

Splicing Instructions

SHP butt splice (30) for Fullsan (FLT, CD, PD) Fullsan Pro (FLT+, CD+, PD+)

Splicing procedure	Melt splices
Splice type (AdV)	SHP butt splice (30)
Splicing tool	SlimHeatingPress (SHP) air-cooled press (see the following operating instructions no.: 283)
Preparation tools	Fullsan belt cutter
Accessories	Safety knife, cut-resistant gloves, safety glasses, thickness sensor, thickness sensor, tape measure, extra material, flashlight, cloth (lint-free and colorless), guide rails (inlays) and separating media suitable for the product
Cleaning agents	Ethanol
Thickness allowance FLT	Belt thickness* π (like Transilon)
Splicing allowance	Fixing section + cutting position
Cut-off length	Required belt length + splicing allowance + thickness allowance
Info	Only applies if the belt is cut off at a 90° angle

⚠ Caution: Fullsan and Fullsan Pro are available in Flat (FLT), Center Drive (CD), and Positive Drive (PD1 or PD2) variants.

The CD and PD1/PD2 are driven by teeth on the underside. The various versions require special steps in the procedure (see information in the sections concerned).

⚠ Caution: These splicing instructions may only be used in conjunction with an up-to-date splice data sheet for the relevant belt type.

The splicing procedure, splice type, splicing instructions and splicing tool must tally in both documents.

⚠ Caution: All the following instructions assume that the underside of the material is at the bottom and the top face is at the top.

⚠ Caution: Only use the tools, equipment and machinery listed as specified in the relevant operating instructions

The splicing parameters were determined under standard conditions (23°C, 50% relative humidity) and can differ if other ambient conditions apply. Press used: Blizzard SHP 900 No. 06, 230 V, 2350 W

Please note: We recommend making a trial splice before you make the actual splice.

Please note: If you're making a splice in humid conditions, we recommend drying the belt beforehand to prevent any blisters from forming. To do so, a belt is placed in the heating press according to the splicing instructions with the following parameters: Pre-dried: 150°C, x bar, 10 mins. The belt must not be cooled once the hold-down time has expired. Then start splicing with the parameters specified. Please make a trial splice before starting.

1 Preparing/cutting

2 Heating press assembly bottom

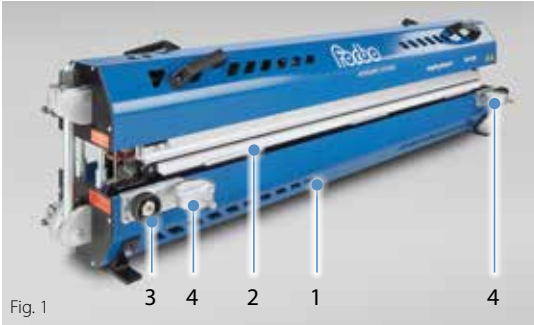


Fig. 1

3 Press layout bottom

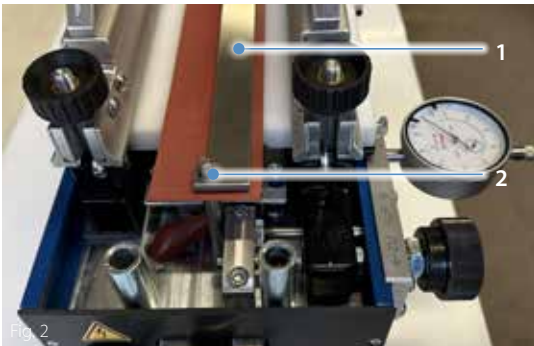


Fig. 2

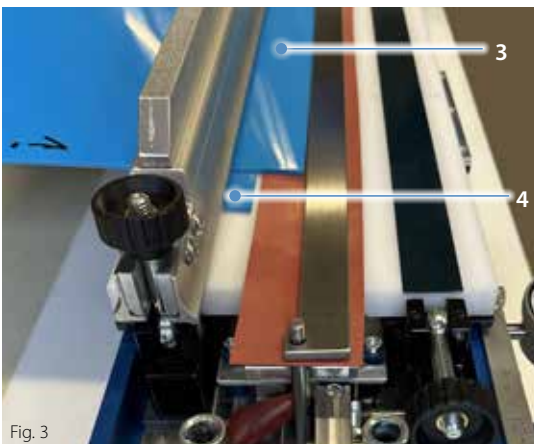


Fig. 3

Procedure

- Before starting, read through all the splicing instructions and prepare for each of the steps.
- Make sure you select the guide rails (inlays) correctly.
- Use the belt cutter to cut the belt to its final length (see the belt cutter's operating instructions)

The instructions show how to use the heating press properly (see operating instructions no.: 283)

Warning: To prevent burns, don't touch the device's heating components (heating platens) and the conveyor belt until they have cooled down.

