

## Target industry:

Manufacturers of lightweight and load-bearing structural components, for example for the aircraft construction, automotive and railway industries and their suppliers.

## Fabrics and materials:

The ultrasonic tool is primarily used for processing CFRP, GRP, semi-finished fibre products, prepregs and composites as well as PVC, PES, PC, PP.

## Outstanding advantages:

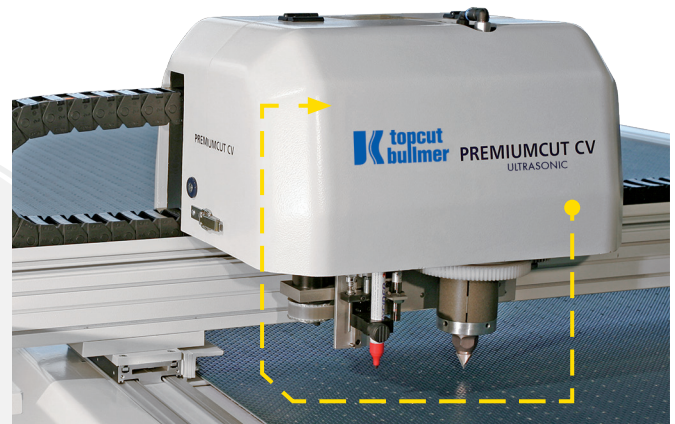
The PREMIUMCUT ultrasonic is modular in design both for under-the-table installation and when supplementary tools are selected.

This means that the cutting system is able to work with the ultrasonic cutting technology and, parallel to that, it can also be fitted with other cutting and processing tools.

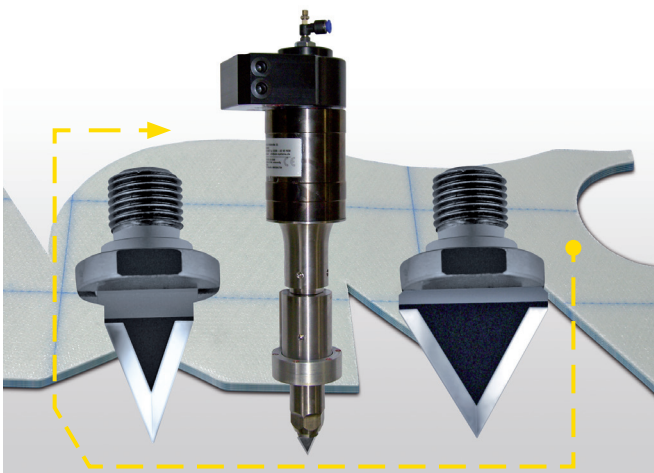
Indeed, ultrasonic cutting is “the” technology of the future for many applications because it is superior by far to the other cutting methods in terms of precision and cleanness of cut. As a rule, using water jet and laser technology for cutting GFRP, GRP and semi-finished fibre products is inappropriate because of the undesirable application of moisture or thermal energy to the cutting material. By contrast, cutting tools caused to oscillate by ultrasound are well suited for the purpose. Not only is a single ply cut in two by this method, high-ply materials (pre-preg up to 10-ply) are also cut into free forms. Diverse blade geometries optimise the cutting results with regard to the cutting materials.



