Shrink Polymer Systems

Cable Installation Materials – 24 volts to 36 kV

INSTALLATION INSTRUCTION
HEASHRINK JOINT TO SUIT STEEL ARMOURED ELECTRO OPTIC SUBMARINE CABLE WITH 2 x 35mm^2 + 1 x 25mm^2 POWER CORES = 12 x FIBRE OPTIC CORES
0.6/1kV KIT REFERENCE NO: SPS 1221

- THESE INSTRUCTIONS SHOULD BE FOLLOWED BY A TRAINED COMPETENT FITTER
- A PROPANE GAS TORCH IS THE PREFERRED METHOD FOR SHRINKING THESE MATERIALS
- ENSURE THAT THE MATERIALS ARE KEPT CLEAN AND DRY AND ARE FREE FROM DUST, SAND AND GREASE
- PLEASE CALL SHRINK POLYMER SYSTEMS FOR ANY ADVICE

DATE OF ISSUE: 01.11.11

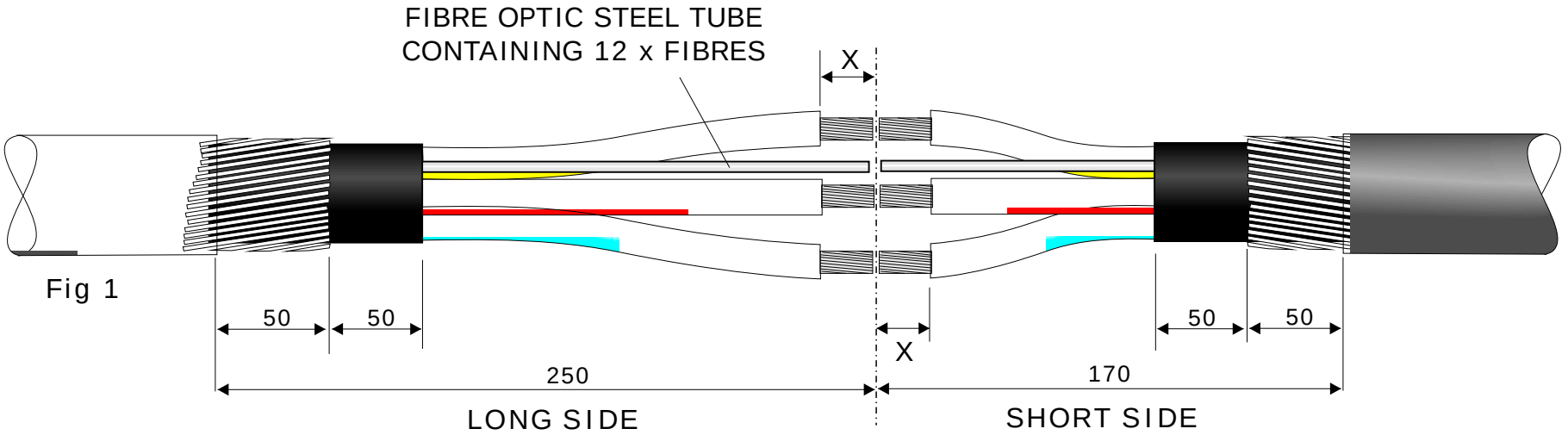

Fig 1

1. Ensure that the cables overlap and prepare as above using the dimensions given in Fig 1.

2. Slide the inner/outer shrink tube/s and the worm drive clamps over the cable ends before proceeding.

Note: Fig 1 above shows the steel fibre optic tube containing 12 x optical fibres, however user should terminate these fibres according to manufacturers instructions. The terminating of these cores is not covered within this instruction.

