

Resistance welding

Resistance welding, specifically, projection welding and resistance projection welding.

Resistance welding is a welding process based on Joule's Law; $Q = I^2Rt$

Q = heat [J]

I = current [A]

R = electrical resistance [Ohm]

t = welding time [s].

In contrast to resistance spot-welding, in resistance projection welding (abbreviated to projection welding), the current density required for welding is generated through the component shape rather than through the electrodes. In resistance projection welding, the electrodes serve only to supply current and to provide power.

The basic structure of projection welding machines corresponds to that of resistance spot-welding devices. Variants in the field of resistance projection welding include cross-wire welding, where wire meshes are welded together, and ring-edge welding.

A quality monitoring system, which works on the basis of fuzzy logic, is used in specific applications.

Many years of experience and the application of several components to ensure a long-lasting join connection, the parts can also be used in critical environments such as the interior of a sheet-fed printing press.