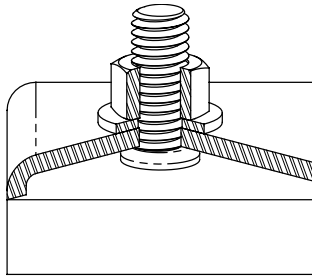


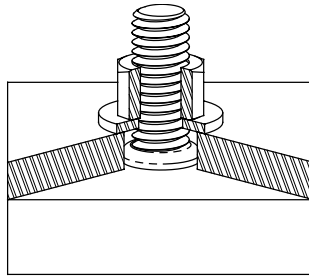
TABLES & OTHER *Information*

Accommodating Fillets without Machining

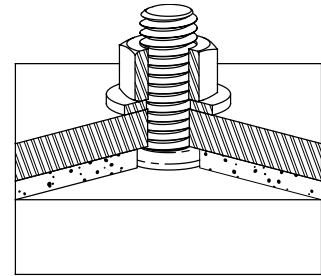
When arc studs are welded, the excess material forms a fillet around the base of the stud. If a ferrule is used, the fillet formation can be controlled. Because the diameter of the fillet is generally larger than the diameter of the stud it is necessary to account for this in the design of mating parts. Below are some common methods of design considerations to accommodate the weld fillet:



(A) Dog Clamp



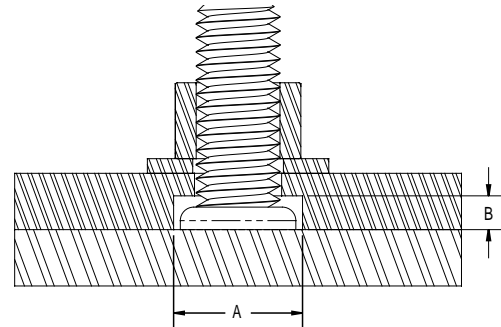
(B) Oversize Clearance Hole



(C) Gasket Material

Accommodating Fillets with Counter Bores / Counter Sinks

Stud Size	Counter Bore	
	A	B
1/4	0.437	0.125
5/16	0.500	0.125
3/8	0.593	0.125
7/16	0.656	0.187
1/2	0.750	0.187
5/8	0.875	0.218
3/4	1.125	0.312



Accommodating Fillets with Reduced Base Weld Studs

Another choice is to select Reduced Base Weld Studs (RB Studs). While this will resolve many mating part clearance problems, the shear and tensile strength are reduced. Additionally, RB style studs are more expensive due to additional manufacturing steps.

