

Ultrasonic welding machines

Standard2 Series



 **rinco**[®]
ultrasonics

AROUND YOU EVERY DAY

STANDARD2 SERIES – Versatile



Standard2-3000



Standard2-745

The ultrasonic welding machines in the Standard2 series with **pneumatic drive** are ideal for welding, cutting and punching thermoplastic moulded parts, non-wovens and textiles as well as films, or for embedding metals in plastic. Standard2 models can be used for high-precision machining of parts made from plastic with **designs of average complexity**.

Multi-level user administration controls permission to make changes to welding parameters, thereby increasing process reliability in operation.

Events and changes are logged in the audit trail, which cannot be deleted, meaning that **traceability and process reliability** are guaranteed.

	Standard2-3000	Standard2-745
KHZ Operating frequency:	20 kHz	35 kHz
 F Maximum force:	3000 N	745 N
 Drive/compressed air:	Pneumatic/6 bar nominal	Pneumatic/6 bar nominal
 Maximum stroke:	100 mm	100 mm
 KG Weight:	115 kg	41 kg
 Height adjustment:	0–280 mm	0–180 mm

COMPATIBLE GENERATORS

Compatible generator: ADG2-20 / ADG2-35

Output power: 400 W, 750 W, 900 W,
1000 W, 1500 W, 2000 W,
3000 W

ADG2 ULTRASONIC GENERATOR

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



FEATURES

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.



CALIBRATION

Pressure and amplitude **can be calibrated**. This makes the welding results reproducible and upholds the quality of your products.



10.1" TOUCH COLOUR DISPLAY

The touch colour display makes it easier to enter parameters and operate the machines. It is **highly responsive and supports capacitive touch operation, even while wearing gloves**.. What's more, it displays a graphic or table showing the most recent welding operations.

FIELDS OF APPLICATION



AUTOMOTIVE



HIGH-TECH



PACKAGING



FOOD



NON-WOVEN & TEXTILE



MEDICAL



HOUSEHOLD



COSMETICS

**WELDING
PUNCHING
RIVETING
EMBOSSING
FLANGING
EMBEDDING
INSERTING
SEALING**

STANDARD2 SERIES

STANDARD2 SERIES – Versatile

AFTER-PULSE

To prevent lightweight workpieces from potentially getting stuck on the horn, an after-pulse can be activated.

PERFORMANCE LEVEL ■ PL e

Our machines deliver optimum safety for operators and maintenance personnel.



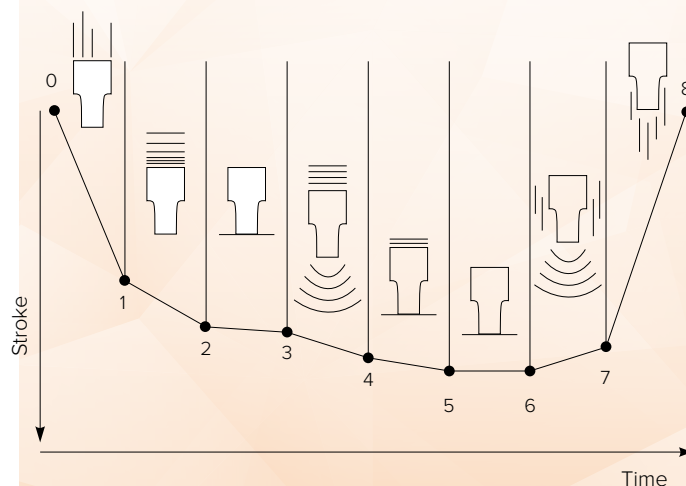
MAXIMUM REPEATABILITY

The database for the ultrasonic welding machines can store **as many parameter data sets** as required.

FREELY PROGRAMMABLE STROKE MOVEMENT

Optimise your welding process by adjusting the stroke movement of the application accordingly.