- Put the bottom half of the press (1) in position (ensuring it's in a stable position and at a height safe to work at, without a belt holder and inlays). (Fig. 1)
- Turn the two belt set screws (3) to put the infeed unit (2) in the starting position. (Turn them tightly towards Open until they go no further). (Fig. 1)
- **Only applies to CD, PD1 and PD2 belts:** Place an end of the belt over both inlays. To ensure that the tooth pitch in the splice is correct later on, the belt end's teeth must engage properly with the recesses in the inlays. If necessary, readjust the belt's set screws on both sides evenly until tooth engagement is perfect. Following an adjustment, the set screws must not be adjusted again.
- Turn the two dial gauges (4) to zero. (Fig. 1)

Caution: Clean the ends of the belt you want to splice and all the components to be placed in the press. To do so, use a cloth soaked in ethanol. Allow the ethanol to evaporate from the components you have cleaned before they are used.

- Clean the top and bottom heating platens.
- Place the layers (except the belt material) to line the press (underside) on the bottom part of the heating press.
Press layout >> see splice data sheet
- Clean the adjustment aid (1) and put it onto the centering bolts (2). (Fig. 2)
- Clean the first end of the belt (3) and center it over the width of the press. Pre-fix it with the belt holder.
Caution: Shim the belt holder up to the edge of the press with belt material (4) if the belt is much narrower than the nominal width of the press. (Fig. 3)
- **Only applies to FLT and CD products:** Now press the end of the belt against the edge of the adjustment aid.
- Make sure that the usable area of the heating width is not exceeded.
- Use the belt holder to affix the end of the belt.
- Remove the adjustment aid.

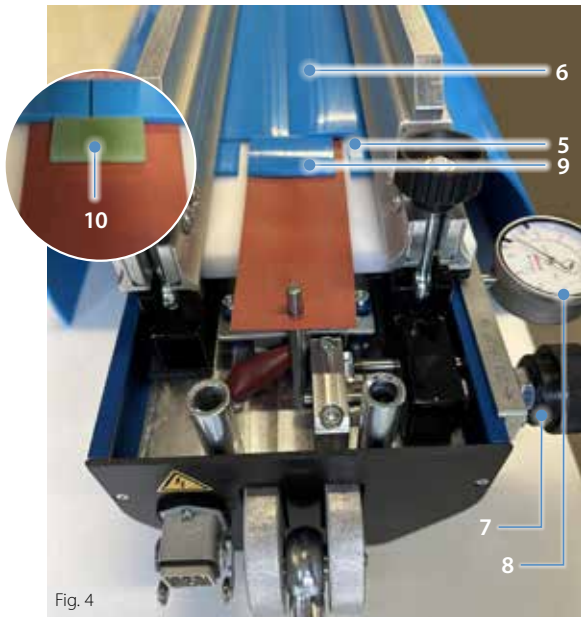


Fig. 4

- Clean the second end of the belt, place it flush with the first end of the belt and affix it with the second belt holder.
Caution: Shim the second belt holder to the edge of the press with belt-imping material (5) if the belt is much narrower than the nominal width of the press. (Fig. 4)
- Press the second end of the belt (6) so that it touches the first end of the belt and affix it. (Fig. 4)
Only applies to FLT belts: There must be no gap in the area where the two belts touch each other. Should there be a gap, use the belt set screws (7) to close it. (Fig. 4)
- **Only applies to FLT belts:** Turn the belt set screw (7) to create even impact pressure until the two ends of the belt touching one another lift up slightly. Turn both belt set screws by the same value towards Closed. The dial gauge (8) shows the value. (Fig. 4)
- **Only applies to CD, PD1 and PD2 belts:** The impact pressure is achieved by adding material when cutting the final length. To obtain the right pitch, the set screws must not be adjusted. (See point 2 of the procedure)
- Then clean the surface of the splice and line the whole area of the press where heating takes place with extra material (9): Use the optional laminated fabric shims (10) if the splice uses the whole nominal width of the press. (Fig. 4)
Caution: The extra material (9) must not be clamped by the belt holders because the infeed unit will otherwise be blocked. (Fig. 4)

4 Press layout top

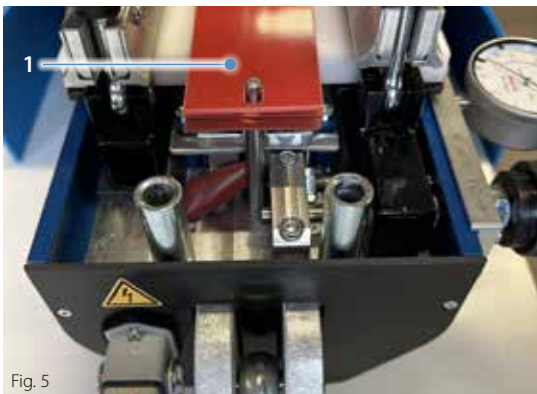


Fig. 5

- Place the layers required to line the press (top face) (1) onto the splice. (Fig. 5)
 Press layout >> see splice data sheet

