

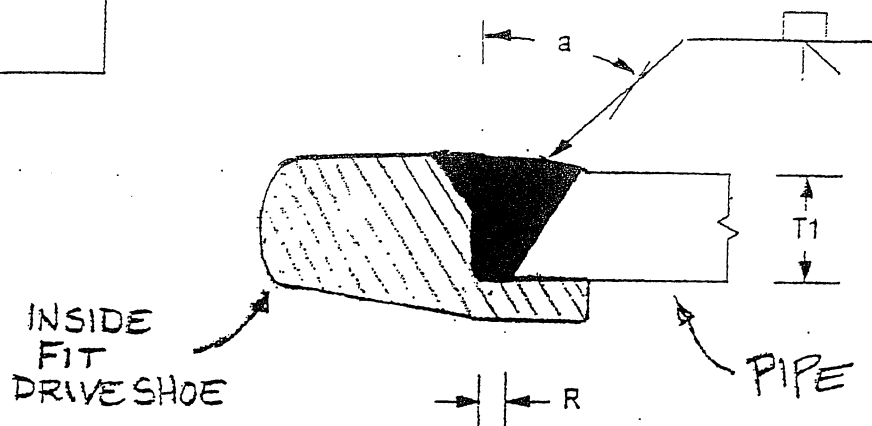
Farwest Fabrication Welding Procedure Specification

WPS-FWF-API-SHOE

Page 2 of 2

Joint Detail

Single-bevel-groove-weld (4)
T-joint (T)
Corner joint (C)



Welding Process	Joint Designation	Base Metal Thickness (U=unlimited)		Groove Preparation				Permitted Welding Positions	Notes
		T1	T2	Root Opening	Groove Angle	Tolerances			
						As Detailed (see 3.13.1)	As Fit Up (see 3.13.1)		
SAW	TC-U4a-S	U	U	R = 3/8	a = 30°	R = +1/16, -0 a = +10°, -0°	+1/4, -1/16 +10°, -5°	F	J, N, V
				R = 1/4	a = 45°				

MEMO

Notes:

- A: Not prequalified for gas metal arc welding using short circuiting transfer nor GTAW. Refer to Annex A.
- B: Joint is welded from one side only.
- Br: Cyclic load application limits these joints to the horizontal welding position (see 2.27.5).
- C: Backgouge root to sound metal before welding second side.
- D: SMAW detailed joints may be used for prequalified GMAW (except GMAW-S) and FCAW.
- E: Minimum weld size (E) as shown in Table 3.4, S as specified on drawings.
- J: If fillet welds are used in statically loaded structures to reinforce groove welds in corner and T-joints, these shall be equal to 1/4 T₁, but need not exceed 3/8 in. (10 mm). Groove welds in corner and T-joints of cyclically loaded structures shall be reinforced with fillet welds equal to 1/4 T₁, but need not exceed 3/8 in. (10 mm).
- M: Double-groove welds may have grooves of unequal depth, but the depth of the shallower groove shall be no less than one-fourth of the thickness of the thinner part joined.
- Mp: Double-groove welds may have grooves of unequal depth, provided these conform to the limitations of Note E. Also the weld size (E) applies individually to each groove.
- N: The orientation of the two members in the joints may vary from 135° to 180° for butt joints, or 45° to 135° for corner joints, or 45° to 90° for T-joints.
- V: For corner joints, the outside groove preparation may be in either or both members, provided the basic groove configuration is not changed and adequate edge distance is maintained to support the welding operations without excessive edge melting.
- Z: Weld size (E) is based on joints welded flush.