

Status 01.2013

Endless joint for
Forbo Siegling
TRANSILON round belts TC



Endless joint for Forbo Siegling TRANSILON round belts

- with temperature-controlled soldering iron
- with jointing clamp with quick closure

Bienefeld GmbH & Co. KG

Ütterlingser Straße 20

58791 Werdohl

Phone: +49 (0)23 92/93 93-0

Fax: +49 (0)23 92/15 07

E-Mail: info@bienefeld-gmbh.de

Internet: www.bienefeld-gmbh.de

- 1 Cut the TRANSILON round belt to length with the special scissors (Fig. 1), paying attention to achieving perpendicular cut faces.

Since material will be melted off, the TRANSILON round belt should be cut longer than the desired final length by the joint addition of approx. 3 mm (notch 1) or approx. 6 mm (notch 2).

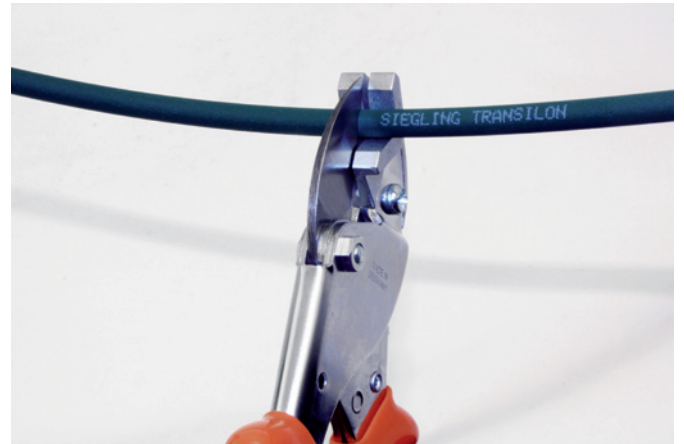


Fig. 1

- 2 Slide the welding bit on to the soldering iron in such a way that the lug on the shaft of the soldering iron lies in the slit of the welding bit sleeve.

Push the pull-back spring on the shaft of the soldering iron up to approx. 8 mm before the plastic housing and suspend it in the drilled hole of the welding bit (Fig. 2).

The power of the spring ensures the proper contact between the thermo sensor (on the tip of the heating device) and the welding bit.

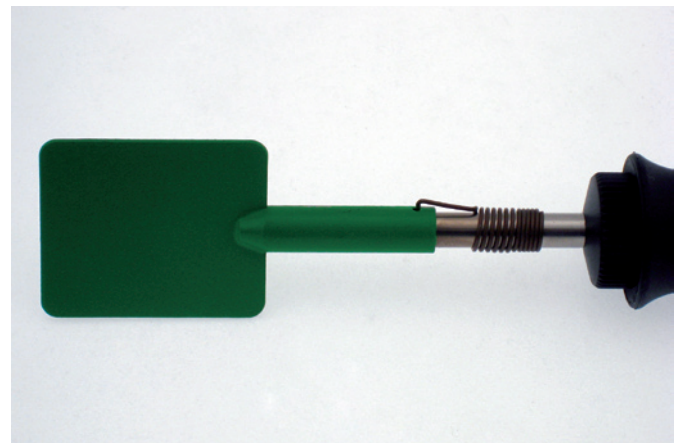


Fig. 2

- 3 Bolt the securing holding device for the soldering iron TC to the table, work bench or similar (Fig. 3).

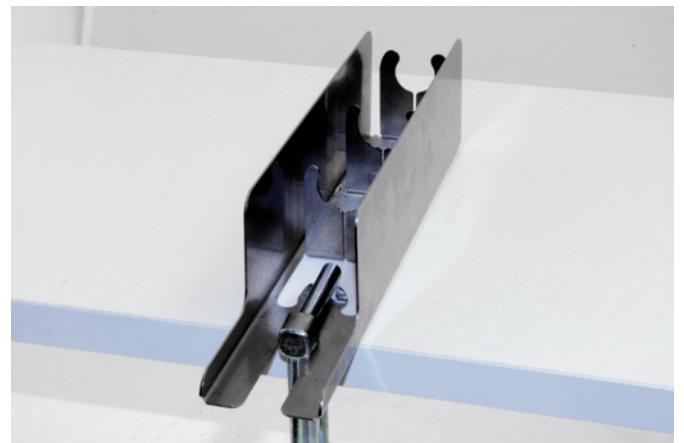


Fig. 3

- 4 First of all guide the cable through the rear retainer and insert the soldering iron TC to the rear (Fig. 4).

