

Ultrasonic welding machines



ABW *Automatic Blister Welder*



 **rinco**[®]
ultrasonics

AROUND YOU EVERY DAY

RINCO ultrasonic welding machines



ULTRASONIC WELDING – THE ECONOMICAL WAY TO JOIN PLASTICS

Thanks to the short cycle times it requires, ultrasonic welding is the most efficient way to join two thermoplastic materials without additives and is therefore a particularly economical joining method. Injection-moulded parts, films or synthetic textiles can be welded using ultrasound in milliseconds and without leaving marks. The high-frequency mechanical oscillations also allow metal parts to be embedded into a plastic component.

We have designed a number of different ultrasonic welding machines to reflect the different materials used in applications and the different demands that the final welding results have to meet.

RINCO manufactures ultrasonic welding machines in three product series:

ELECTRICAL MOTION2 SERIES
STANDARD SERIES and
EASY SERIES

These machines meet every single requirement – from welding the very smallest through to large components.

Our ***ABW blister welding machine*** is the perfect solution for blister and film packaging.

Would you like a tailor-made solution for your specific requirements? Contact us and we will be happy to advise you.

COME AND DISCOVER THE OUTSTANDING QUALITY OF RINCO PRODUCTS FOR YOURSELF

We are proud that our efforts to achieve perfection have been recognised by official bodies. The ISO certifications awarded to us prove that Swiss values such as reliability and precision are important roots from which our corporate culture has grown. We will always offer consistently high quality and the very best service.



CE

All RINCO machines are **CE-compliant** and therefore meet high European standards.

RELIABILITY

RINCO machines operate very **reliably**, are practically maintenance-free and have a **long service life**.



EFFICIENT RINCO
AFTER SALES SERVICE

AFTER-SALES SERVICE

We help our customers out with **technical support** even after they have made a purchase.

ACCURATE ALIGNMENT

Base plates can be made level on the pedestal using jack screws, so the mount attached to the base plate will line up precisely with the horn.

QUALITY RIGHT FROM THE START

Our machines boast a **robust and rigid construction**, offer stability, provide great performance and guarantee optimum functionality and perfect welding results.



ABW35 – Automatic blister welder



ABW35

KHZ Operating frequency: 35 kHz

F 3000N Maximum force: 745 N

Drive/compressed air: Pneumatic/6 bar nominal

Maximum stroke: 6 mm

KG Weight: 11.2 kg

Height adjustment: 0–28 mm



Our ABW35 ultrasonic blister welding machine makes it so easy to weld **blister packs**. This compact welding device needs neither a footswitch nor a two-hand control device. As soon as the pack has been positioned correctly, the integrated, adjustable microswitch triggers the ultrasonic welding process. This allows for extremely **quick cycle times and ensures it is incredibly easy to use**. The ABW35 is also ideal for textile welding/textile cutting and sealing.

There is a wide range of standard tools available for you to choose from. We would also be delighted to tailor-make tools to meet specific customer requirements.

COMPATIBLE GENERATORS

Compatible generators: SDG35-400
SDG35-750

Output power: 400 W, 750 W



SDG ULTRASONIC GENERATOR

You can find more information about performance and features in the “Ultrasonic generators” product brochure.

FEATURES

QUICK AND SIMPLE TO SET UP

The ABW35 ultrasonic welding machine is **set up and ready to go in an instant**.

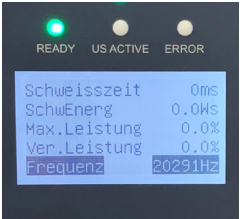
STROKE MOVEMENT

The **pressure** and **speed** of the stroke movement can be regulated.

VISUAL INDICATOR FOR THE USER

Status LEDs on the generator show the operator whether the generator is ready for operation, whether the ultrasound is active or whether an error has occurred.





STATUS LEDS
Indicate the status
of the generator at
a glance.