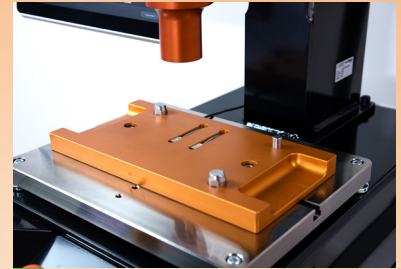
- 0–1 Actuator moves from start position to brake position
- 1–2 Braking point from actuator speed to touchdown speed
- 2–3 Pressure increase until trigger is reached
- 3–4 Welding process
- 4–5 Pressure build-up without ultrasonics
- 5–6 Firming up and cooling-down phase
- 6–7 Afterpulse with ultrasound
- 7–8 Actuator moves back



TOOL CHANGE

QUICK AND EASY

Thanks to the quick-change system, tools can be replaced **within just a few minutes**. This minimises the risk of errors. The removable carriers are indexed.



CHANGE THE MOUNT

Integrated sensor technology for automatic changeover of parameter data sets



CHANGE THE OSCILLATOR UNIT

In just a few steps

TRAVEL MEASUREMENT OF 0.01 MM

for high-precision welding

SYSTEM PRESSURE REGULATION

With an indicator on
the generator.

ROBUST DESIGN

SCALE FOR ACTUATOR

Scale for reading and
adjusting the actuator
(0–100 mm).

THROTTLE

For changing the
lowering speed and
the weld intensity.

PRECISION ADJUSTING SCREW

For depth control stop.

ULTRASONIC GENERATOR

ADG2

HEIGHT ADJUSTMENT

Effortless with the hand wheel.

BASE PLATE

Plate with jack screws for
attaching and precisely
aligning the mount.

AIR TREATMENT UNIT

With microfilter.

SAFETY

EMERGENCY STOP

TWO-HAND RELEASE BUTTON

STANDARD2 SERIES – Versatile

FUNCTIONS

7 WELDING MODES TO CHOOSE FROM

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



Welding time

W/S

Welding energy



W/S

Welding time AND/OR welding energy



Welding travel (absolute or differential)



Contact cut-off

TRIGGER (ULTRASONIC TRIGGER POINT)

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



- Time
- Travel
- Pressure
- External signal
- Travel and pressure

ADJUSTABLE AMPLITUDE

You can change the value for the internal or external amplitude to between **40 and 100%** in 1% increments so as to achieve the best possible welding or cutting result.



SOUNDPROOF CABIN

Reliable noise protection solution

ABSOLUTE QUALITY CONTROL

A **bar code reader** can be used to scan a welded component's bar code/ QR code and assign it to a specific welding result.



DATA EXPORT

A data string can be exported via RS232, Ethernet/a company network or a storage medium like a USB stick in order to log welding data. There is also the option to read out the data via **PROFINET**.



REMOTE ACCESS SERVICE

Remote maintenance can be set up for our RINCO after-sales service to carry out quick and efficient troubleshooting.



AUDIT TRAIL

The non-deletable audit trail automatically records and documents all relevant system events as well as changes to machine parameters, user rights and process data. Every action is logged with a time stamp, user ID and detailed description. This ensures dependable traceability and process reliability.



USER ADMINISTRATION

You can assign user authorisations using a menu-based system: Users are granted targeted access to individual menu items, allowing access to specific functions or areas of the user interface to be controlled individually, which increases process reliability.

You can find other features as well as options and accessories for the Standard2-series ultrasonic welding machines at the end of this brochure.



