General Description

Sonobond’s SeamMaster Ultrasonic Bonders cleanly cut and seal the edge of synthetic films and fabrics in just one pass without using consumables such as thread or adhesives. Fraying and unraveling are totally eliminated along the sealed edge as a double layer of fabric passes under the SeamMaster to automatically join the two layers as they are slit and sealed. These cutter/sealers operate at speeds much faster than sewing or adhesive machines. Yet they require minimal retraining of sewing machine operators.

The new SM10 is one of several ultrasonic film and fabric bonders from Sonobond. This table model unit is very cost-effective and provides a 16” x 20” working area for a variety of patterns up to 10mm wide. The SM10 operates at speeds up to 60 feet per minute and has the pattern wheel located in the table for easy interchange.

Features and Benefits

- Seams, cuts, or trims synthetic fabrics and films without thread, adhesives, or other consumables
- Eliminates fraying and beading
- Much faster than sewing or adhesive machines
- Designed for table mounting
- 16” x 20” working area
- Simple stitching or cutting with patterns up to 10mm wide
- Operates at speeds up to 60 feet per minute
- Easy to operate with only minimal training required
Applications

The SM10 and other Sonobond SeamMaster units provide unique advantages for cutting and sealing nonwoven materials for industrial and commercial filtration applications, as well as medical disposables. They are ideal for the assembly of filters, medical disposables and medical garments, such as those which must be constructed with fused seams to reduce the risk of contamination to the wearer. Sonobond fabric bonding machines produce hemming, lacing, embossing, stitching, and printing by using interchangeable roller patterns. They can accommodate the bulky material sometimes used for filtration devices. They are also ideal for hand-guided operations, such as working around curves.

Theory of Operation

Ultrasonic bonding is accomplished by channeling high-frequency vibrations to the fabric. As synthetic or nonwoven material passes between an ultrasonic unit’s horn and anvil, the vibrations are directed into the fabric where they create a rapid heat buildup. This heat causes the material’s synthetic fibers to melt and fuse, creating bonded seams that will not fray or unravel.

Welder Head Features

Pattern Wheel: 0.40" (10mm) wide
Speed adjustable to 60 ft/minute
Wheel alignment adjustable
Air pressure regulated

Welder Size: 24 1/2 inches wide x 16 inches deep x 27 inches high
Welder Weight: 111 lbs

Power Supply Features

Frequency: 20 kHz
Services: 110 or 220 volt, 12 amp
Tuning: Automatic
Adjustable output power
Size: 6 inches wide x 22 inches long x 16 inches high
Weight: 31 lbs

Specifications are provided for information only and are believed to be accurate. However, no responsibility is assumed by Sonobond Ultrasonics for their use. Ongoing product development and improvement may cause changes without notice.