Friction welding machines



RS02

The unique friction welding machine RS02 for polyurethane profiles eliminates downtime with a perfect weld on each application!

Features at a glance

- No long heating-up and set-up times, spliced within seconds.
- Precise pressure and automatical O-positioning prevents uneven welds and premature failure.
- Automatic alignment ensures that the belt ends are aligned perfectly.
- Temperature variation is never a concern (no guess-work).
- Without the risk of injury or fire due to hot metal.
- Due to its small size the RS02 press can be used in confined spaces.
- Thanks to its exchangeable jaws the RS02 is suitable for splicing round belts from Ø 6 mm and V-belts from 6x4mm made of polyurethane.



Scope of delivery:

- 1 pc. Friction welding machine RS02
- 1 set standard profile jaws at your choice
- 1 pc. Torque wrench
- 1 pc. Scissors AS02
- 1 pc. Edge cutter SE02
- 1 pc. Carrying case with durable and predective foam inlay

Dimension (HxWxD): 390 x 105 x 123 mm Weight: approx. 2450 g, Power: 500 W

Description RS02, 230V Order No. FBWRS022230V



Tutorialvideo: https://youtu.be/7GhtkzLiiyl



Battery-operated friction welding machine for polyurethane profiles for improved high-mobility maintenance.

Features at a glance

Same characteristics as RS02,

- but with the following distinguishing features:
- Cordless; battery-operated
- Larger scope of delivery





Scope of delivery:

- 1 pc. Friction welding machine RS02 AKKU
- 1 set standard profile jaws at your choice
- 1 pc. Torque wrench
- 1 pc. Scissors AS04
- 1 pc. Edge cutter SE02
- 2 pcs. Battery pack
- 1 pc. Charger
- 1 pc. Assortment box
- 1 pc. Carrying case with durable and predective foam inlay

Dimension (HxWxD): 390 x 105 x 123 mm Weight: approx. 2780 g, Power: 18 V 4Ah (72Wh)

Description RS02 AKKU, 230V Order No. FBWRS02A230

Our Alu clamping jaw range

1 set of jaws consists of 4 parts

Features at a glance

- Please note each belt profile requires a matching set of jaws.
- Therefore, please select the appropriate clamping jaws for the required profile geometry.
- On request, we also manufacture clamping jaws for PU special profiles.

Round belts

RS Clamping jaws round belt Ø 6,0 mm	FBWSBR060
RS Clamping jaws round belt Ø 6,3 mm	FBWSBR063
RS Clamping jaws round belt Ø 7,0 mm	FBWSBR070
RS Clamping jaws round belt Ø 7,9 mm	FBWSBR079
RS Clamping jaws round belt Ø 8,0 mm	FBWSBR080
RS Clamping jaws round belt Ø 9,0 mm	FBWSBR090
RS Clamping jaws round belt Ø 9,5 mm	FBWSBR095
RS Clamping jaws round belt Ø 10,0 mm	FBWSBR100
RS Clamping jaws round belt Ø 12,0 mm	FBWSBR120
RS Clamping jaws round belt Ø 12,5 mm	FBWSBR125
RS Clamping jaws round belt Ø 12,7 mm	FBWSBR127
RS Clamping jaws round belt Ø 13,0 mm	FBWSBR130
RS Clamping jaws round belt Ø 14,0 mm	FBWSBR140
RS Clamping jaws round belt Ø 14,3 mm	FBWSBR143
RS Clamping jaws round belt Ø 15,0 mm	FBWSBR150
RS Clamping jaws round belt Ø 15,9 mm	FBWSBR159
RS Clamping jaws round belt Ø 17,0 mm	FBWSBR170
RS Clamping jaws round belt Ø 18,0 mm	FBWSBR180
RS Clamping jaws round belt Ø 19,0 mm	FBWSBR190
RS Clamping jaws round belt Ø 20,0 mm	FBWSBR200







for V-belts

V-belts

RS Clamping jaws V-belt (Y) 6 x 4 mm	FBWSBK06
RS Clamping jaws V-belt (M) 8 x 5 mm	FBWSBK08
RS Clamping jaws V-belt (Z) 10 x 6 mm	FBWSBK10
RS Clamping jaws V-belt (A) 13 x 8 mm	FBWSBK13
RS Clamping jaws V-belt (B) 17 x 11 mm	FBWSBK17
RS Clamping jaws V-belt (C) 22 x 14 mm	FBWSBK22