FUNCTIONS

5 WELDING MODES TO CHOOSE FROM

Thanks to the welding modes, you can find the **right setting for every application**, guaranteeing perfect welding. The following welding modes can be selected on the ABW35:

-  Welding time
-  Welding energy
-  Welding time AND/OR welding energy
-  Contact cut-off

FIELDS OF APPLICATION:

 **AUTOMOTIVE**

 **HIGH-TECH**

 **PACKAGING**

 **FOOD**

 **NON-WOVEN & TEXTILE**

 **MEDICAL**

 **HOUSEHOLD**

 **COSMETICS**

**WELDING
PUNCHING
SEALING**

ABW35 – Automatic blister welder



SOFTSTART AND SOFTSTOP FUNCTION

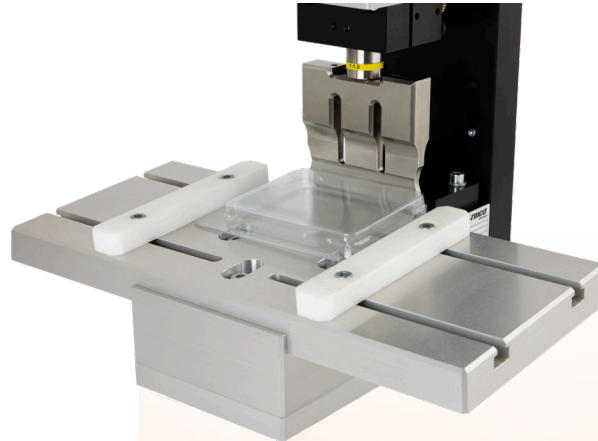
This mode **gently augments and attenuates the oscillations** of complex horns.



TRIGGER (ULTRASONIC TRIGGER POINT)

The welding operation can be initiated using a trigger. You can choose from the following triggers:

- On (for external signal)
- Off
- Time



FEEDER RAIL

The feeder rail makes it easy to position the blister in exactly the right place.



FOOTSWITCH

The welding cycle of the ABW35 can also be triggered with a footswitch if packs have especially narrow edges.

**ULTRASONIC
GENERATOR**
SDG

**PRECISION ADJUSTING
SCREW**

For stroke limiter.

PRESSURE REGULATOR

Maintains a constant system pressure.

HORN

STROKE LIMITER

The 6 mm stroke limiter ensures that you can work safely.

ADAPTABLE

SIMPLE MOUNTING

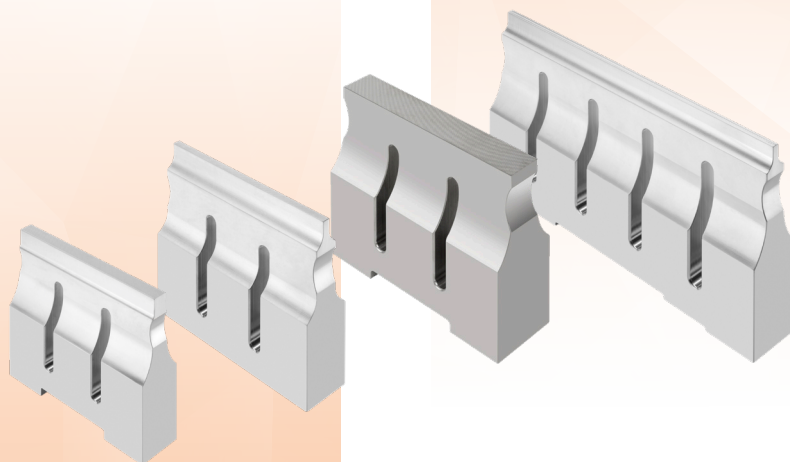
The ABW35 ultrasonic welding machine can be mounted **on a table or on the wall**.

FLEXIBILITY

Thanks to the modular construction of our components, a manual workstation can be **developed** into an automation line or **integrated** into a special-purpose machine at any time.

STANDARD TOOLS –
Suitable for many applications

A wide range of standard tools for welding blister and film packaging is available for the ABW35 ultrasonic welding machine.



You can find other features as well as options and accessories for the ABW35 ultrasonic welding machine at the end of this brochure.

ABW35

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Lots of parameters need to be coordinated with one another if you are to achieve a perfect weld.

RINCO ultrasonic generators are designed to control ultrasonic welding machines. These generators provide options for you to set the precise parameters you need for your ultrasonic welding process. You can enter a range of values to specify **when the ultrasound will be triggered**.

The ultrasonic trigger point, also known simply as the trigger, can be linked to a number of different conditions.

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These conditions, for example the type of material used to make the component, the configuration of the weld seam and the component size, are all taken into consideration and the appropriate trigger is used to define the exact parameters and, therefore, the perfect ultrasonic trigger point for the application in question. Your welding results will be top quality. What's more, these conditions can also help to protect tools.










































Choosing the right welding mode is one way of achieving a perfect end result. This mode can be customised for each application.

