

PFAFF[®] Industrial

Seamsonic 8310/8312

Ultrasonic welding machine for
continuous welding of flexible thermo-
plastic materials and nonwovens



PFAFF

8310/8312

Features:

- All parameters controlled electronically (power, amplitude, speed and pressure)
- The seam distance and working cycles can be programmed at the Seamsonic
- 100% reproducibility of the welding process
- Most of thermoplastic sheets, laminates, textiles and non-wovens are weldable
- Equipped with differential feed; separate drive for sonotrode and anvil wheel; that means smooth, non-distorted seams or the possibility of adding a some fullness
- Process reliability through monitoring of welding parameters with integrated device for constant performance (so that reliable processing is possible even when sewing over cross seams)
- High production speed
- Easy welding of small radii and curves
- High wear comfort with lingerie items due to smooth Seam
- Smooth and even seams with standard or custom made anvil wheels
- No start/stop – marks

Programmable welding with PFAFF 8310/8312

For the first time the Seamsonic ultrasonic welding machine uniquely combines all the physical advantages of ultrasonic welding with the whole range of technological sewing experience. On the PFAFF 8310/8312 Seamsonic the workpiece is held between the sonotrode and the anvil wheel and welded continuously under pressure. When welding continuously by the ultrasonic method, the material to be welded will be subjected to rapid changing pressure vibrations. The heat develops because of molecular vibrations beneath the material surface, for thin materials within the immediate vicinity of the actual weld.

Versions:



PFAFF 8310-041
Top sonotrode, feed-off-the-arm version



PFAFF 8310-042
Bottom sonotrode, flat-bed version



PFAFF 83 10 CS dual
New double wheel solution - flatbed-version = simultaneous cutting and welding



PFAFF 83 12 CS
One wheel solution-machine - flatbed-version = cut edge and welded





Applications for the PFAFF 8310/8312

Ultrasonic welding with the Seamsonic is a modern, innovative and economic alternative and complementary to conventional sewing technology. If assembling of laminates, clothing fabrics with high share of polymer and technical nonwovens is required and in particular to get, the use of the Seamsonic is the first choice.

Technical section:

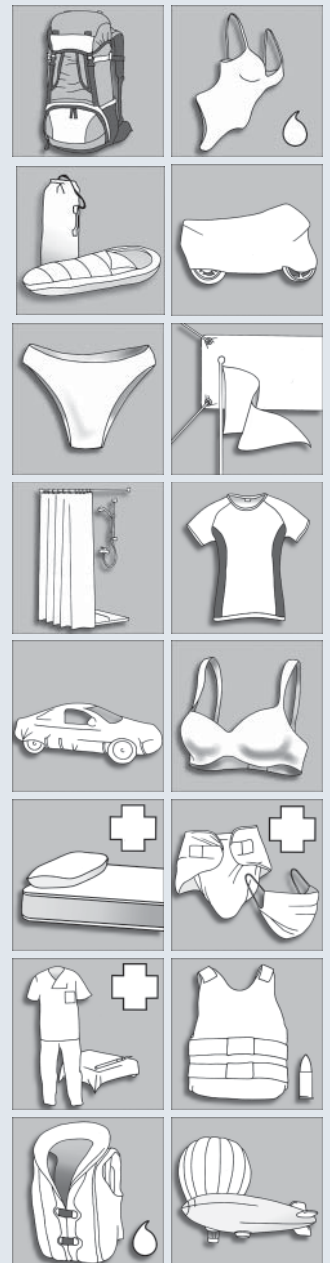
Filter bags, health care articles, medical mattresses and pillows, needle felts, operations sheets, foils, bullet proof vests, blinds and awnings, pleated filter, shower curtains, spacer fabrics, seat covers, MBR-modules and many more

Garment section:

Outdoor garment, Tyvek protective clothing, bras, lingerie, medical garment & drapes, Softshell a, sport garments, clean-room garments and many more

Automotive section:

Vehicle interior and insulation item, Protective car covers, blinds, curtains and many more



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Technical data:

- Digital PLC-control
- Operated through touch screen
- Functions: manual or automatic operation with speed regulation via foot pedal, amplitude from 50 – 100 %, start delay for ultrasonic generator and motor, stop delay for speed, automatic reverse, tacking function

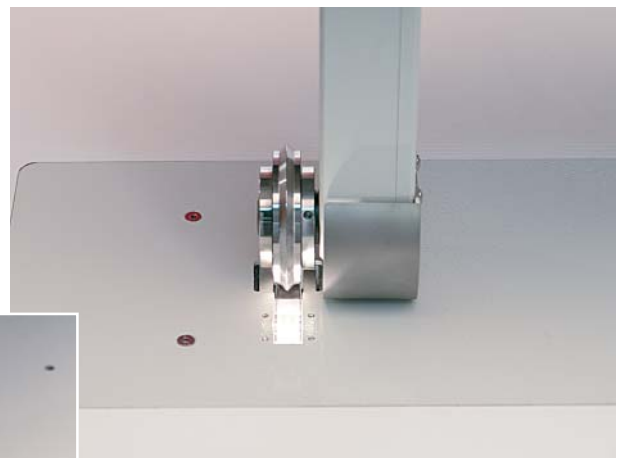
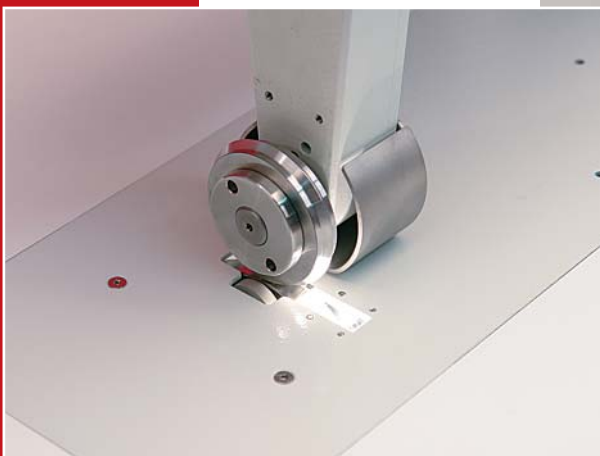
Available optional: with free arm, feed-off-the-arm for overlap seams and tubes, as well as with post beds (modules can be interchanged) and as a flat bed version. (The types 8310 CS dual und 8312 CS will be deliver only as flat-bed-version.)

