

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 \varnothing 6 mm and V-belts from 6x4mm made of polyurethane.



original
DESIGN

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 predictive foam inlay

Dimensions (HxWxD): 390x105x123 mm
Weight: approx. 2450 g, Power: 500 W

Description
230 Volt

Order No.
FBWRS02230V



Tutorialvideo:
<https://youtu.be/7GhtkzLiyl>

RS02 AKKU

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



original
DESIGN

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 AS02
- 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 predictive foam inlay

Dimensions (HxWxD): 390x105x123 mm
Weight approx. 2780 g, Power: 18V 4Ah (72Wh)

Description
230 Volt

Order No.
FBWRS02A230

Charger



Battery pack



Friction welding machines

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.**



for round belts



for V-belts

Round belts

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

V-belts

RS Clamping jaws V-belt (Y) 6x4mm	FBWSBK06
RS Clamping jaws V-belt (M) 8x5mm	FBWSBK08
RS Clamping jaws V-belt (Z) 10x6mm	FBWSBK10
RS Clamping jaws V-belt (A) 13x8mm	FBWSBK13
RS Clamping jaws V-belt (B) 17x11mm	FBWSBK17
RS Clamping jaws V-belt (C) 22x14mm	FBWSBK22

V-belts special versions

RS Clamping jaws V-belt 8x6,5mm	FBWSBK8X65
RS Clamping jaws V-belt 10x8mm	FBWSBK10X8
RS Clamping jaws Supergrip (Z) 10x6mm	FBWSBK10G
RS Clamping jaws Supergrip (A) 13x8mm	FBWSBK13G
RS Clamping jaws Supergrip (B) 17x11mm	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) 17x19mm	FBWSBK17X19
RS Clamping jaws SK1 (C) 22x24mm	FBWSBK22X24

Twin V-belts

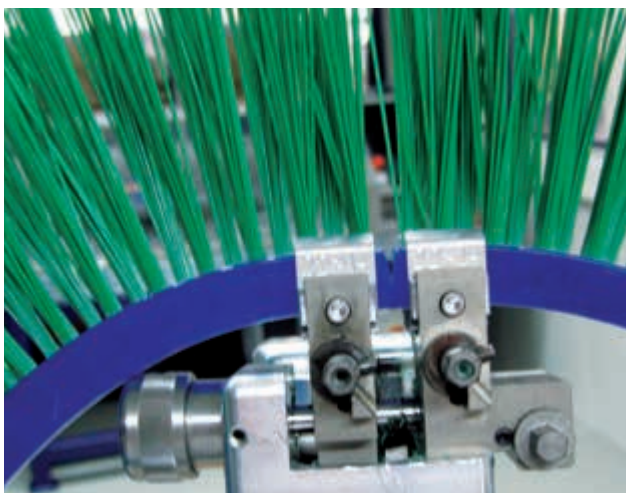
RS Clamping jaws Twin V-belt 21x8mm	FBWSBK21X8
RS Clamping jaws Twin V-belt (Z) 24x6,8mm	FBWSBK24X68
RS Clamping jaws Twin V-belt 30x8mm	FBWSBK30X8

T-Profiles

RS Clamping jaws T-Profile 15x5mm	FBWSBST15X5
RS Clamping jaws T-Profile 5x5x25mm	FBWSBST5525

Special profiles

RS Clamping jaws square profile 11,8x11,8mm	FBWSBSQ118
RS Clamping jaws U-Profile 18x11,8mm	FBWSBSU180
RS Clamping jaws prism V-belt 33x8mm	FBWSBS33X8
RS Clamping jaws peach profile 28x29mm	FBWSBS28X29



FRICION 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.

USE

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 technology.

How does friction welding work?

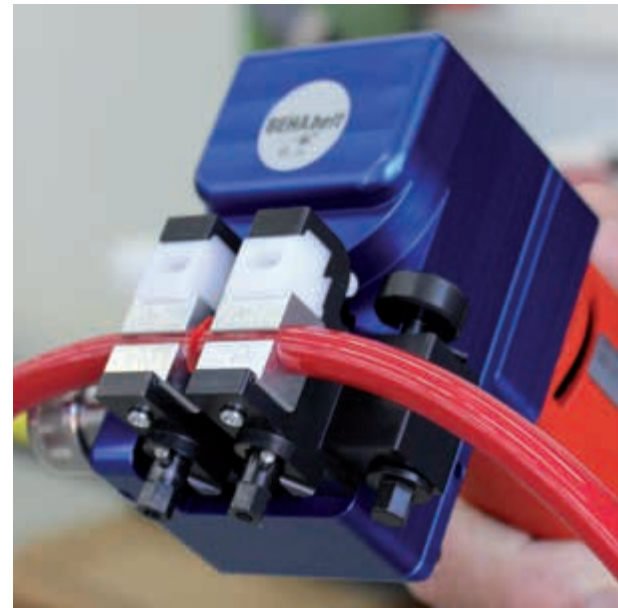
Basically this welding technology uses the reciprocal coefficients of friction of the profile materials and thus effect fusion of the material in the joint under pressure and in executing a rotational movement. It is up to the user to decide when the process can be terminated when a welding bead has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



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

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.