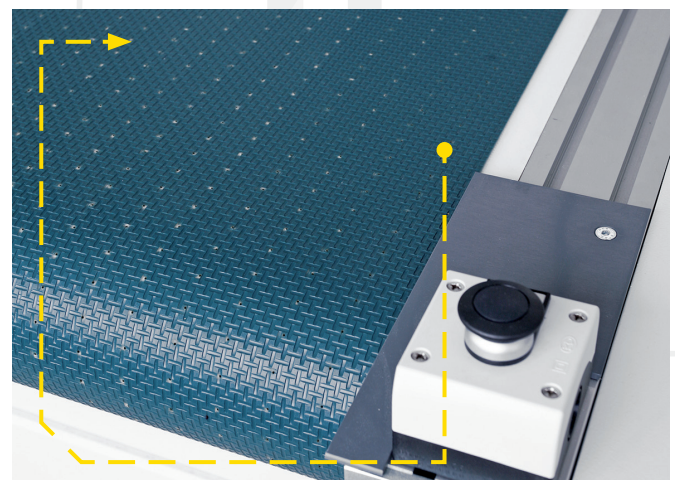
Ultrasonic cutting head



Diverse blade geometries available



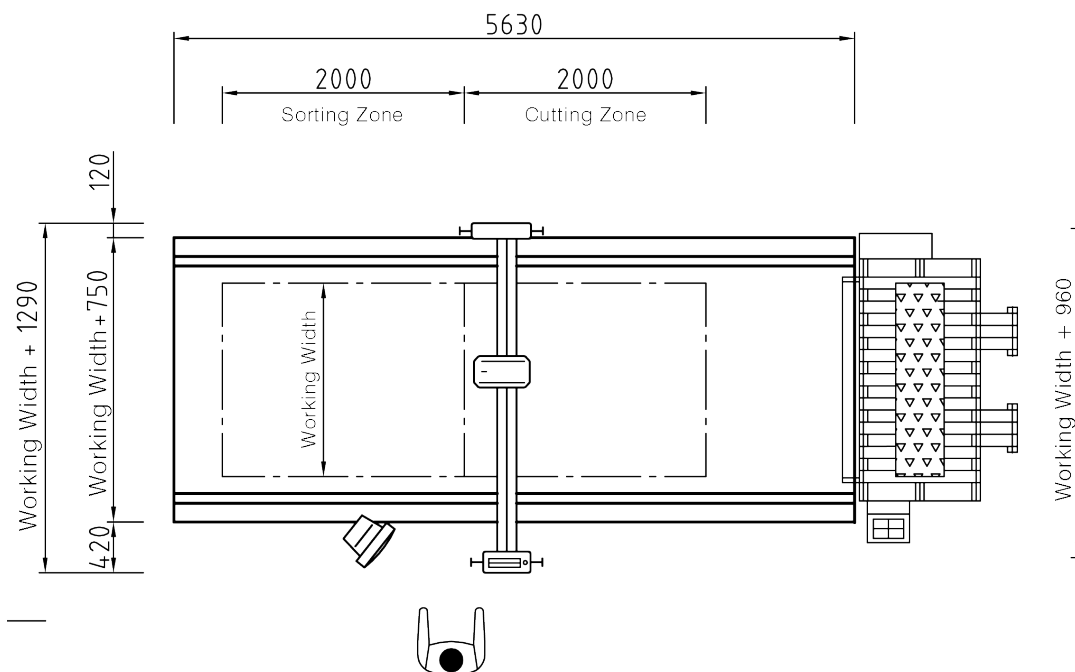
Perforated conveyor-belt for ultrasonic knife



### Options

- Twin vacuum pump with 15 kW (2 x 7,5 kW)
- Pen for marking seams and text
- Spray tool for marking seams and text
- Inkjet printer for piece annotations (pre or post cutting)
- Projector (laser) for "cut piece identification system"
- Monitor (TFT) for "cut part identification system"
- Foil unwinding device
- Conveyor cleaning device
- Synchronised cradle for rolls up to 400 mm diameter and a max. weight of 60 kg
- Various software options

### Machine footprint



### Technical data

Working width	1600, 1800, 2000, 2200 mm 2700, 3200, 4200, 5000 mm
Cutting window length	starting from 2000 mm
Max. position speed	100 m/min
Max. acceleration	1g
Position accuracy	0,1 mm
Max. cutting height (depends on mat.)	max. 10 mm (single or multi-layer)
Connection values:	
Ultrasonic unit	230 V 20/60 Hz, approximately 9,6 A 2200 VA, 2000 W max.
Compressed air	min. 6bar
Vacuum pump, Cutter	230/400 V, 50 Hz, 7,5 kW, 3,5 kW

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