AWS D1.5M/D1.5 Interpretation

Subject: Reinforcing Fillet Welds
Code Edition: D1.5M/D1.5:2002
Code Provision: 2.8.1.1 and Figure 2.4 TC-U5-S Joint
AWS Log: D1.5-02-I10

Inquiry: Regarding the reinforcing filler weld specified by subclause 2.8.1.1 and Figure 2.4—Details of Welded Joints for CJP Groove Welds on a TC-U5-S (or any corner joint), which of the below figures (Fig. A or B) shows the acceptable desired face angle of a TC-U5-S joint reinforcing fillet weld (as shown by dotted lines), that is either welded separately or is an integral part of the larger weld?

Response: The intent of a reinforcing fillet weld is to provide a gradual transition of the weld face to the base metal. Figure A does not accomplish this purpose. Figure B meets this intent. The fillet weld need not be concave as shown in Figure B.

AWS standards are prepared by AWS technical committees. Because many AWS standards are written in the form of codes or specification, they cannot present background material or discuss the committee’s intent. The nature of inquiries directed to the American Welding Society and their technical committees have indicated that there are some requirements in AWS standards that are either difficult to understand or not sufficiently specific. It should be recognized that the fundamental premise of AWS standards are to provide general stipulations applicable to any situation and to leave sufficient latitude for the exercise of engineering judgment. Another point to be recognized is that AWS standards represent the collective experience of AWS technical committees; and, while some provisions may seem overly conservative, they have been based on sound engineering practice.