

# Bending and Edging Machine Model BV



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Our bending and edging machines in the BV series are semi-automatic tools to satisfy the highest demands on quality, edge looks and flexibility in the smallest of spaces. This line of machines is based on a sturdy welded construction where all of the machine's components are matched to the relevant load case, thus ensuring a top quality bending and edging process, also called welding by bending with heating element. The high quality standard of **WEGENER** machines is your guarantee for maximum precision, reliability and longevity.

One new feature is the standard user interface based on a 7" full graphics touch screen, which works in combination with a modern Siemens control system S7-1200-series and whose display is based on symbols. The clearly-structured and easily-understandable menu guidance system therefore does not rely on a user language. All process parameters such as heating and cooling times as well as the temperatures of both heating elements can be entered individually via the touch screen.

The bending angle can be set via the control of the machine and the bending line correction is set manually. The process used here is a mixture of a bending and a butt welding process and is ideal for processing semi-crystalline materials. The upper heating element is moved into the material to be bent during the fusing process. The bending beam performs the actual bending. This results in optically perfect bending zone surfaces. Even a closed channel cross section can be bent, and its removal is facilitated by the lateral quick-release fastener on the clamping beam. The upper v-shaped heating element can be replaced by an optional, flat



S7-1200 7" Simatic



Optional travel limitation for the upper heated tool

version to bend amorphous materials. A special feature is the optional limitation of the upper and lower heating element's travel. This option in combination with the upper flat heating element also makes the machine suitable to produce bends by means of radiant heating of the bending zone. This allows transparent materials to be bent without any contact marks of the heated tools.

| Technical Data   | BV 206                           | BV 306                           |
|--|----------------------------------|----------------------------------|
| Machine length (mm):   | 3,400                            | 4,400                            |
| Machine width (mm):  | 1,100 (2,000 with stop position) | 1,100 (2,000 with stop position) |
| Machine height (mm):   | 1,700                            | 1,700                            |
| Total weight approx. (kg):                                       | 1,150                            | 1,500                            |
| Max. working width (mm):   | 2,050                            | 3,050                            |
| Sheet thickness (mm):  | 2 to 20                          | 2 to 20                          |
| Min. bending angle:  | 5°                               | 5°                               |
| Max. bending angle:  | 95°                              | 95°                              |
| Min. channel cross section (mm):                                 | 250 x 250                        | 250 x 250                        |
| Min. remaining clamping length (mm) (30 mm clamped):             | 60                               | 60                               |
| Power supply:  | 230/400 V<br>3/N/PE 50/60Hz      | 230/400 V<br>3/N/PE 50/60 Hz     |
| Power consumption (kW):  | 4.5                              | 6.5                              |
| Compressed air connection (bar) min. - max.:                     | 8 - 10                           | 8 - 10                           |
| Clamping force (at 8 bar in kN):                                 | 12                               | 18                               |
| Clamping areas each side:  | 1                                | 1                                |
| Upper heating element Teflon coated, Tmax= 260 °C (W x H in mm): | 30 x 40, 86°                     | 30 x 40, 86°                     |
| Lower heating element Teflon coated, Tmax= 260 °C (W x H in mm): | 25 x 40, flat                    | 25 x 40, flat                    |

## Features

- V-shaped upper heating element with optimised flank angle to produce 90° bends in PE-HD and PP
- Lower heating element in flat design to heat up the rear of the panel or board
- Separate temperature control for the upper and lower heating element
- Heating and bending times controlled by the Siemens PLC control system
- Clamping beam with clamping feet to clamp the panels or boards
- Infinitely variable adjustment of the angle via the machine control from 5° to 95°
- Mechanical bending line correction
- Quick-release fastener for the easy removal of closed profiles
- User interface with symbols / does not rely on user language
- Paint: blue / silver / anthracite

## Options

- Contact heating element 20 x 40 mm, flat, to process PVC, PC-ABS, PMMA
- Stop position with scale to adjust the bending leg length between 250 mm and 1,100 mm
- Travel limit for upper heating element; to heat the upper side of panels via radiant heat; only in combination with contact heating element 20 x 40 mm, flat
- Travel limit for lower heating element; to heat the lower side of panels via radiant heat
- Special energy supply
- Special paintwork



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