steel: 1.8 mm Aluminum: 3.5 mm
Min. material thickness	0.5 mm
Min. external radius	1.5... 2 x sheet thickness
Bending angle	-135°... +135°
Max. number of bends per side	Unlimited
Angle tolerance	± 0° 25'
Bend dimension tolerance	± 0.15 mm
Bending straightness tolerance	0.25 mm x linear meter
Numerical control	Siemens Sinumerik 840 DNC

Flexibly yours™

FINN-POWER

Finn-Power Oy Tel. + 358 6 428 2111
 P.O. Box 38 Fax + 358 6 428 2244
 FIN-62201 Kauhava www.finn-power.com
 FINLAND