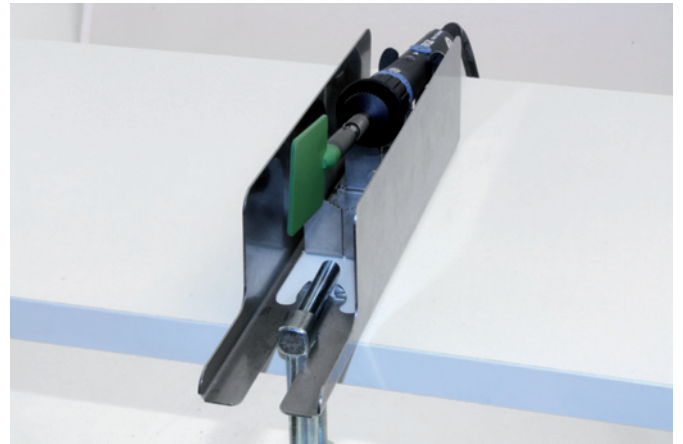


Fig. 4

- 5 For welding the soldering iron TC is pulled forward and set in the front tothing in such a way that the welding bit is vertical (Fig. 5).

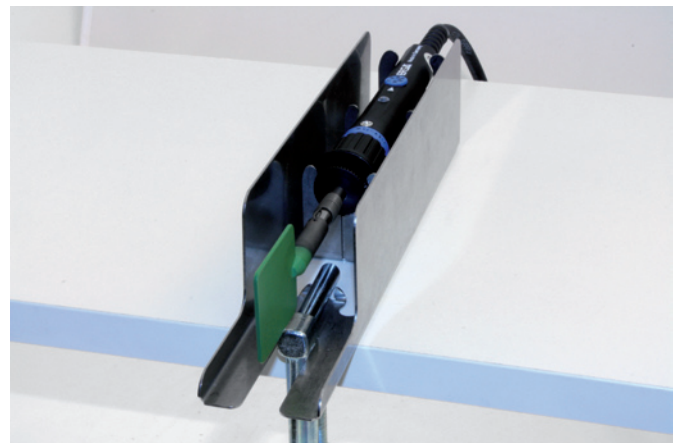


Fig. 5

- 6 For cooling down or brief intervals the soldering iron can be drawn to the rear and engaged in the tothing of the handle (Fig. 6).

For extended interruptions in working the soldering iron is to be switched off.

Never leave the soldering iron unattended until it has cooled down completely!

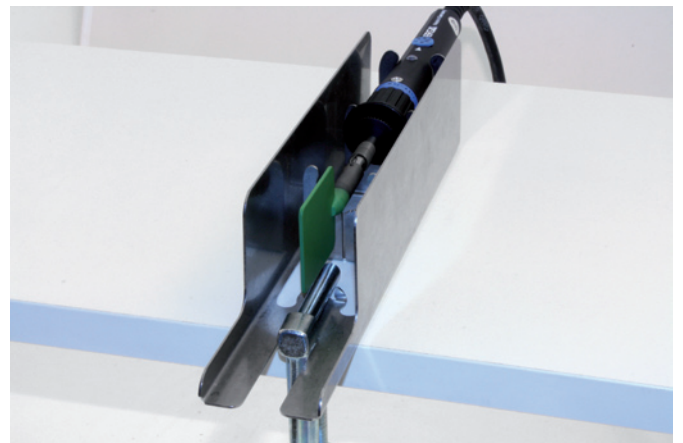


Fig. 6

- 7 The blue temperature-regulating knob (Fig. 7) is calibrated for the use of the soldering iron with a standard ERSA soldering tip.

When using the ERSA Multi-TC with Bienefeld article 208751: „Welding bit for ERSA Multi-TC, green“, the temperature able to be reached in the middle of the welding bit is around 30 °C lower than that indicated on the scale. The reason for this is the significantly larger surface of the welding bit and the thereby related greater loss of heat through radiation. Accordingly when 260 °C is set, the effective temperature reached will be approx. 230 °C.