Ultrasound unit:

- welding power constant control
- Inaudible operating frequency of 35 KHz
- Process linked automatic amplitude stabilization and frequency correction
- Automatic tuning of sonotrode before and during welding
- steel-sonotrode

Optional accessories:

- Custom-made anvil wheels, milled or engraved, cutting wheels, guide aids for overlap and peeling seams, hemmers and binders.
- Material puller with separate left and right side switching
- Automatic tuning of sonotrode before and during welding
- Puller-aggregate for better transport of heavy material or long material-sheets



Cut & Seal

As an individual application, or combined as double-wheel-solution.

The 8312 CS and the 8310 CS dual combine the physical operations of the cutting direct welding by ultrasound and dge sealing.

PFAFF 8312 CS

The proved single-wheel-solution was optimized by the use of steal-sonotrode. This will reduce wear and associated costs greatly. For our customers the fine C&S-seam with its high strength is the main argument to buy this class of machines.

Main advantages are:

- Two manufacturing processes in one flow (Cut & Seal)
- Minimum seam width (micro seam) at high firmness
- High wearing comfort of welded materials
- Flat, not aplyed seams after taping with PFAFF 8303 or PFAFF 8330



PFAFF 8310 CS dual

The newly developed double-wheel-solution is a unique additional feature of the 8312 CS. Different requirements from the automotive and clothing industries, as well as the filter-production gave the impulse for this. The exact distance between the cut edge and the welded seam provide maximum process control. The 8310 CS dual ensures optimum edge-sealing with simultaneous welding.

Main advantages are:

- All the advantages listed at the PFAFF 8312 CS
- World premiere: welding machine with a real edge-cut seal & simultaneous seal
- Differently shaped anvil-wheels provide optimal seam-quality
- The pressure of both wheels are adjusted separately
- Distance of the edge to of the weld-seam is always equal to 100%



Technical Data:

Welding speed:

0.5 - 20.0 m/min.
(standard - 10m/min)

Seam widths:

0.5 – 10 mm

Throat:

400 mm

Material thickness:

> 50 µ

Gap adjustment:

0 – 2 mm, fine adjustment
1/50 mm

Welding pressure:

0 – 800 N (5 bar)

Power supply:

230 V, 50/60 cycles, 16 Amp.

Consumption:

4 Amp., 800 VA

Compressed air:

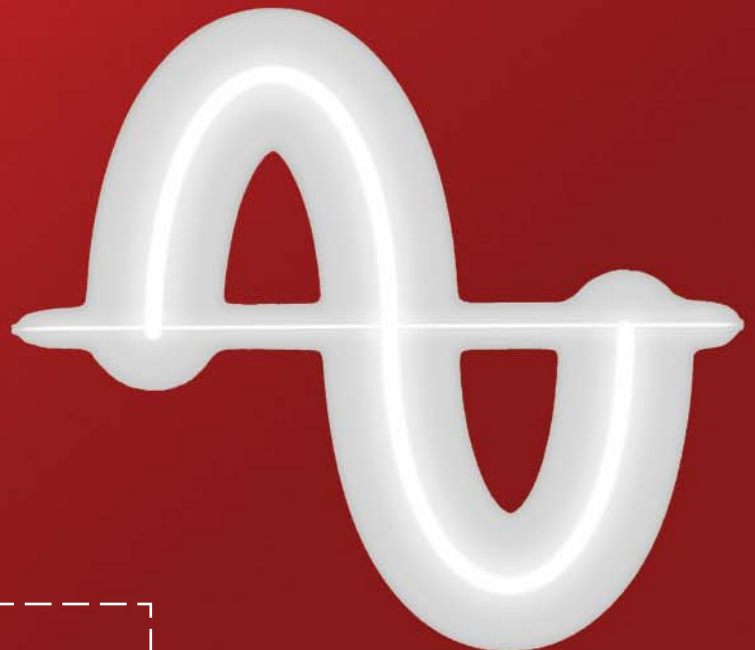
6 bar, 10 litres/min.

Weight:

gross 230 kg, net 182 kg
depending of the version

Measures:

121 x 67 x 135 cm packed
depending on the version



by PFAFF
**Made
in Germany**

Application support: +49-631/200-3426

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Internet:

www.pfaff-industrial.com/welding

The right to alter the design, weight
and dimensions is reserved.

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