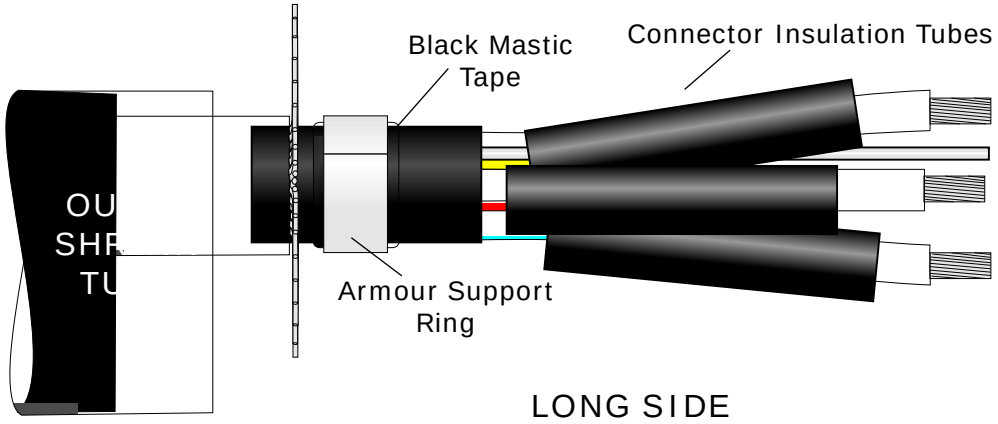

Fig 2

3. Bend back the armour wires and apply 212D black mastic tape around the cable bedding. Fit the armour support ring towards the end of the bedding. Press the armour wires into the tape.

Position the connector tubes down the longer cores as shown in Fig 2.

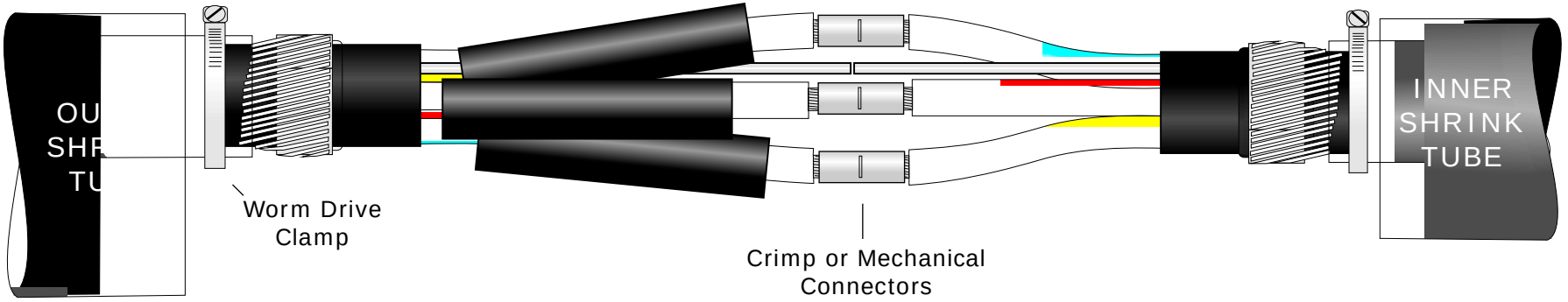

Fig 3

4. Before proceeding ensure the inner/outer shrink tubes and clamps are over the outer cable sheaths. Using an approved method, connect the individual cores and clean and de-grease the connectors.

Note: If mechanical connectors used, the shrink tube sizes may need increasing in size, please consult.

