



SONIMAT

Empowering Technologies

MANUAL ULTRASONIC COMPOSITE CUTTING & WELDING EQUIPMENT

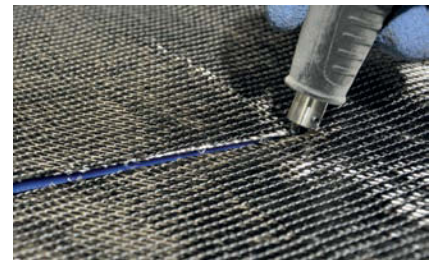


ULTRASONIC CUTTING

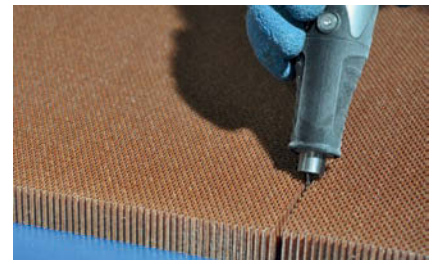
Our ultrasonic portable system (SSP) allows to cut dry fibers, prepreg material and honeycomb core up to 25 mm thick. It uses innovative ultrasonic technology, fully developed by SONIMAT for 25 years.

Advantages

- No fraying
- Cutting effort reduced
- Increased blade life-time
- Cauterization (Composites TP)



Cutting of dry fiber carbon with a single ply blade



Cutting of honeycomb core with a 25mm blade

Different blades for a wide range of applications

8 mm blade		Suitable for most cutting applications Prepregs, semi-polymerised and dry fibers composite
25 mm blade		Suitable for thick materials Prepregs, semi-polymerised and dry fibers composite Monolithic or sandwich structures 90° bevelled cut
Single ply blade		Suitable for single ply fabrics and tapes Highly deformable fabrics

New design for a better cutting capability



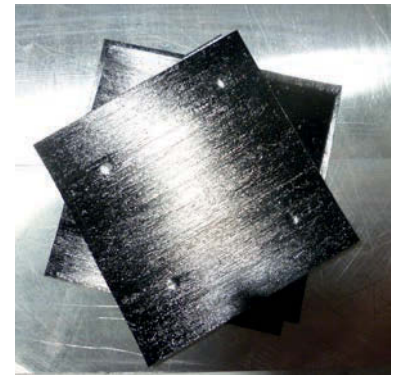
ULTRASONIC WELDING

Our model allows welding and assembly operations on composite and thermoplastic materials (PEEK, PA, PEI, ...) and pre-positioning of thermosetting composites.



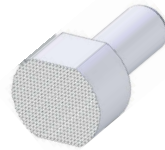
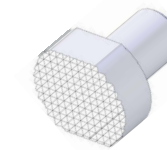
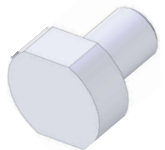
Welding up to 25 folds, our SSP equipment is perfect for pre-positioning the folds before manipulation.

Allows the maintenance of thermoplastic composite stacks before handling

- Prepreg fabrics: powders, films, co-mingles,
- Consolidated plates, ribbons,
- Matrices: PA, PEI, PEEK, PEKK, PPS, ...



Interchangeable welding nozzles

Designation	Conical (F1)	Radial (F2)	Diamond dots 0.5mm (B1)	Diamond dots 1.0mm (B2)	Flat (B)
Shape					
Applications	Prepreg fabrics and Thermoplastics		Thermoplastics		

