

# Ultrasonic HighTech Equipment For Textile Industry

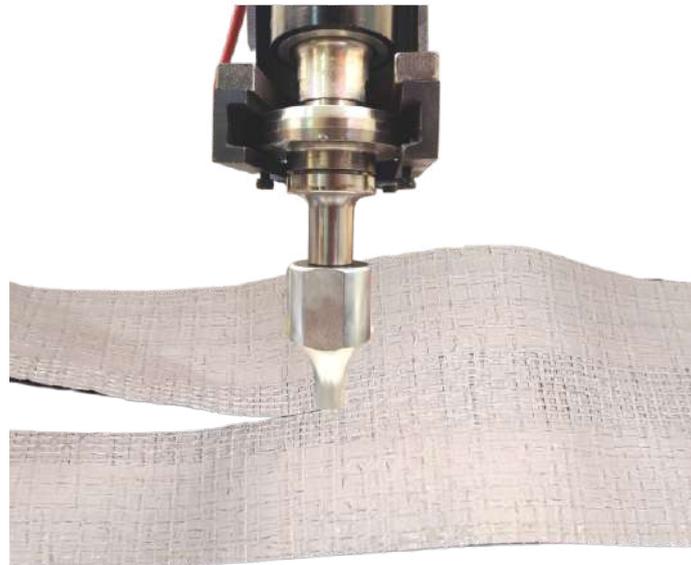


Ultrasonic energy has found extensive use in cutting of textiles, woven sacks/plastics etc and their downstream processing. Many of these uses are based on the ability to use ultrasonic energy to induce heat and pressure by vibratory action. The use of ultrasonic Cut n Seal technology makes manufacturing of non-wovens and wovens, economical and process-safe and our customers from the medical, packaging, fabrics and engineering industry value it tremendously.



## Ultrasonic Textile Slitters

Ultrasonic cutting and sealing process is mostly used in the field of textiles on circular loom. The principal advantage of the ultrasonic seal and cut method is that the edge of the textile material, while being cut simultaneously, is sealed by the dissipation of ultrasonic energy, thereby preventing the presence of a frayed edge or the unraveling of threads, no discoloration of fabric and very strong, smooth, clean and long lasting edges without over thickness with low energy consumption. The model is mainly used for cutting of woven sacks, HDPE or PP circular woven fabric, etc.



## Specifications TCS 500L/ 1000L

Ultrasonic Generator	UTG - 500W/ UTG - 1000W
Ultrasonic Converter	36 kHz/ UC 40/ 33
Horn	Special Steel Alloy/ Titanium (Based on applicaton)
Working GSM	20-150/ 150-270
Cutting blade	Industrial Grade, Ceramic (Based on application)
Booster with ring	Titanium (Based on application)
Sealing & Welding area	15 mm, 20 mm (as per requirment)

## Ultrasonic Textile Slitters

Ultrasonic cutting is mostly used in cutting of Synthetic (Polyester, Nylon) fabric cutting, saree cutting, BOPP film sealing. The technology has tremendous advantages over other cutting methods such as cutting without pressure prevents any deformation of the material, high quality of the cut is achieved, no smudging or breaking of individual layers, reduced processing time and no heat input into the product i.e the tool remains cold.



## Specifications TCX 500/ 1000/ 1500

Ultrasonic Generator	UTG - 500W/ UTG - 1000W/ UTG - 1500W
Ultrasonic Converter	36 kHz/ UC 40/ 33, 36 kHz/ UC 40/33, 20 kHz/ UC-50/50-4
Horn	Steel or Titanium
Working GSM	50/ 50-270/ 270-500
MS/ Steel Roller	Yes
Booster with ring	Yes (Titanium)
Spring loaded attachment	Yes
Weld area (Dia. in mm)	5 mm/ 5 to 20 mm/ 20 to 30 mm (max)

## Ultrasonic Continuous Sealers

The Ultrasonic Sealing system is designed with AC induction motor, roller, electronic control & working table and is being developed for sealing of Fabrics, Plastic Films, Laminated paper, Non-Woven Fabrics, Filters, etc. It is a versatile machine being offered in range of frequency and power.

Typical applications for the systems include protective garments, disposable hospital gowns, shoe covers, face masks, infants nursery garments, filters, bags, curtains, sails and web splicing. Sealed edges and seams with no stitch holes prevent penetration of chemicals, liquids, bloodborne, pathogens or particulate thus providing a benefit over conventional stitching methods.



## Ultrasonic Stitching Machine

### Specifications USM 1000L/ 1000H

Ultrasonic Generator	SG-40-36-1000W/ SG-22-1000W
Ultrasonic Converter	36 kHz/ UC 40/33, 20 kHz/ UC 50/44
Horn	Steel or Titanium
Working GSM	50-140/ Upto 300
MS Roller anvil for stitching	Yes
Booster with ring	Titanium
Foot Switch	10 Amp/ 250 V
Motor	AC, 90 W
Weld dia.	45 mm, 50 mm(as per req.)



## Rotary Stitching Machine

Rotary ultrasonic stitching machine applies a disk-like sonotrode to work together with roller for stitching, system transmits ultrasonic energy at edge surface of sonotrode instead of at the terminal surface. This system can perform two manufacturing processes in one flow i.e (Cut & Seal). Major applications include filter bags, healthcare 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, outdoor garment, medical garment & drapes, sport garments, vehicle interior and insulation item, protective car covers, sunshades and many more.



### Technical Specifications USM Rotary 1000X

Ultrasonic Generator	AWG-35-1000W
Ultrasonic Converter	35 kHz/ UC 1235
Horn	Titanium
Working GSM	Upto 200
Rotary motor for sealing head	Yes
PLC+HMI (For system controls)	Siemens
Weld area (Width in mm)	6 mm (max)
Proportional value	ELS

## Expertise Ultrasonic Solutions

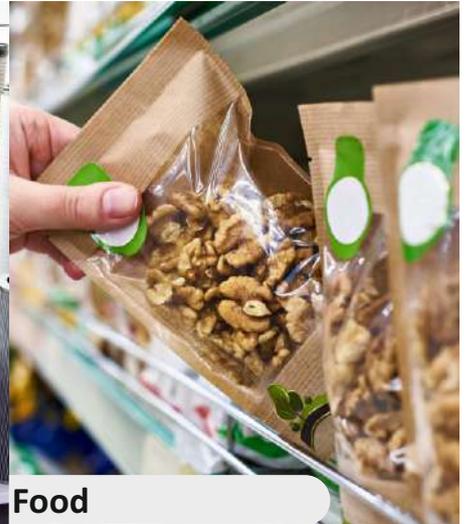
We have successfully been catering to the needs of various industries.



Clothing



Filtration



Food



GeoTextile



Hygiene



NonWoven



Medical



Fibc/Jumbo Bags



WovenSack

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