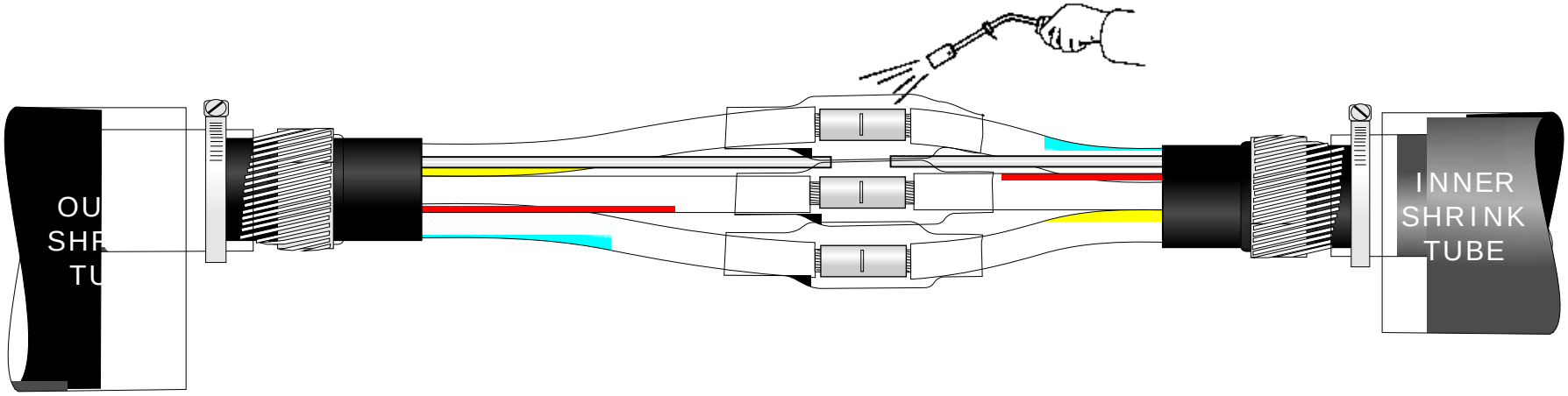

Fig 4

5. Centralise the individual connector insulation tubes over the connectors. Using a suitable heat source starting from the centre and working to one end at a time shrink in place, keeping the flame moving to ensure an even recovery (Fig 4).

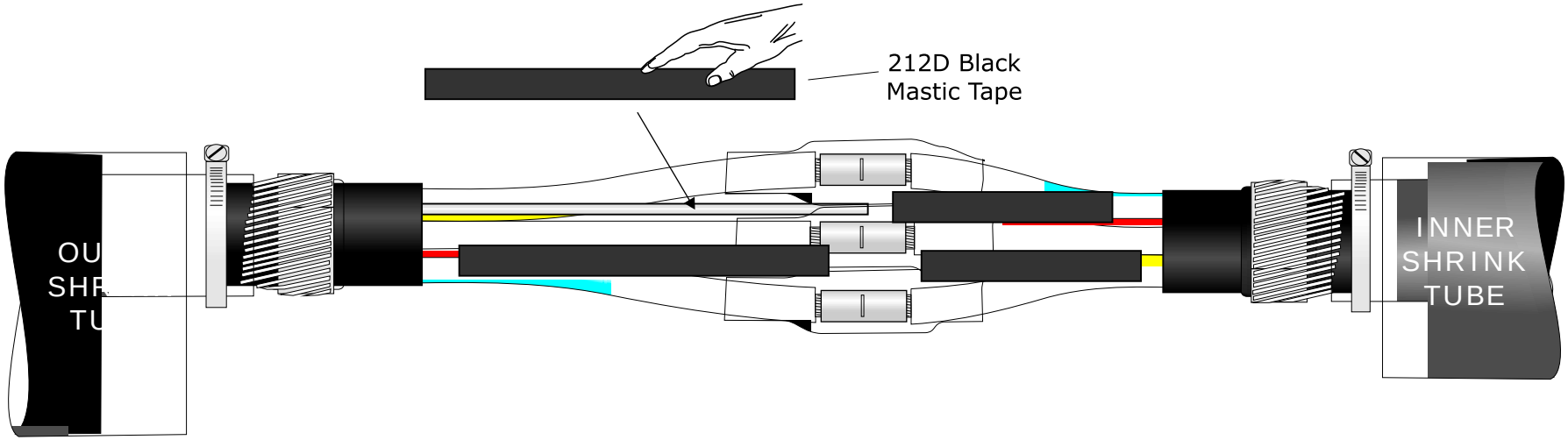

Fig 5

6. Take the 212D black mastic strips, remove the backing papers and insert the strips between the cores as shown above in Fig 5. Apply enough tape to fill up the spaces. This tape will melt and flow and fill up the voids once the heat is applied to the inner and outer shrink tubes.

