

BelSonic SeamStar BS 2060 Z

Continuous ultrasonic sewing machine with PLC, allowing specific functions



The *BelSonic SeamStar BS 2060 Z* 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 Z* 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 Z* 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 Z* is highly cost-effective and provides a secure payback.

The *BelSonic SeamStar BS 2060 Z* 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.

The quality of the seams of the *BelSonic SeamStar BS 2060 Z* is constant with European and international regulations regarding medical standards for barriers.

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 or gluing machine
- Can be used with horns of 25 or 50 mm diameter, depending on the increased access 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
- Cuts and seals simultaneously, thus eliminating fraying or unravelling of bonded edges and seams
- Requires minimal operator training



PLC

PLC

The PLC allows for different functions :

- Automatic return to the original start position of the pattern wheel
- Adjustment of the original start position
- Adjustable cut / weld distances
- Operating in free or distance mode



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.

Technical Features

Frequency:	20 kHz
Size:	1200 mm wide x 550 mm long x 800 mm high
Weight:	135 kg
Tension:	220 V / 12 A
Tuning:	automatic
Control panel:	on top of the table
Puller wheels:	left and right of the horn
Roller width:	10 or 50 mm
Air pressure:	6 bar maximum
Puller (option) :	behind the horn
Normal speed :	20 m per min.
Speed kit:	40 m per min.