BAR CODE READER

Available as a hand unit or permanently mounted



TWO-HAND RELEASE

Ergonomic safeballs (button option also available)

STANDARD2 SERIES

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	Standard2-3000	Standard2-745	Standard 50	Easy 3000	Easy 745	ABW35
									
	Compatible generator	XDG2-20/SCU2-20	XDG35/SCU35	ADG2-20	ADG2-35	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, 750, 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, external signal, travel absolute & force	Time, travel, force, external signal, travel absolute & force	Time, travel, pressure, external signal, travel & pressure	Time, travel, pressure, external signal, travel & pressure	Time, travel, pressure, 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	Internal, external	Internal, external	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	Standard2-3000	Standard2-745	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	150 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



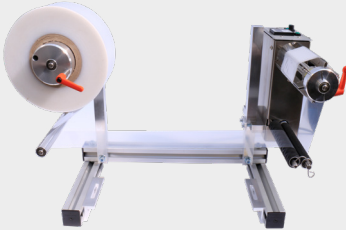
To trigger the welding cycle using your foot, complete with emergency stop button.

Footswitch



To trigger the welding cycle using your foot.

Film transport



To protect the application from marks.

ADG device switch box



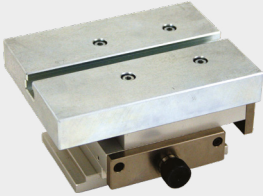
Designed for small multi-head systems if no higher-level control is required or if PLC is to be kept to a minimum. This enables small special systems to be built from only standard components.

DUO TOUCH two-hand control device



For increased ergonomic requirements, compatible with cleanrooms.

Compound table

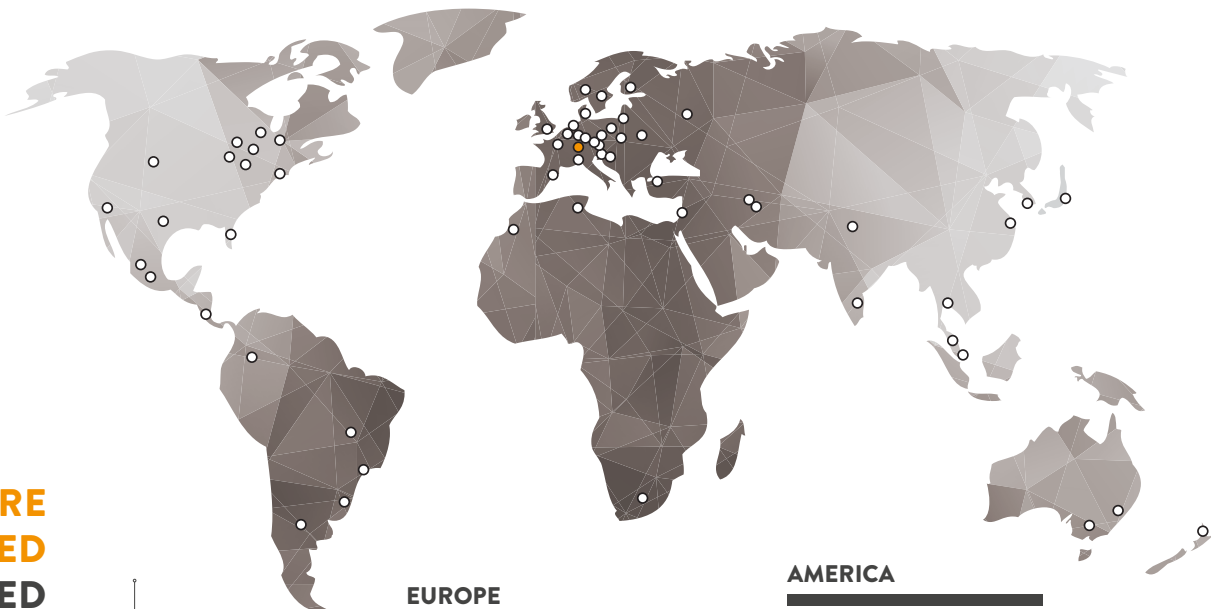


Precise compound table for fine-tuning. Mounted using clamps.

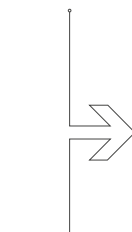
Column extension



Extension for large components.



**WE ARE
FOCUSED
COMMITTED
GLOBAL
LOCAL**



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