

AWS RWPH:2011

Resistance Welding Pocket Handbook



American Welding Society

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Resistance Welding Pocket Handbook

1st Edition

Prepared by the American Welding Society (AWS) J1 Committee on Resistance Welding Equipment

With guidance from the AWS RWMA Committee

Under the Direction of the AWS Technical Activities Committee

Abstract

General information relating to the operation of common resistance welding equipment.



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This booklet contains:

- basic information on resistance welding
- important "do's" and "don'ts"
- common weld defects and their probable causes
- · various charts including sample weld schedules

While this pocket handbook contains important safety tips, it is NOT a safety manual. Nor is it an operator's manual or a maintenance manual. It cannot take the place of any of these. Similarly, it is not an industry standard and does not replace any existing industry standards. Its sole purpose is to help you make better and more consistent welds.

For additional information please consult other AWS technical documents relating to resistance welding. Assistance can also be obtained from the members of the RWMA Committee of the American Welding Society.



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What is a Resistance Weld?

It is the localized fusion of metal where the heat required for coalescence is caused by the flow of electric current through the workpieces and pressure is applied by the electrodes to forge the parts together. An example resistance welding configuration is shown in Figure 1.



Figure 1—Basic Resistance Weld Configuration