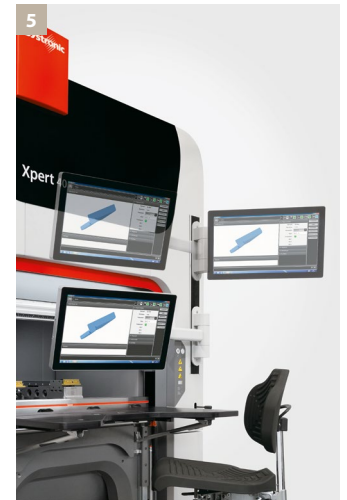# ByBend Star 40/80

**The mobile bending miracle. Compact speed machine for small and medium-sized parts.**

## Customer benefits

- Mobile use: The ByBend Star 40 as well as the ByBend Star 80 can be moved effortlessly to the place of use and are ready for operation in less than 5 minutes

- Compact design: Up to 88.18 US tons of press force and a bending length of 4.92 feet - all this with a footprint of less than 64.58 square feet

- High speed: The compact chassis ensures high dynamics and enables bending speeds of up to 0.98 inch per second in highest bending quality

- Low energy consumption: The energy efficiency is unbeatable - thanks to Dynamic Drive System (DDS), Energy Saver and automatic start-stop function

- Convenient handling: The ergonomic design, the individually adaptable working environment and the intuitive software ensure high operating comfort

1 Maximum process speed
2 Individual adjustable work environment
3 Fast Bend safety system
4 Optical stroke triggering
5 Adjustable monitor







|  | ByBend Star 40 | ByBend Star 80 |
|---|---|---|
| **Tonnage** | 44 US tons | 88 US tons |
| **Bending length** | 40.6 in | 60.2 in |
| **Open height** | 20.3 in | 20.3 in |
| **Standard stroke** | 7.9 in | 7.9 in |
| **Y-approach speed (up to)** | 9.84 inch/s | 9.84 inch/s |
| **Y-working speed (up to)** | 0.98 inch/s | 0.98 inch/s |

# ByBend Star 40/80
## Technical Data

| | ByBend Star 40 | ByBend Star 80 |
|---|---|---|
| **Length** | 60 in | 80.71 in |
| **Width** | 54.53 in | 54.53 in |
| **Height** | 91.93 in | 100 in |
| **Tonnage** | 44 US tons | 88 US tons |
| **Bending length** | 40.6 in | 60.2 in |
| **Standard stroke** | 7.9 in | 7.9 in |
| **Open height** | 20.3 in | 20.3 in |
| **Distance between side frames** | 41.7 in | 61.8 in |
| **Table Width** | 2.4 in | 2.4 in |
| **Max. back gauge range X-axis** | 19.7 in | 19.7 in |
| **X-axis travel** | 11.8 in | 11.8 in |
| **R-axis travel** | 3.9 in | 3.9 in |
| **Z-axis travel** | 37.6 in | 57.3 in |
| **Z-axis speed** | 4,724 in/min | 4,724 in/min |
| **Y-approach speed (up to)** | 10.83 inch/s | 10.83 inch/s |
| **Y-working speed (up to)** | 1.18 inch/s | 1.18 inch/s |
| **Accuracy Y-axis** | 0.00016 in | 0.00016 in |
| **Oil capacity** | 26 gal | 53 gal |
| **Main motor power** | 7.5 kW | 15 kW |
| **Weight** | 8,818 lbs | 14,330 lbs |

The right to make changes to dimensions, construction, and equipment is reserved. ISO-9001-certified.

The technical data can vary in the different countries, according to local security rules and configuration of the machine.

# Most important options
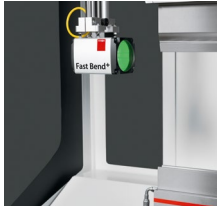
### Fast Bend+
Saves 20 percent time in comparison to conventional safety systems
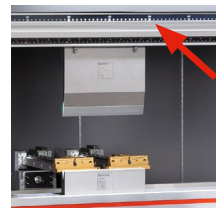
### LAMS
Measures and corrects the angle during the bending process

### Energy Saver
Reduces machine energy consumption by up to 60 percent. The machine creates less noise and less heat.

### Optical bend guiding system
The worldwide fastest bending process control leads the user to the perfect part quickly and safely
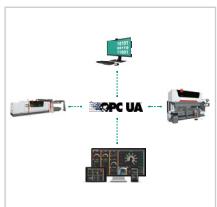
### Detachable Bending line laser
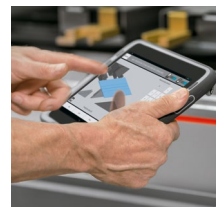Position bent parts quickly and easily

### LED workspace lighting
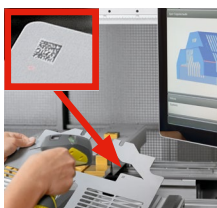Illuminates the workspace perfectly and uses a minimum amount of energy

### OPC Interface
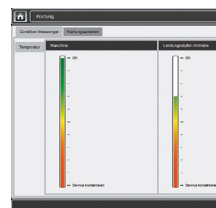Enables machine and operational data evaluation

### Tablet Control
Bend process corrections are easily made using the tablet

### PartID (part identification)
Identifies manufactured parts

### Condition Messenger
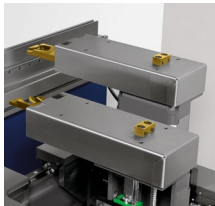Preventive function check of the machine

### ByCockpit
Digital real-time information for sheet metal parts production. The ByCockpit keeps you up to date with selected key indicators on the machine performance, manufacturing efficiency, and material stock.