V-belts special versions

RS Clamping jaws V-belt 8 x 6,5 mm	FBWSBK8X65
RS Clamping jaws V-belt 10 x 8 mm	FBWSBK10X8
RS Clamping jaws SuperGrip (Z) 10 x 6 mm	FBWSBK10G
RS Clamping jaws SuperGrip (A) 13 x 8 mm	FBWSBK13G
RS Clamping jaws SuperGrip (B) 17 x 11 mm	FBWSBK17G
RS Clamping jaws SuperGrip (C) 22x14mm	FBWSBK22G
RS Clamping jaws (B) $17x11$ for brush 90°	FBWSBK17B
RS Clamping jaws (C) $22x14$ for brush 90°	FBWSBK22B

Rigde top V-belts

RS Clamping jaws SK1 (B) 17 x 19 mm	FBWSBK17X19
RS Clamping jaws SK1 (C) 22 x 24 mm	FBWSBK22X24

Twin V-belts

RS Clamping jaws Twin V-belt 21 x 8 mm	FBWSBK21X8
RS Clamping jaws Twin V-belt (Z) 24 x 6,8 mm	FBWSBK24X68
RS Clamping jaws Twin V-belt $30 \times 8 \text{ mm}$	FBWSBK30X8

T-Profiles

RS Clamping jaws T-Profile 15 x 5 mm	FBWSBST15X5
RS Clamping jaws T-Profile 5 x 5 x 25 mm	FBWSBST5525

Special profiles

RS Clamping jaws Square profile 11,8 x 11,8 mm	FBWSBSQ118
RS Clamping jaws U-Profile 18x11,8mm	FBWSBSU180
RS Clamping jaws Prism V-belt 33 x 8 mm	FBWSBS33X8
RS Clamping jaws Peach profile 28 x 29 mm	FBWSBS28X29



FRICTION WELDING TECHNOLOGY FOR PU

The unique friction welding machine RS02 is the professional tool for the maintenance operator and also the fastest and most reliable way of welding belt profiles. Constantly good quality connections are produced in a few seconds with repeatable accuracy due to fixed welding parameters.

Welding clamping jaws tuned to the respective profile ensure reliable clamping and perfect alignment of the profile.

Thanks to its handy type of construction, the friction welding machine can even be used in narrow space conditions for comfortable welding. The recently developed battery version is now available to ensure unlimited freedom of motion.



Which profiles can be welded?

The RS02 friction welding machine can be used for butt welding of PU round belts with/without reinforcement from 6 to 20 mm and PU V-belts with/without reinforcement from 6 x 4 mm to 22 x 14 mm.

Still many other geometrical shapes and special profiles can be joined by means of special clamping jaws using this welding technolog

How does friction welding work?

Basically this welding technology uses the reciprocal coefficients of friction of the profile materials and thus effect fusion of the material in the joint under pressure and in executing a rotational movement. It is up to the user to decide when the process can be terminated when a welding bead has been produced all over the joint.

What has to be observed to produce a proper weld?

Clamping jaws tuned to the respective geometry are required for reliable clamping of the profiles during this procedure.

Flat and angularly cut belt ends are an important prerequisite for this welding procedure to create optimum welding conditions and produce friction over the entire joint surface. For belt profiles with reinforcement it is required before welding, as usual, to drill out the reinforcement at the joint surfaces by some millimetres to prevent the reinforcement from crossing in the joint and consequently deterioration of the welded connection.

An exception is the patented weldable glass fibre reinforcement of BEHAbelt where this working step is unnecessary.







HIGHLIGHTS

- **Mobile use** thanks to small design.
- Welding parameters defined by the speed and pressure.
- **TOP welding quality** thanks to welding results with repeatable accuracy.
- Machine is immediately ready for use; no heating time required.
- High process mastery with excellent repeat accuracy.
- Reduction of the risk of accidents, as no hot parts are involved.

