

Hot Plate Welding

Related to contact welding, this technique is used to weld larger parts, or parts that have a complex weld joint geometry. The two parts to be welded are placed in the tooling attached to the two opposing platens of a press. A hot plate, with a shape that matches the weld joint geometry of the parts to be welded, is moved in position between the two parts. The two opposing platens move the parts into contact with the hot plate until the heat softens the interfaces to the melting point of the plastic. When this condition is achieved the hot plate is removed, and the parts are pressed together and held until the weld joint cools and re-solidifies to create a permanent bond. The most common form of this welding is butt heat fusion welding which welds two circular tubes end to end.

