

SUGGESTED GROUSER BAR WELDING PROCEDURE FOR CARBON, HEAT TREATED & HIGH CHROME HEAT TREATED GROUSER BARS

1.
 - a) Existing Pads and bars must be clean and free from moisture, dirt and grease at the weld area.
 - b) Rods must be used immediately as taken from moisture – protecting package.
2.
 - a) Dress old grouser back to one inch with oxy-acetylene cutting process – resulting in straight, smooth edge. Clean cut surface of oxide and slag with a grinder or file.
 - b) Cut grouser bar 1" shorter than pad.
 - c) (i) On bars with weld preparation ends of $\frac{1}{4}$ ", fit bar with $\frac{3}{32}$ root gap $\frac{1}{2}$ " from ends of pad.
(ii) On bars with weld preparation ends of $\frac{5}{16}$ " – $\frac{3}{8}$ ", fit bar with $\frac{1}{8}$ " root gap $\frac{1}{2}$ " from ends of pad.
3.
 - a) Tack bar on pad at both ends and center (one side only) with E7018 electrode using medium to high side of recommended amperage settings. Tacks must be minimum of 2" long and flat on surface to assist in cleaning. Apply tacks with a large deposit using high heat and a slow rate of travel.
4.
 - a) The backstep welding technique should be utilized using a slow rate of travel, large electrodes and high heat. The first pass should be on the opposite side from the tacks. Start in the middle of the bar and weld out to the end. Starting at the opposite end, weld to the start of the first deposit. Repeat this procedure for the tacked side of the bar. On larger bars this procedure may have to be done twice. Always clean start of first pass before joining with the second pass. Root passes must be flat on face and fairly heavy. Finish pass contour should be slightly convex. No undercut is allowed on tacks or passes. All craters at the ends of welds should be filled.
 - b) Bar ends should be cleaned and corked with a fillet weld using E7018 rod.
5.
 - a) Avoid quenching or rapid cooling of welds (i.e. water, mud, snow, etc.)

NOTE: To completely ensure a proper welding procedure, preheat (200oF) prior to welding should be performed.

For more information contact:

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