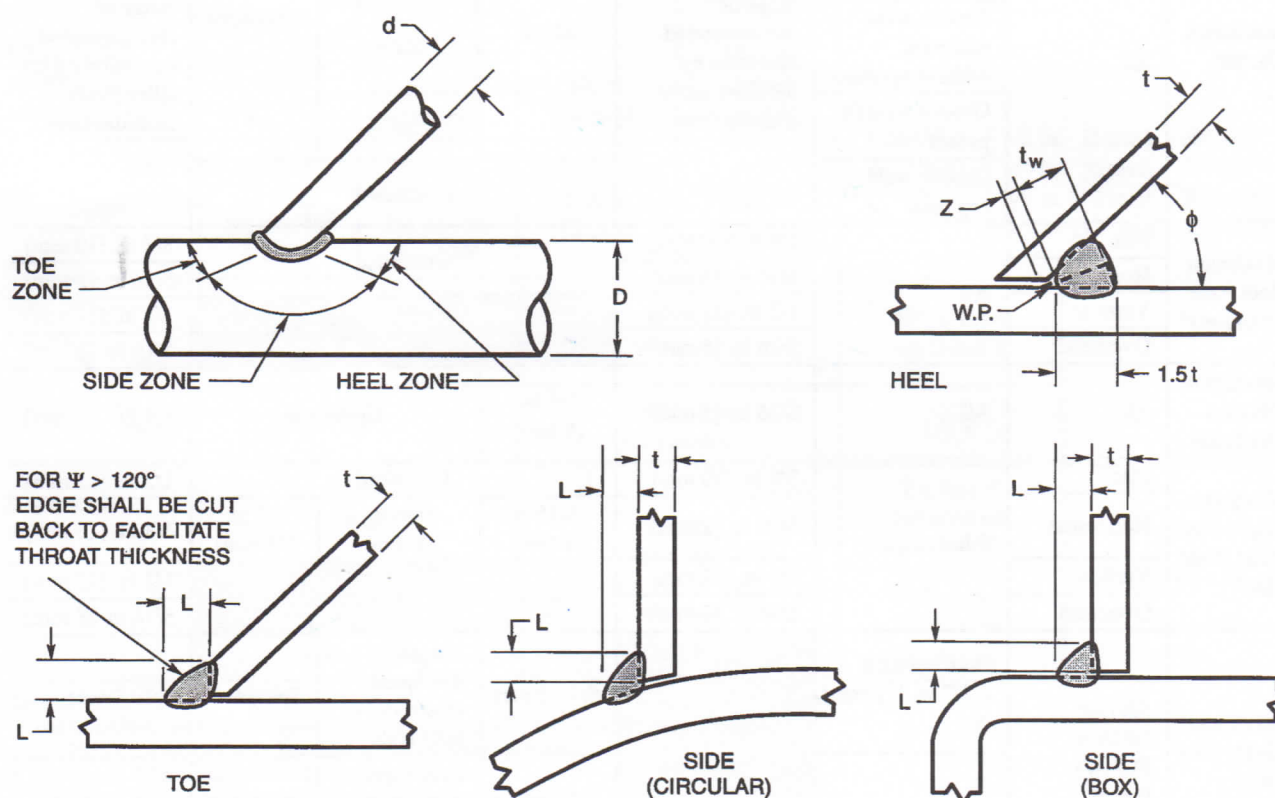


Figure 3.1—Weld Bead in which Depth and Width Exceed the Width of the Weld Face (see 3.7.2)



FOR $\Psi > 120^\circ$
EDGE SHALL BE CUT
BACK TO FACILITATE
THROAT THICKNESS

MIN L FOR

	$E = 0.7t$	$E = t$	$E = 1.07t$
HEEL $< 60^\circ$	$1.5t$	$1.5t$	LARGER OF $1.5t$ OR $1.4t + Z$
SIDE $\leq 100^\circ$	t	$1.4t$	$1.5t$
SIDE $100-110^\circ$	$1.1t$	$1.6t$	$1.75t$
SIDE $110-120^\circ$	$1.2t$	$1.8t$	$2.0t$
TOE $> 120^\circ$	t BEVEL	$1.4t$ BEVEL	FULL BEVEL 60-90° GROOVE

General Notes:

- t = thickness of thinner part.
- L = minimum size (see 2.24.1.3 which may require increased weld size for combinations other than 36 ksi [250 MPa] base metal and 70 ksi [485 MPa] electrodes).
- Root opening 0 to 3/16 in. [5 mm] (see 5.22).
- Not prequalified for $\phi < 30^\circ$. For $\phi < 60^\circ$, the Z loss dimensions in Table 2.8 apply. See Table 4.9 for welder qualification position requirements.
- See 2.23.1.2 for limitations on $\beta = d/D$.

Figure 3.2—Fillet Welded Prequalified Tubular Joints Made by SMAW, GMAW, and FCAW (see 3.9.2)