General Description

The Sonobond SeamMaster and LaceMaster Series provide rapid sealing, sewing, and trimming of synthetic fabrics without thread, glue, or other consumables. Although similar in appearance and operation to traditional sewing machines, these ultrasonic bonders eliminate all needle and thread breakage, thread color changeover, and thread unravelling problems. They are also more cost-effective than other sewing, heat sealing, or adhesive machines — and up to four times faster.

Sonobond’s SeamMaster/LaceMaster Series is specially designed for the textile and apparel industries. In addition to their “sewing” function, SeamMaster bonding machines can trim the fabric while easy-to-change pattern wheels simultaneously simulate a wide range of stitch patterns. Seams bonded by Sonobond’s SeamMaster are so perfectly fused and sealed that they can be used to help comply with OSHA’s regulations for barrier seams.

The Sonobond LaceMaster fabric decorating machine is designed specifically to produce high-quality, low-cost lace and trim on both woven and nonwoven materials. It features over 500 optional and interchangeable lace patterns for slitting, lacing, embossing, and tacking. Both the SeamMaster and the LaceMaster perform their functions in one quick pass that saves time, labor, and material costs.

Features and Benefits

• Seams, trims, and seals without thread, glue, or other consumables
• Quick and efficient. Performs four times faster than conventional sewing machines and ten times faster than adhesive methods
• Requires only one pass through the machine
• Virtually eliminates fraying or unraveling of bonded edges and seams
• More efficient than sewing, heat sealing, or glue machines
• Features a wide selection of interchangeable roller patterns for hemming, lacing, embossing, and printing
• Requires minimal training to operate
• Combines several labor-intensive operations into one — saving time and money
• Helps meet OSHA regulations for barrier seams in medical apparel
• Exclusive SoftSeam™ process produces seams that are soft and smooth against the skin
Applications

The Sonobond SeamMaster and LaceMaster offer a diverse production alternative for joining, cutting, patterning, and quilting synthetic fabrics. Materials best suited for ultrasonic bonding are 100 percent synthetic or blends with up to 40 percent natural fibers.

Materials that can be used on the SeamMaster Series of ultrasonic bonders are polypropylene, polyester, nylon, acrylics, vinyls, PVC, and thermoplastic urethanes that are constructed as wovens, nonwovens, knits, films, and laminates. Products include draperies, garments, blankets, tents and awnings, athletic accessories, automotive seating, banners, flags, medical apparel, safety products, netting, trims, and soft luggage.

Materials most suited for use with the LaceMaster bonding machine include lycra spandex, tricot, polyester, nylon, acrylics, vinyls, PVC, and thermoplastic urethanes — constructed as wovens, nonwovens, knits, films, laminates, and coatings. Applications for the LaceMaster include: hemming and lacing of blouses, dresses, lingerie, bathing suits, tablecloths, and pillows; embossing of packaging, apparel, ribbons, and trim edges; and printing of fabric trim, edging, and special effects.

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.

Specifications

Frequency: 20Khz
Size: 48 inches wide x 21 inches long x 30 inches high
Weight: 265 lbs
Services: 110 or 220 volt; 12 amp.
Tuning: Automatic
Max Pattern Width: See below
Standard Speed: 60 ft per min
Optional Speed Kit: 120 ft per min

Ordering Information

LM920 Up to 2-inch pattern wheel width
LM720 Up to 2 7/8-inch pattern wheel width
SM86 Up to 1-inch pattern wheel width

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.