One welding mode can ensure that the end mass of the product being welded is always exactly the same once the welding process is complete, for example, whereas another welding mode will always perform the exact same welding steps on all components, but the end mass may vary. Wear to the welding tool, as experienced in cutting and punching applications, for example, can also be reduced by choosing the right mode. Whatever your desired result: **together we will find the perfect, reliable solution.**

You can count on our knowledge and commitment right from the start. And even after projects are complete, we are always ready to answer your questions. Our devices have been designed such that we can perform remote diagnostics at any time, so any errors can be rectified efficiently.



		Electrical Motion2-20	Electrical Motion2-35	Standard 3000	Standard 745	Standard 50	Easy 3000	Easy 745	ABW35
									
	Compatible generator	XDG2-20/SCU2-20	XDG35/SCU35	ADG20	ADG35	ADG70	SDG20	SDG35	SDG35
KHZ	Frequency	20 kHz	35 kHz	20 kHz	35 kHz	70 kHz	20 kHz	35 kHz	35 kHz
	Force	3000 N	745 N	3000 N	745 N	50 N	3000 N	745 N	745 N
	Output power (W)	3000, 2000	900	3000, 2000, 1500, 1000	900, 600, 400	100	2000, 1500, 1000	750, 400	750, 400
	Dimensions W x L x H (mm)	572 x 755 x 1372	380 x 553 x 1030	400 x 760 x 1345	316 x 520 x 1066	320 x 460 x 505	400 x 727 x 1345	316 x 529 x 1066	120 x 156 x 489
	Weight	135 kg	53 kg	115 kg	41 kg	15.5 kg	120 kg	41 kg	11.2 kg
	Stroke	100 mm	100 mm	100 mm	100 mm	25 mm	100 mm	100 mm	6 mm
	Warranty: 2 years	3 years	3 years	✓	✓	✓	✓	✓	✓
	Amplitude adjustment	40–100%, 1% increments/ external	40–100%, 1% increments/ external	40–100%, 1% increments/ external	40–100%, 1% increments/ external	40–100%, 1% increments/ external	15–100%, 1% increments/ external	15–100%, 1% increments/ external	15–100%, 1% increments/ external
	Audit trail	✓	✓						
	Calibration	✓	✓						
	Cleanroom, ISO class 6	✓	✓	✓					
	Welding time	✓	✓	✓	✓	✓	✓	✓	✓
W/S	Welding energy	✓	✓	✓	✓	✓	✓	✓	✓
	Welding travel	✓	✓	✓	✓	✓			
	Contact cut-off (mode)	✓	✓	✓	✓	✓	✓	✓	✓
	Continuous mode						✓	✓	
	Multi Melt Control (mode)	✓	✓						
	Trigger point	Time, travel, force, off, external signal, travel absolute & force	Time, travel, force, off, external signal, travel absolute & force	Time, travel, pressure, off, external signal	Time, travel, pressure, off, external signal	Time, travel, pressure, off, external signal	On, off, time, start	On, off, time, start	On, off, time, start
	Data transmission	✓	✓	✓	✓	✓	✓	✓	✓
	Database	✓	✓	✓	✓	✓			
	Associated software	✓	✓						
	Digital technology	✓	✓	✓	✓	✓	✓	✓	✓
	Electric drive	✓	✓						
	Pneumatic drive			✓	✓	✓	✓	✓	✓
	Height adjustment	✓	✓	✓	✓	✓	✓	✓	✓
	Multilingual	✓	✓	✓	✓	✓	✓	✓	✓
	Protection against power overload	✓	✓	✓	✓	✓	✓	✓	✓
	Protection against overheating	✓	✓	✓	✓	✓	✓	✓	✓
	Part counter	✓	✓	✓	✓	✓	✓	✓	✓
	Remote access	Internal, external							
	Softstart, softstop	✓	✓	✓	✓	✓	✓	✓	✓
	Touch display	✓	✓						
	User administration	✓	✓	✓	✓	✓	✓	✓	✓
OCTS	Quick Change Tool System (oscillation system)	✓	✓						
SMED	Quick Tool Change (sonotrode and anvil)	✓	✓	✓	✓	✓	✓	✓	

