Prima Power

The Bend
The Combi
The Laser
The Punch
The System
The Software

Prima 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, Prima 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 Prima 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 (- 64 %)
  - low oil maintenance cost
  - very fast operation

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

New industrial design – easy integration

Prima Power EBe has also been designed for the modern manufacturing facility, with carefully planned ergonomics through integrated safety covers.

Servo operated blade movements

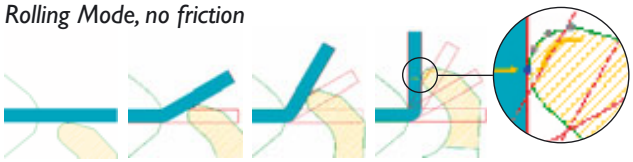
The new construction features actuation of the bending blade movements (vertical and horizontal) by servo NC-axes instead of hydraulic cylinders. The upper tool movements are made also by another NC servo-axis.

Prima 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.

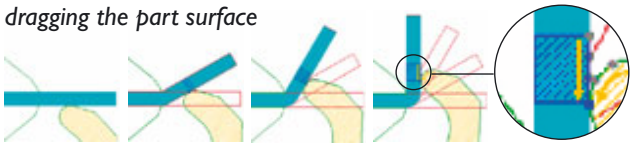
Two operating modes

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.

Rolling Mode, no friction



Circular Mode, the blade is dragging the part surface



Other features

- Sophisticated software, including graphic parametric programming, and simulation at operator interface
- Off-line programming
- Reduced vibration
- Very low noise level
- Configurability with all Prima Power bending options
- Upper pressure force automatically adjusted according to the material thickness and length
- Automatic recording of bending parameters in material data base
- Environmentally friendly Green Means® solution

Technical Data	EBe4		EBe5	EBe6	
Max. bending length	2,250 mm		2,650 mm	3,350 mm	
Min. length between bends *1	350 mm		350 mm	350 mm	
Min. width between bends *1	160 mm		160 mm	160 mm	
Sheet length, min. ... max.	370 ... 2,450 mm		370 ... 2,850 mm	370 ... 3,800 mm	
Sheet width, min. ... max.	180 ... 1,500 mm		180 ... 1,500 mm	180 ... 1,700 mm	
Max. bend height type	200 mm		200 mm	200 mm	
Max. re-entering bend *1	55 mm		55 mm	55 mm	
Max. panel diagonal	3,000 mm		3,000 mm	3,950 mm	
Bending force	32 tons		41 tons	41 tons	
Sheet holding force	52 tons		90 tons	90 tons	
Max. material thickness					
Steel 410 N/m²	2.5 mm / 3.0 mm	for max.	3.2 mm	2.8 mm / 3.2 mm	for max.
Stainless steel 600 N/m²	1.8 mm / 2.0 mm	1,800 mm	2.2 mm	1.8 mm / 2.0 mm	2,750 mm
Aluminum 260 N/m²	3.5 mm / 4.0 mm	of length	4.0 mm	3.0 mm / 4.0 mm	of length
Min. material thickness	0.5 mm		0.5 mm	0.5 mm	
Min. external radius	1.5 ... 2 x sheet thickness		1.5 ... 2 x sheet thickness	1.5 ... 2 x sheet thickness	
Bending angle	-130° ... +130°		-130° ... +130°	-130° ... +130°	
Max. number of bends per side	Unlimited		Unlimited	Unlimited	
Siemens numerical control	Sinumerik 840 D NC		Sinumerik 840 D NC	Sinumerik 840 D NC	
Power: Average consumption	9.5 kWh		13.5 kWh	13.5 kWh	
Voltage	400 V (50-60 Hz)		400 V (50-60 Hz)	400 V (50-60 Hz)	

*1 These values cannot coexist in a single construction.

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