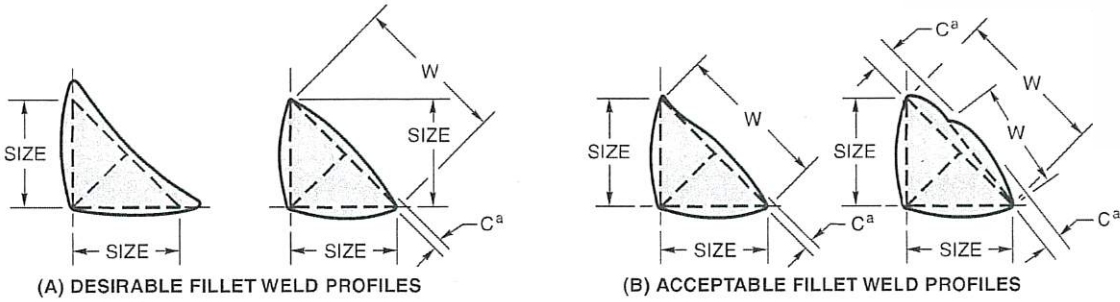


## APPENDIX V

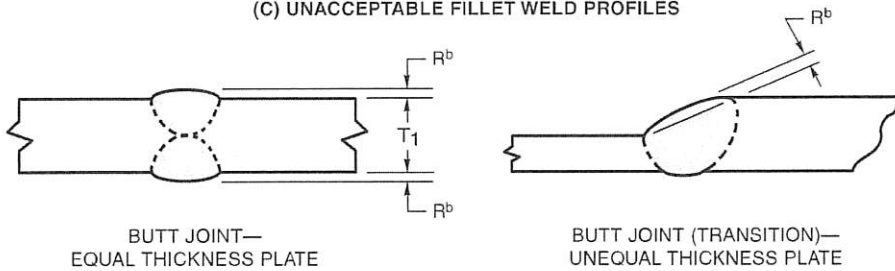
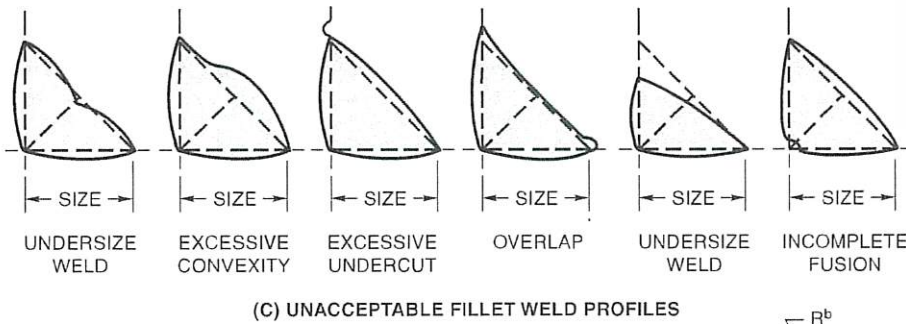
### ACCEPTABLE AND UNACCEPTABLE WELD PROFILES



← Accept

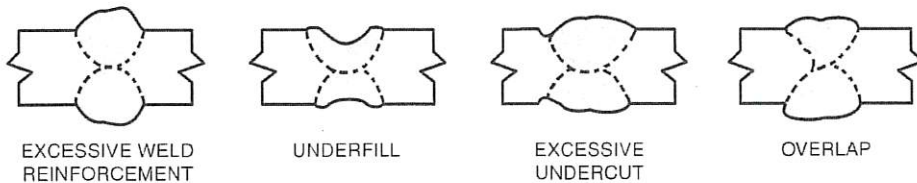
<sup>a</sup>Convexity, C, of a weld or individual surface bead with dimension W shall not exceed the value of the following table:

WIDTH OF WELD FACE OR INDIVIDUAL SURFACE BEAD, W	MAX. CONVEXITY, C
$W \leq 5/16$ in	1/16 in
$W > 5/16$ in TO $W < 1$ in	1/8 in
$W \geq 1$ in	3/16 in



<sup>b</sup>Reinforcement R shall not exceed 1/8 in.

#### (D) ACCEPTABLE GROOVE WELD PROFILE IN BUTT JOINT



## APPENDIX VI

### WELD PROFILE ACCEPTANCE DESCRIPTION

- (1) The faces of fillet welds may be slightly convex, flat, or slightly concave as shown in Appendix V (A) and (B), with none of the unacceptable profiles shown in (C). Except at outside corner joints, the convexity,  $C$ , of a weld or individual surface bead with dimension  $W$  shall not exceed the values noted in the table in Appendix V.
- (2) Groove welds shall preferably be made with slight or minimum reinforcement except as may be otherwise provided. In the case of butt and corner joints, the reinforcement shall not exceed  $1/8$  in [3.2 mm] in height and shall have gradual transition to the plane of the base metal surface. See Appendix V. They shall be free of the discontinuities shown for butt joints in (E).
- (3) Surfaces of groove welds required to be flush shall be finished so as not to reduce the thickness of the thinner base metal or weld metal by more than  $1/32$  in [0.8 mm] or 5% of the thickness, whichever is smaller, nor leave reinforcement that exceeds  $1/32$  in [0.8 mm]. However, all reinforcement must be removed where the weld forms part of a faying or contact surface. Any reinforcement must blend smoothly into the plate surfaces with transition areas free from weld undercut. Chipping may be used provided it is followed by grinding. Where surface finishing is required, its roughness value shall not exceed  $250 \mu\text{in}$  [6.3  $\mu\text{m}$ ]. Surfaces finished to values of over  $125 \mu\text{in}$  [3.2  $\mu\text{m}$ ] through  $250 \mu\text{in}$  [6.3  $\mu\text{m}$ ] shall be finished so that the grinding marks are parallel to the direction of primary stress. Surfaces finished to values of  $125 \mu\text{in}$  [3.2  $\mu\text{m}$ ] or less may be finished in any direction.
- (4) Ends of groove welds required to be flush shall be finished so as not to reduce the width beyond the detailed width or the actual width furnished, whichever is greater, by more than  $1/8$  in [3.2 mm] or so as not to leave reinforcement at each end that exceeds  $1/8$  in [3.2 mm]. Ends of welds in butt joints shall be faired to adjacent plate or shape edges at a slope not to exceed 1 in 10.
- (5) Welds shall be free from overlap.