### Optical Tool Detection System
Camera based tool set up verification system

### Flexible back gauge systems
Double the axis speed compared to the standard backgauges possible

### Hydraulic bending aids
Makes bending large, heavy, and long-sided parts easier. Material-friendly handling of sensitive materials such as stainless steel

### Hydraulic quick-clamping
The automatic clamping of upper tools shortens set-up time by more than 20 percent
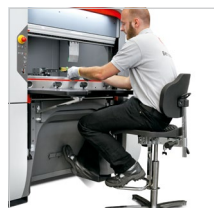
### Optical stroke triggering
Triggers the stroke of the pressbrake with a simple foot movement

### Tandem operation
Maximum flexibility for processing small to extra-long bend parts

### Robot interface
Allows to connect robots from various manufacturers

| | Customer benefits | | | | Pressbrake | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Increase efficiency | Reduce costs | Simplify processes | Be informed | Xpert 40 + 80 | Xpert | Xpert Pro | Xact Smart | Xpress |
| Fast Bend+ | ■ | ■ | ■ | ■ | | ▲ | ▲ | | |
| Fast Bend | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Fast Bend S | ■ | ■ | ■ | ■ | | | | ▲ | ▲ |
| Fast Bend with angle measurement | ■ | ■ | ■ | ■ | ▲ | | | | |
| LAMS | ■ | ■ | ■ | ■ | | ▲ | ▲ | | |
| Dynamic Crowing | ■ | ■ | ■ | | | ■ | ■ | ▲ | |
| Energy Saver | | ■ | | | ■ | ▲ | ■ | ▲ | |
| Optical bend guiding system | ■ | | ■ | ■ | ▲ | ▲ | ▲ | | |
| Optical foot switch | ■ | | ■ | | ▲ | | | | |
| Tablet Control | ■ | | ■ | | ▲ | ▲ | ▲ | | |
| PartID (part identification) | ■ | ■ | ■ | | ▲ | ▲ | ▲ | ▲ | ▲ |
| Bending line laser | ■ | | ■ | | ▲ | ▲ | ▲ | ▲ | ▲ |
| LED workspace lighting | ■ | | ■ | | ▲ | ▲ | ▲ | ▲ | |
| OPC Interface | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ▲ | ▲ |
| Condition Messenger | ■ | | | ■ | ■ | ■ | ■ | | |
| Observer | ■ | ■ | ■ | ■ | ▲ | ▲ | ▲ | ▲ | ▲ |
| Flexible back gauge systems | ■ | | ■ | | ▲ | ▲ | ▲ | ▲ | ▲ |
| Hydraulic bending aids | ■ | ■ | ■ | | | ▲ | ▲ | ▲ | |
| Hydraulic quick-clamping | ■ | ■ | ■ | | ▲ | ▲ | ▲ | ▲ | |
| Tool opening on a control panel | ■ | | | | | ▲ | ▲ | | |
| Tandem operation | | ■ | | | | ▲ | ▲ | ▲ | |
| Robot interface | | ■ | | | ▲ | ▲ | ▲ | ▲ | |
| Increased open height, stroke, and throat | ■ | | ■ | | | ▲ | ▲ | ▲ | |
| Bar code scanner | ■ | | | | ▲ | ▲ | ▲ | | ▲ |
| Remote diagnostics | ■ | | | | ▲ | ▲ | ▲ | ▲ | ▲ |
| Optical Tool Detection System | ■ | | ■ | ■ | ▲ | | | | |
| Mechanical crowing system | ■ | | ■ | ■ | | | | | ▲ |

■ Standard
▲ Option

# Bending tools

**Use the right tools to achieve perfect bending results when air bending, embossing, and 3-point bending. Original tools from Bystronic are capable of unleashing the full potential of the machine's features, in order to ensure that your party are always bent with utmost precision.**

**Customer benefits**

- The quality of our tools is specifically designed and tested for Bystronic press brakes and your applications

- Bystronic bending tools (available with a variety of clamping types) are flexible and versatile, in order to cover your applications

- Original tool plus bending data: With every bending tool, you also receive the relevant import data for your press brake's software

- For particularly challenging applications, our tool specialists will be glad to advise and support you with the design of customized solutions

- The special production process and the high-strength quenched and tempered steel of our tools guarantee a long service life even under tough conditions

- The right tool for you product: You show us the product you want to manufacture, we recommend the suitable bending tool setup

- Bystronic bending tools can also be used with third-party press brakes. For this purpose, Bystronic offers its tools with various clamping styles