# BelSonic SeamStar BS 2060

***Continuous ultrasonic sewing machine for cutting and/or welding of thermoplastic fabrics & films***


The *BelSonic SeamStar BS 2060* seals, sews, cuts and/or welds synthetic fabrics without using thread, glue or any other consumables.
Looking like a traditional sewing machine, the *BelSonic SeamStar BS 2060* however has more clearance between the pattern wheel above and the sonotrode or horn underneath, making it ideal for hand-guided applications with tight tolerances, or when working around curves.
Ultrasonic welding with the *BelSonic SeamStar BS 2060* eliminates the use of needle and thread and all related problems.
With a production speed up to 4 times faster than a sewing machine, the *BelSonic SeamStar BS 2060* is highly cost-effective and provides a secure payback.

The *BelSonic SeamStar BS 2060* is designed for specialised applications in textile, apparel and lingerie and engineered fabrics industries. A variety of interchangeable pattern wheels or rollers are available for continuous welding, cutting and sealing, embossing, slitting, etc. of synthetic fabrics. Also custom designed pattern wheels can be developed for your specific needs.

As a special feature the *BelSonic SeamStar BS 2060* can be used to fuse adhesive films in between two layers of non thermoplastic material. This will allow for a perfect seal even with cellulose or other non-synthetic fabrics.

***control panel easily accessible***

**Your advantages**

- Welds, cuts & seals, trims or embosses without thread, glue or other consumables
- Quick and efficient : works up to four times faster than a traditional sewing machine
- Can be used with horns of 25 or 50 mm diameter, depending on the increased acces for hand-guided operations that is required
- Interchangeable pattern wheels or roller that have a diameter of 60 mm
- Also available as a modular unit for integration in production lines
- Provides a complete barrier seam for example for medical apparel
- Continuous machine requiring only one pass through the machine

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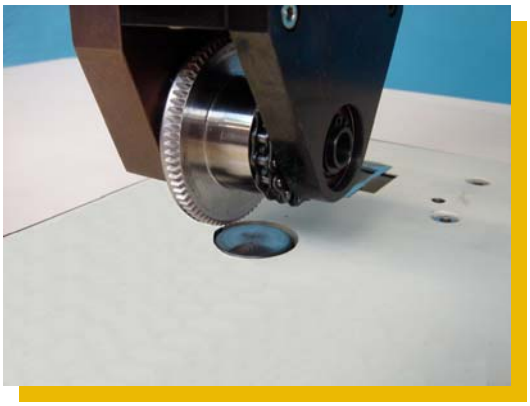
- Cuts and seals simultaneously, thus eliminating fraying or unravelling of bonded edges and seams
- Requires minimal operator training

## Applications

The *BelSonic SeamStar BS 2060* offers a production alternative for cutting and/or welding of synthetic fabrics. Materials best suited for ultrasonic bonding are made of 100% synthetic or thermoplastic fibres. Blends with a maximum of 40% natural fibres can possibly also be used.

The *BelSonic SeamStar BS 2060* can be used with following materials : polyester, polypropylene, nylon, acrylics, PU coated fabrics, etc. These materials can be (non-)woven, needle felts, knits, films and laminates.

Product application will include : Filtration, Body armor, Lingerie, Disposable garments , Carpets, Belts, Technical textiles, Packaging, Isolation (airplane covers, construction), Roller blinds, etc.



## Ultrasonic Energy

Ultrasonic bonding is accomplished by channelling high-frequency vibrations to the fabric. As synthetic or nonwoven material passes between the ultrasonic horn or sonotrode and the pattern wheel or roller, the vibrations are directed into the fabric where they create a rapid heat build-up. This heat causes the material's synthetic fibres to melt and fuse, creating bonded seams that will not fray or unravel and provide a full barrier.

*left / right movement of the C-frame*
*only without puller*

## Technical Features

| | |
|---|---|
| Frequency: | 20 kHz |
| Size: | 1200 mm wide x 550 mm long x 800 mm high |
| Weight: | 135 kg |
| Tension: | 220 V |
| Tuning: | automatic |
| Control panel: | on top of the table |
| Puller wheel (optional): | behind the horn |
| Max. roller width: | 25 mm |
| Max. horn surface diam.: | BS 2060 S: 25 mm (as on pictures)<br>BS 2060 L: 50 mm |
| C-frame movement: | C frame can be moved 10mm in right or left direction |
| Air pressure: | 6 bar maximum |

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