Patent claims

1. A method for welding plastic pipes (1) made of thermoplastic material by means of a butt-welding process, the pipes (1) being held in a coaxial position in relation to one another by means of clamping fixtures (2), trimmed by means of a trimmer (3) which can be brought between the clamping fixtures (2) and heated up by means of heated tools (6) which can be fitted in place of the trimmer (3), the heating of the free pipe ends (8) to be welded having the effect of producing a melting region, which forms a bead when pressing occurs, characterized in that the pipe projection (5) of the pipes (1) is trimmed to a defined size.

2. The method as claimed in claim 1, characterized in that the adjustment for contacting the heated tool takes place during the heating-up phase (11).

3. The method as claimed in either of claims 1 and 2, characterized in that there is no need for a separate heated-tool contacting phase (10).

4. The method as claimed in claim 1, characterized in that the joining phase (13) is displacement-controlled.

5. The method as claimed in either of claims 1 and 4, characterized in that the joining phase (13) is pressure-controlled.

6. The method as claimed in claim 1, characterized in that the heating temperature of the heated tool adapts itself correspondingly to the (in relation to the) ambient temperature.

7. The method as claimed in either of claims 1 and 6, characterized in that the duration of the heating-up phase is dependent on the ambient temperature.

8. A device for welding plastic pipes (1) made of thermoplastic material by means of a butt-welding process, the pipes (1) being held in a coaxial position in relation to one another by means of clamping fixtures (2), trimmed by means of a trimmer (3) which can be brought between the clamping fixtures (2) and heated up by means of heated tools (6) which can be fitted in place of the trimmer (3), the heating of the free pipe ends (8) to be welded having the effect of producing a melting region, which forms a bead when pressing occurs, characterized in that the device has a trimmer stop (4) to define the length of the pipe projections (5) to be trimmed.

9. The device as claimed in claim 8, characterized in that the device has a displacement measuring system.

Patent claims

1. A method for welding plastic pipes (1) made of thermoplastic material by means of a butt-welding process, the pipes (1) being held in a coaxial position in relation to one another by means of clamping fixtures (2), trimmed by means of a trimmer (3) which can be brought between the clamping fixtures (2) and heated up by contact with the means of heated tools (6) which can be fitted in place of the trimmer (3), the heating of the free pipe ends (8) to be welded having the effect of producing a melting region, which forms a bead when pressing occurs, characterized in that the pipe projection (5) of the pipes (1) is trimmed to a defined size.

2. The method as claimed in claim 1, characterized in that the adjustment for contacting the heated tool takes place during the heating-up phase (11).

3. The method as claimed in either of claims 1 and 2, characterized in that there is no need for a separate heated-tool contacting phase (10).

4. The method as claimed in claim 1, characterized in that the joining phase (13) is displacement-controlled.

5. The method as claimed in either of claims 1 and 4, characterized in that the joining phase (13) is pressure-controlled.

6. The method as claimed in claim 1, characterized in that the heating temperature of the heated tool adapts itself correspondingly to the (in relation to the) ambient temperature.

7. The method as claimed in either of claims 1 and 6, characterized in that the duration of the heating-up phase is dependent on the ambient temperature.

8. A device for welding plastic pipes (1) made of thermoplastic material by means of a butt-welding process, the pipes (1) being held in a coaxial position in relation to one another by means of clamping fixtures (2), trimmed by means of a trimmer (3) which can be brought between the clamping fixtures (2) and heated up by contact with the means of heated tools (6) which can be fitted in place of the trimmer (3), the heating of the free pipe ends (8) to be welded having the effect of producing a melting region, which forms a bead when pressing occurs, characterized in that the device has a trimmer stop (4) to define the length of the pipe projections (5) to be trimmed.

9. The device as claimed in claim 8, characterized in that the device has a displacement measuring system.