

UNITED ASSOCIATION

WELDING PROCEDURE SPECIFICATION UA-1

Supporting Procedure Qualification Records: UA-1A
Manual SMAW Welding Processes

JOINTS

Groove Design: Vee-groove, single bevel
Backing: With or Without
Root Spacing: $\frac{1}{16}$ " to $\frac{3}{16}$ "
Retainers: None

BASE MATERIALS

Limited to P-1 Carbon Steel Materials
Thickness Range: 0.0625" to 0.560"

POSITIONS

All welding positions permitted
Uphill or downhill progression permitted on any pass of a vertical weld

PREHEAT & POST WELD HEAT TREATMENT

Minimum Preheat of 50° F.
Post weld heat treatment not permitted

WELDING PARAMETERS

F-No. 3 A-No. 1 SFA No. 5.1
Diameters: $\frac{3}{32}$ ", $\frac{1}{8}$ " or $\frac{5}{32}$ "
Deposited Weld Metal Thickness Range: Up to 0.560" maximum
Amperage Ranges: $\frac{3}{32}$ " 40 to 80 ; $\frac{1}{8}$ " 75 to 125; $\frac{5}{32}$ " 110 to 170
Direct Current & Straight Polarity (Electrode Positive)

GENERAL WELDING TECHNIQUES

Initial & interpass cleaning with brushing, filing or grinding using hand or power tools
Stringer beads required for root pass, subsequent passes may be either stringer or weave beads
Multipass welding required, with no single pass greater than $\frac{1}{2}$ "
Back gouging of welds is not permitted
Peening of welds is not permitted

