



Made in Germany
PATENT

Patent EU: EP 0 974 772
Patent US: 6,250,178B1
Patent DE: DE4318781

- | | |
|-----------------------|--|
| 1) Drive motor | 8) Adjusting knob for contact pressure |
| 2) Speed regulator | 9) Profile jaws |
| 3) ON/OFF switch | 10) Adapter for standard profiles |
| 4) Excentric drive | 11) Hexagonal head bolt to clamp the profile |
| 5) Clamping equipment | |
| 6) Centre lever | |
| 7) Release button key | |

Friction welding machine RS02 for Polyurethane Profiles consisting of:

- Drive motor 230 Volt/AC with speed control and ON/OFF switch
- Excentric drive with automatically activated piston stroke
- Clamping device with centre lever and release button key
- Exchangeable profile jaws
- Adjusting knob for contact pressure

- Note for the welding of small profiles: Clamp profile in the fixed clamping jaw with only 2 mm supernatant. Clamp other end of the profile in the oscillating jaw with only 3 mm supernatant. Do not crush profile so that a planar friction surface as possible is preserved.
- Set the speed regulator (2) (steps 1 - 6) depending on the profile to be welded. Small profiles step 4 - 6; depending on PU quality, large profiles step 5-6.
- Set the contact pressure on adjustment knob (8).
Heavily depressed position → full pressure
slightly depressed position → half pressure

Work sequence

⚠ Please note the safety instructions and warnings on the back.

- Select and insert the clamping jaws (9). Remove adapter (10) for customised profiles if required and insert the customised clamping jaws.
- Driving jaws (9) apart and rotate the external hex (5) with a key to the left until the clamping equipment engages.
- Cut off both ends of the profile to be connected.
- Insert the profile in the middle of the clamping jaws (9) and hold it tight with the centre lever (6). Tighten the hexagonal head bolt (11) with the hexagonal socket wrench. Repeat process for other side.
- Between the two ends profile now should still minimal welding gap (light gap).

- **⚠ Warning: It is not necessary to tighten the tension bolts to the full stop point when fastening belts in the RS02 welder. Only tighten the tension bolts as required to prevent belt slippage in the jaws. Over tightening can cause damage to the tension bolts and cause the material to deflect.**



General:

large profiles from Ø 12 → Full set pressure (8)

small profiles < Ø 12 → Half set pressure (8)

⚠ Unit connected to 230 volts / AC power connect

⚠ Switch on the machine (3) Important: only with clamped profile, risk of voiding parts (profile jaws)!

- After reaching the max. Speed of the motor by pressing the release button (7) fusion process (welding jaws move together).
- When profile swells up, switch off the machine (3)
- Welding process is finished
- Leave profile clamped for 2-3 min. in the machine to cool off.

Note: Allow to cool profile after removal for about another 10 minutes before the weld is loaded.

- First, open the hex head bolt (11) to take out the profiles. Then move apart with the external hex (5) the sealing jaws to facilitate the removal of the profile.
- Now the next welding process can be performed.

Safety and warning notes

Notes on the appliance or in the operating instructions:

-  Warning of a dangerous situation. Read the operating instructions.
-  Note. It is essential that you read this
-  Caution! Dangerous voltage, danger of electrical shock.
-  Continuous double or reinforced installation in accordance with Class II IEC 536.
-  Conformity mark, confirms that the applicable guidelines have been observed. The EMC guideline (89/336/EEC) with the Standards EN 50081-1 and EN 50082-1 have been met. The low voltage guideline (73/23/EEC) with the Standard EN 61010-1 has also been met.
-  Before the appliance is used, the operating instructions must be read carefully and followed in all aspects.
-  If the instructions are not observed, or if you should forget to follow the warnings and notes, serious injuries to the user or damage to the appliance could occur.

Transport and Storage

The appliance must be stored in a dry and closed area. If the appliance has been transported at extremely high temperatures, it needs to be acclimatised until it is completely dried out before it is switched on.

Safety Measures

-  For all work, the applicable accident prevention regulations of the professional association must be observed.
-  The friction welding machine RS02 may only be held on the handles provided for this. Touching the welding head during operation must be avoided at all costs.
-  The appliance may only be connected to the input voltage specified on the nameplate.
-  If the safety of the operator can no longer be guaranteed, the appliance must be taken out of operation and secured against unintended use. This is the case if the appliance:
 - displays obvious damage
 - no longer performs the desired functions
 - was stored for too long under unfavourable conditions
 - was subject during transport to mechanical strains.
-  During the welding process melted welding material can be thrown out of the machine. While operating the machine it is essential to wear safety glasses and protective long-sleeved clothes (danger of burns).
-  Use the machine only in large and / or ventilated areas.
-  Switch on the machine only when belt profile is clamped, otherwise the clamping jaws can be thrown out of the holder.
-  Never use the product in an explosive area.
-  Never use the product in a wet area. Avoid the contact to the device directly with water.
-  Repairs should only be performed by trained persons. Please send the product to an authorized BEHAbelt service partner or directly to BEHAbelt.
-  This machine is not designed for continuous operation. Risk of motor over heating and damaging of the machine.

Intended use

The appliance may only be used under those conditions and for those purposes for which it was constructed. In particular the safety notes ( work procedure) and use in a dry environment must be observed.

-  Operational safety is no longer guaranteed if the appliance is modified or converted.

Technical Data

Nominal voltage:	230 V AC $\pm 10\%$
Frequency:	50..60 Hz
U/min:	max. 24.000
Power:	500 W
Dimensions:	295 x 111 x 100 mm
Weight:	2.5 kg

 **Call us. We would be glad to advise you!**
+49 (0) 7684/907-0



Reg. No. 241088Q1