

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 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>

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 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

Charger



Battery pack



BEHA Innovation GmbH

Distributor: TYMA CZ, s.r.o., Na Pískách 731, 400 04 Trnava, CZ, tel.: +420 475 655 010, e-mail: info@tyma.cz, web: <https://www.tyma.cz>

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.**

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 round belts

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) 22 x 14 mm | FBWSBK22G |
| RS Clamping jaws (B) 17 x 11 for brush 90° | FBWSBK17B |
| RS Clamping jaws (C) 22 x 14 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 x 8 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 18 x 11,8 mm | FBWSBSU180 |
| RS Clamping jaws Prism V-belt 33 x 8 mm | FBWSBS33X8 |
| RS Clamping jaws Peach profile 28 x 29 mm | FBWSBS28X29 |

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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.

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.

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Tutorialvideo on YouTube

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.