Fig. 7

- 8 The soldering iron TC reaches its temperature after approx. 2 minutes. Check the temperature with a Testo 805 infra-red thermometer (Fig. 8).

IMPORTANT: Hold the thermometer at a distance of not more than 15 mm from the welding bit since otherwise too much of the colder ambient air will be measured and the measurement will be incorrect!

For welding Siegling TRANSILON round belts we recommend a welding temperature of 230 °C.



Fig. 8

- 9 When using the Bienefeld round belt jointing clamp with quick closures (Fig. 9), the two threaded bars are to be adjusted in such a way that the belt when inserted is firmly held. The positions are locked by tightening the nuts

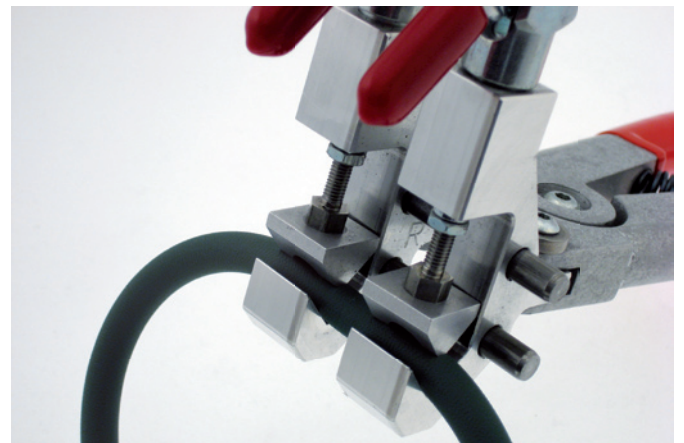


Fig. 9

- 10** Welding the ends of the round belt with the Bienefeld round belt jointing clamp:

Engage the bar for the pressure setting as follows:

- Setting 1 for round belts of 3 to 6 mm diameter notch 1 (Fig. 10).

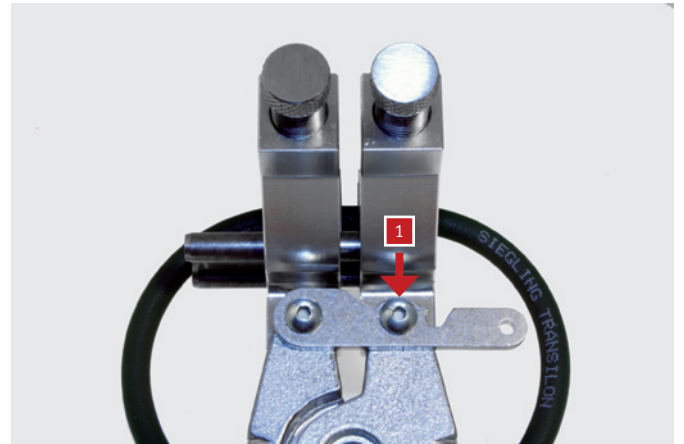


Fig. 10

- 11** • Setting 2 for round belts of 7 to 15 mm diameter notch 2 (Fig. 11).

Insert the ends of the round belt in the jointing clamp in such a way that the cut surfaces touch each other in the middle of the clamp opening.

Clamp the ends of the belt with the clamping screws or, as the case may be, with the quick closures.

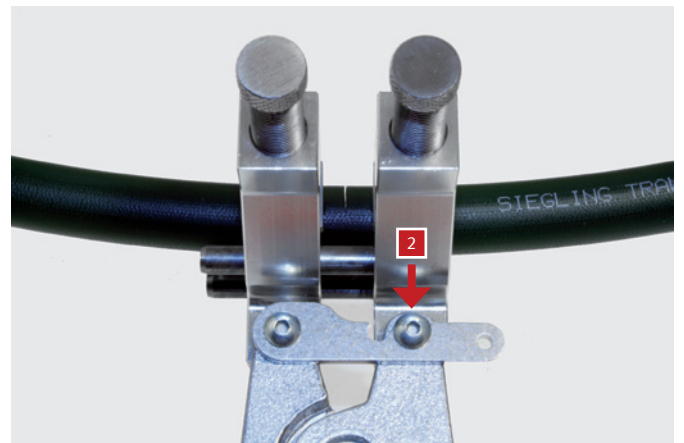


Fig. 11

- 12** Press the handles of the jointing clamp together to such an extent that the bar disengages and a gap is created between the ends of the belt.

