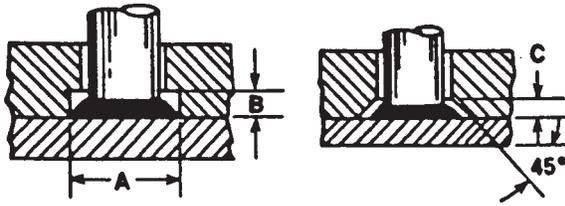


## ARC STUD WELD FILLET ACCOMMODATION

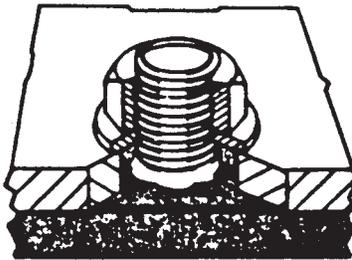


### COUNTER BORE OR COUNTER SINK METHODS

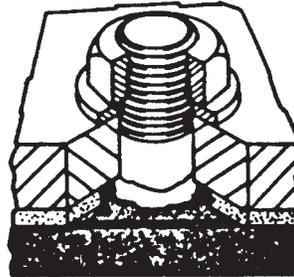
When an arc stud is welded, a fillet forms around its base with the fillet dimensions being closely controlled by the design of the ferrule used. Since the diameter of the fillet is generally larger than the diameter of the stud, some consideration is required in the design of mating parts. MIDWEST FASTENERS recommends a counter bore and counter sink method for this application. Dimensions will vary with studs and ferrules. Additional methods of accommodating fillet include over-sized clearance holes, use of a gasket material around the fillet or use of a dog type construction.

STUD SIZE (in.)	COUNTERBORE (in.)		90° COUNTERSINK (in.)
	A	B	
1/4	0.437	0.125	0.125
5/16	0.500	0.125	0.125
3/8	0.593	0.125	0.125
7/16	0.656	0.187	0.125
1/2	0.750	0.187	0.187
5/8	0.875	0.218	0.187
3/4	1.125	0.312	0.187

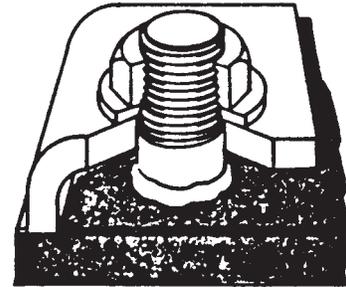
### SEVERAL OPTIONAL METHODS OF FILLET ACCOMMODATION:



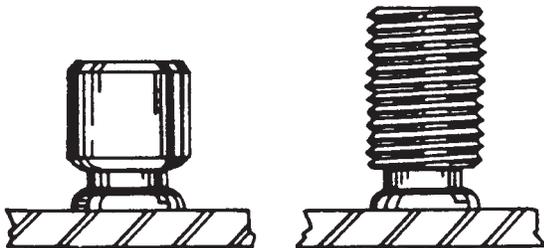
(A) OVERSIZE  
CLEARANCE HOLE



(B) GASKET  
MATERIAL



(C) DOG CLAMP



### IF AN OVERSIZE FILLET DOES NOT MEET THE APPLICATION:

A MIDWEST FASTENERS weld stud designed with a reduced weld base is available so that the weld fillet does not exceed the maximum diameter of fastener. This design is not recommended if full fastener strength is important.



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