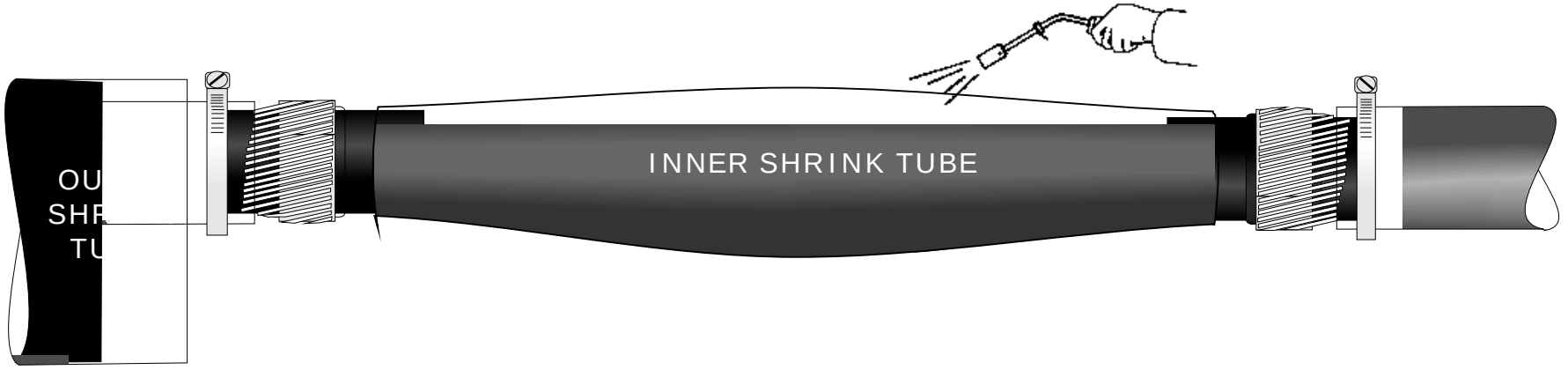

Fig 6

7. Ensure the inner cable bedding is clean and grease free before positioning the inner shrink tube centrally so that it overlaps equally at both sides. Shrink from the centre of the tube to one end at a time but ensure heat is applied evenly all around the tube to ensure a wrinkle free finish and good adhesive flow.

