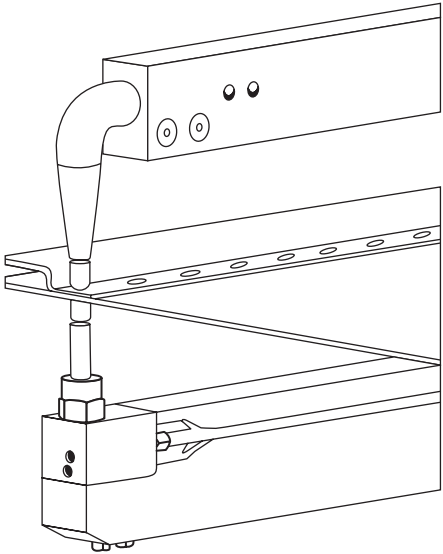

AWS RWPH:2011

Resistance Welding Pocket Handbook

American Welding Society

AWS RWPH:2011

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.

American Welding Society
550 N.W. LeJeune Road, Miami, FL 33126

International Standard Book Number: 978-0-87171-785-6
American Welding Society
550 N.W. LeJeune Road, Miami, FL 33126

Statement of Use. Although care was taken in choosing and presenting the data in this pocket handbook, AWS cannot guarantee that it is error free. Further, this Pocket Handbook is not intended to be an exhaustive treatment of the topic and therefore may not include all available information, including with respect to safety and health issues. By publishing this Pocket Handbook, AWS does not insure anyone using the information it contains, against any liability or injury to property or persons arising from that use.

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.

RWMA®
RESISTANCE WELDING MANUFACTURING ALLIANCE

Table of Contents

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.

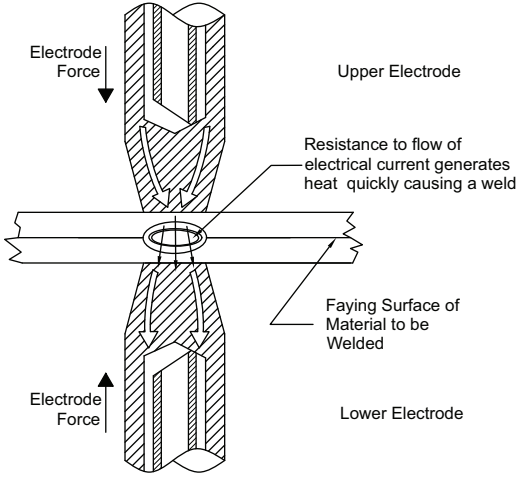

Figure 1—Basic Resistance Weld Configuration