

# iSONIC ECO FLEX

Ultrasonic welding cabin with exchangeable tool cassette



# iSONIC ECO FLEX

The ultrasonic welding cabin for universal use

The new ultrasonic welding cabin, ECO FLEX iSONIC, is available as a completely revised concept. The highlight here is first and foremost the working area: Individually tailored to match the application in question, it is now integrated as an interchangeable tool cassette in the cabin. The replacement of the cassette can be performed both from the operating side and also from the rear side of the machine.

The tool cassette has a modular structure and is equipped with 20, 30 or 35 kHz ultrasonic technology for surface, piercing and rivet type joints. Also, small punching applications can be implemented. For this SONOTRONIC uses its own highly developed ultrasonic components. All ultrasonic components as well as the holding tools are developed and produced in our own production facilities based on the workpiece CAD data. Likewise, programming of the PLC control and remote maintenance is performed directly in-house.

## Applications

- For surface, piercing and rivet joints using ultrasonic (also hot plate or infrared riveting possible)
- Small-sized ultrasonic punching
- Small and medium-sized parts

## Industries

In all plastics processing industries:

- Household goods industry, e.g.:  
Control elements, covers, observation windows, accessories for dishwasher baskets
- Electronics industry, e.g.  
lights, control panels
- Toy industry, e.g.  
Toy boat
- Automotive industry, e.g.:  
Fitted small assemblies in center consoles, instrument panels or door panels such as tweeters, door inner actuators, trim panels, storage compartments or cup holders
- Textile industry:  
Punching and welding (cut & seal) of nonwoven fabrics for the production of a membrane

## Advantages

- Flexible machine concept thanks to tool change function
- Available in three different cabin widths (external dimension):  
1,700 mm  
2,100 mm  
2,500 mm
- Proven components
- High quality
- Short delivery times
- Attractive prices





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# Exchangeable tool cassette

## Quick insertion and removal on operating and rear side

The ECO FLEX iSONIC enables changing over of the working area, which is fitted by default as a tool cassette, from either the front or rear side. This means that multiple workpieces can be processed in individual working areas on one and the same machine. Alongside storage space in production, this is a primary saver of investment costs. With a tool change trolley and smooth-running ball bearings in the machine interior, the tool cassette can be changed quickly and ergonomically. The insertion or removal of the tool cassette can be performed via both the operating and rear side. To do so, both sides have wide opening areas, which is also helpful for maintenance.

### Features

- Front can be completely folded up through 90° for maintenance purposes and tool changes
- Pneumatically operated lifting door with large viewing panel plus single-hand start and safety edge or light curtain (optional)
- Automatic coupling for electro-pneumatic energy supply of the tool cassette
- Touchpanel with intuitive user guidance
- Ergonomic loading conditions (loading width, loading height, loading depth)
- Space for the control cabinet on the left and right side of the machine
- Forklift mounts for safe and easy transport

### Configurable function columns with ergonomic arrangement of the operating elements

- Emergency stop
- Start button (capacitive)
- Variable operator messaging system (EKS/Chip/Card system)
- Service sockets (230V/ Ethernet/USB)
- Connection barcode reader
- Handheld welding device (optional)
- Status light
- Control panel ergonomically adjustable

### Components and workspace in a tool cassette

- Changing of the tool cassette on the operating and rear side
- Upgrade to acoustic protection cabin for high-noise applications (optional)
- Pneumatic vertical stroke with 300 mm stroke length (optional)
- Pneumatic sliding table drive



Changing the tool cassette on the operating side

Changing the tool cassette on the rear side

Design of the workroom as tool cassette enables quick change of tools to the front and rear.

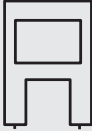
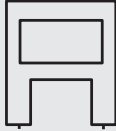
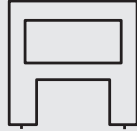


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# iSONIC ECO FLEX

## Technical data

Compact welding cabin with exchangeable tool cassette

Technical data, iSONIC ECO FLEX			
			
Dimensions (W x H x D) [mm]	1,700 x 2,450 x 1,250	2,100 x 2,450 x 1,250	2,500 x 2,450 x 1,250
Dimensions working area (W x H x D) [mm]	800 x 1,250 x 500	1,200 x 1,250 x 500	1,600 x 1,250 x 500
Vertical stroke (optional) [mm]	250		
Axle stroke, sliding table (optional) [mm]	300		
Number of ultrasonic generators, max.	8		
Working frequencies [kHz]	20, 30 and/or 35		

Subject to technical modifications.

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