	Electrical Motion2-20	Electrical Motion2-35	Standard 3000	Standard 745	Standard 50	Easy 3000	Easy 745	ABW35
								
Workstation	✓	✓	✓	✓				
SSK soundproof cabin	✓	✓	✓			✓		
35 kHz tool case		✓		✓			✓	✓
20 kHz tool case	✓		✓			✓		
Footswitch with emergency stop								✓
Footswitch								✓
Film transport	✓	✓	✓	✓		✓	✓	
ADG device switch box			✓	✓	✓			
Device switch box for hand units						✓	✓	✓
DUO TOUCH two-hand control device			✓	✓	✓		✓	
Compound table					✓			
Column extension	300 mm/200 mm/100 mm	150 mm/100 mm	300 mm/200 mm	100 mm		300 mm/200 mm	100 mm	

Workstation



Available with automatic drawer or rotative table for ergonomic working. Equipped with soundproofing.

SSK sound enclosure cabin



Reduces the noise level by up to 20 dB.

35 kHz tool case



Tool for setting up service work.

20 kHz tool case



Tool for setting up service work.

Footswitch with emergency stop button



To trigger the welding cycle using your foot, complete with emergency stop button.

Footswitch



To trigger the welding cycle using your foot.

Film transport




To protect the application from marks.

ADG device switch box



Designed for small multi-head systems if no higher-level control is required or if PLC is to be kept to a minimum. This enables small special systems to be built from only standard components.

DUO TOUCH two-hand control device



For increased ergonomic requirements, compatible with cleanrooms.

Compound table

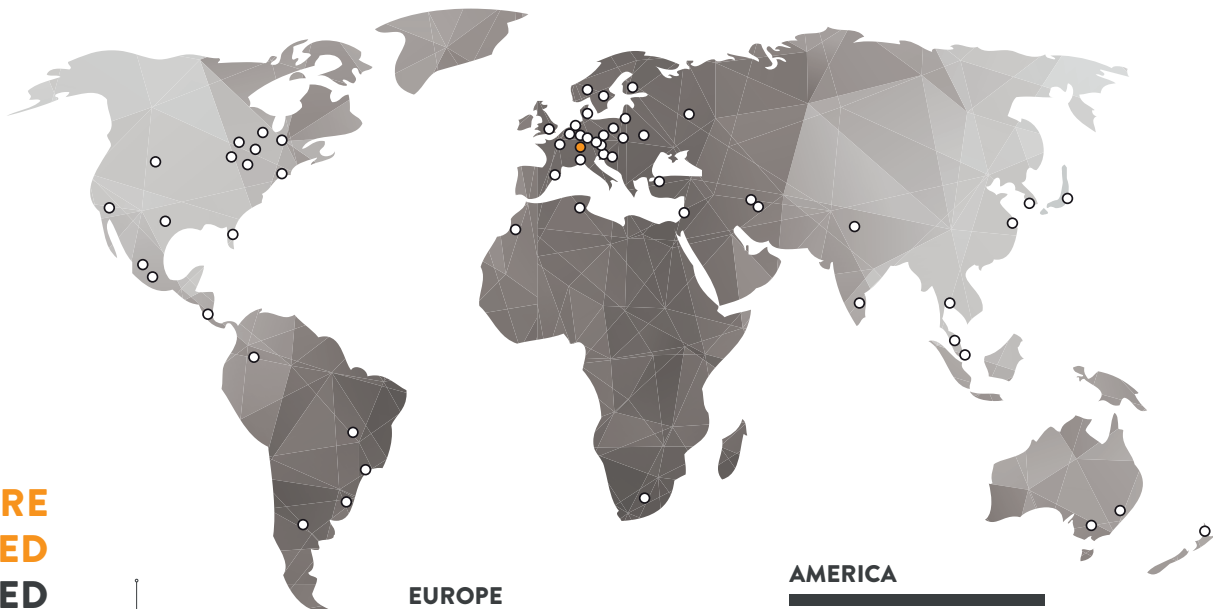


Precise compound table for fine-tuning. Mounted using clamps.

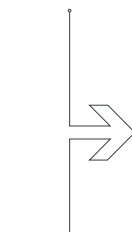
Column extension



Extension for large components.



**WE ARE
FOCUSED
COMMITTED
GLOBAL
LOCAL**



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