Push the open jointing clamp over the welding bit in such a way that the ends of the round belt are positioned as far as possible centrally above the welding bit (Fig. 12). Open the handles of the jointing clamp slowly and melt the round belt.

When the ends have melted sufficiently, open the jointing clamp rapidly, draw it away from the welding bit and get the ends of the belt pressed together by the spring pressure.

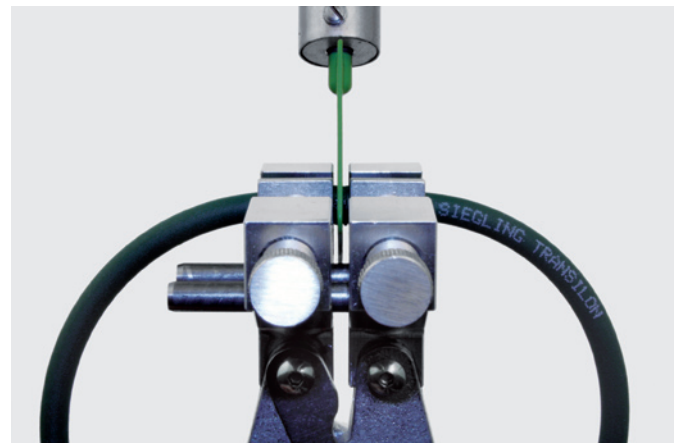


Fig. 12

- 13 **TIP:** The melting process can be observed better if the jointing clamp is turned! (Fig. 13)

WARNING: Melting generates vapours hazardous to health! Ensure adequate ventilation. Do not inhale the vapours!

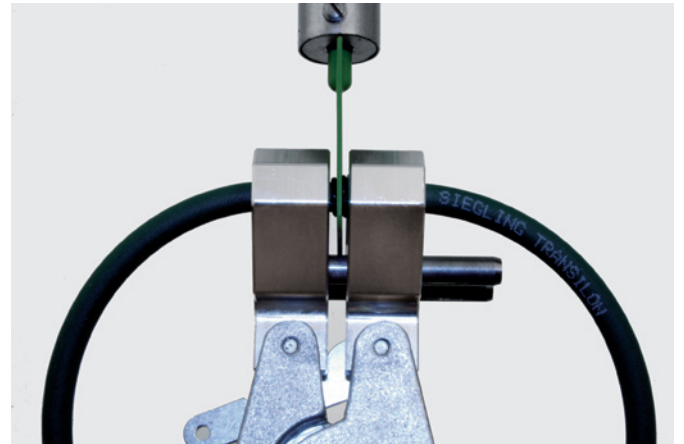


Fig. 13

- 14 Allow the welded joint to cool down for approx. 3 minutes (Fig. 14) (with belts ≥ 8 mm diameter, support this process with cold water).

Never bend or stretch the belt when it is still warm.

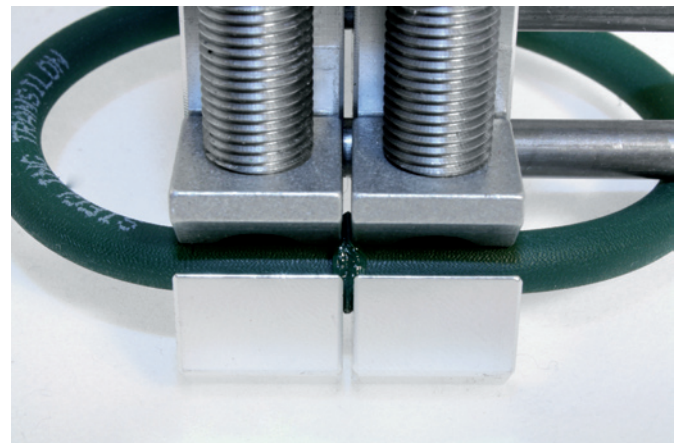


Fig. 14

- 15 Cut off the welding bead (Fig. 15) or grind it off with a sanding disk. In addition the welded joint can be smoothed with the welding bit.

Clean the welding bit only with cotton cloths.

Bienefeld supplies round belts, devices and accessories ex stock.



Fig. 15