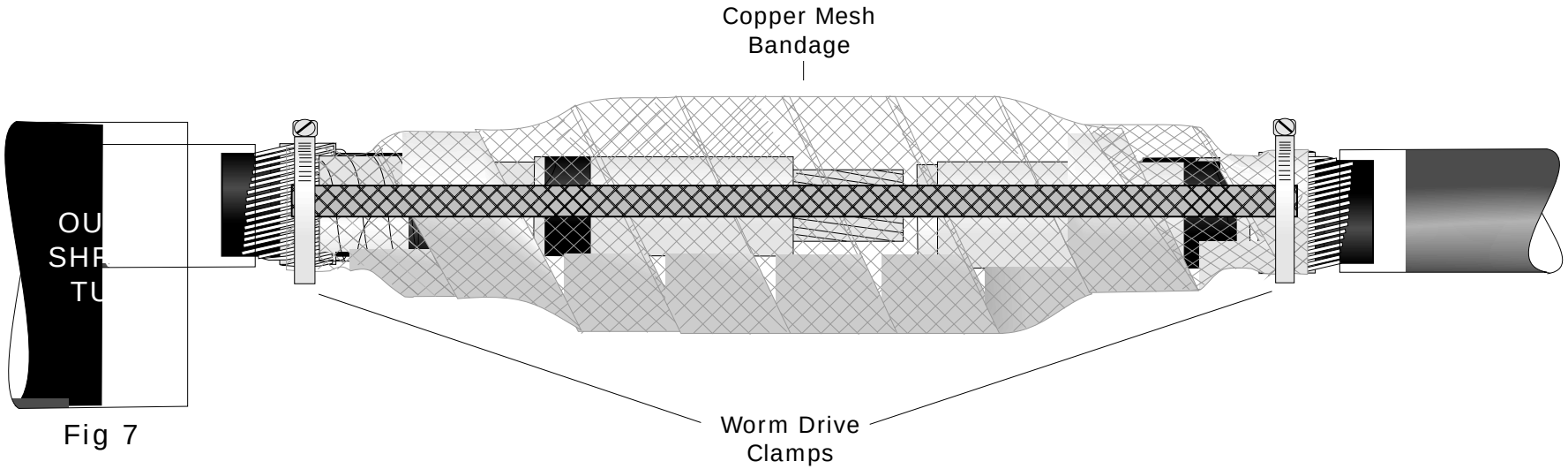

Fig 7

8. Wrap the tinned copper mesh with a 50% overlap around the entire joint. Extend the mesh onto the armours at both ends. Lay the earth braid across the joint and using the worm drive clamps, attach the copper mesh and earth braid to the armours. Trim off any excess braid.

9. Apply 212D black mastic over the worm drive clamps and extend onto the cable outer sheath.

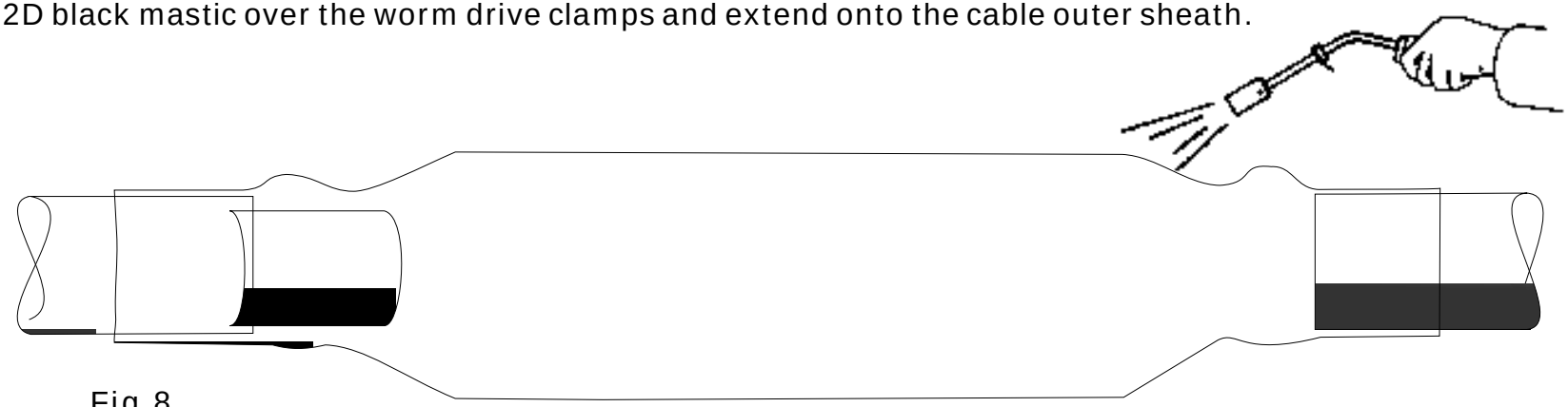

Fig 8

10. Centralise the outer shrink tube over the joint gap. Using a suitable heat source shrink from the centre to one end at a time. Keep the flame on the move all around the tube to ensure an even wall thickness.

Once fully recovered sealant should be visible at each end. Allow the completed Joint to cool before applying any mechanical strain.

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