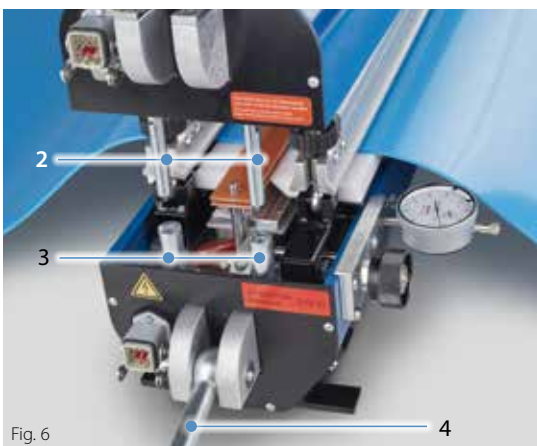
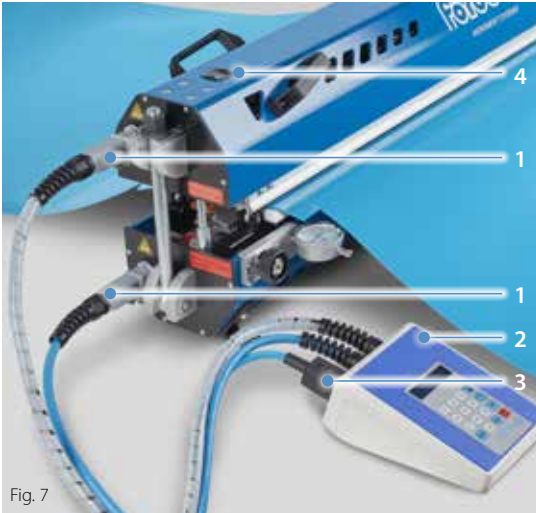


Fig. 6

- Place the top half of the press with the help of the centering bolts (2) into the center hole (3) on the bottom part of the press. (Fig. 6)
- Tighten the eye bolts (4) and collar nuts by hand to join the top and bottom part of the press with each other (no tools required). (Fig. 6)
Please note: Ensure uniform contact pressure by alternately tightening the clamping screws.

5 Heating splices



- Connect the plugs (1) on the control device (2) to the heating press.
- Use the power lead (3) to connect the heating press to the mains.
- Enter all the parameters required on the compressed air regulator (4) and control device (2). (>> see operating instructions) (Fig. 7)

Top heating temperature	>> see splice data sheet
Bottom heating temperature	>> see splice data sheet
Heating temperature's hold-down time	>> see splice data sheet
Pressure	>> see splice data sheet

Caution: The press may only build up pressure (be started) once both halves of the press have been connected by tightening the eye bolts.
Please note: The pressure starts building up via an in-built compressor as soon as the start button on the external control device (2) has been pressed. The pressure is released automatically after one splicing cycle (heat, hold, cool). (Fig. 7)

- Start the heating process.
The heating process starts, pressure is generated.

6 Cooling down the press

Cooling is carried out by in-built fans that use ambient air to cool the press and the splice.

The air-cooling process starts and ends automatically based on parameters in the control device.

7 Completing the heating procedure

If all parameters required have been met, the control device indicates Process Complete and asks you to confirm by pressing the OK button.

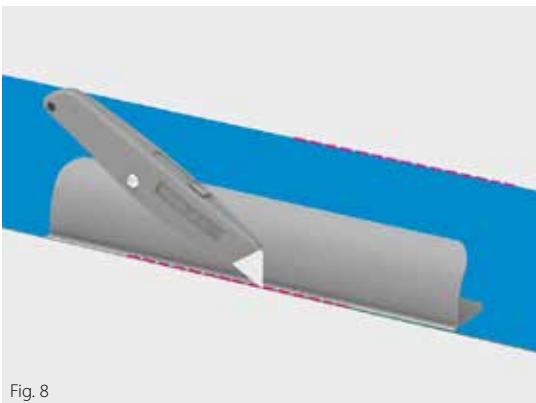
- After confirming by pressing the OK button, disconnect the press from the mains.

8 Opening the press

- Unplug the top half of the press.
- Open the press.
- Place the top part of the press carefully onto the centering bolts.

Warning: For safety reasons, don't touch the heating platen after heating.

9 Removing the belt



- Take the belt out of the heating press.
- **Only applies to CD, PD1 and PD2 belts:** Ensure the positions of the teeth on the splice to ensure the pitch is correct and that they are parallel.
- Use the safety knife to straighten up the edges of the splice (use cut-resistant gloves). (Fig. 8)
- The belt is now ready for use.