

ARC WELD Studs

Shoulder Base Stud Mild Steel

	BODY DIAMETER							
	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8
Example Part No.	SBC2531-1640	SBC3134-1946	SBC3737-2562	SBC4343-3178	SBC5050-3793	SBC6262-50125	SBC7562-62156	SBC8775-75187
Thread Pitch	#8-32	#10-24	1/4-20	5/16-18	3/8-16	1/2-13	5/8-11	3/4-10
Min Thread Length	.40"	.46"	.62"	.78"	.93"	1.25"	1.56"	1.87"
Max Length	Most sizes are made to order.							
Base	Min Length	.312"	.343"	.375"	.437"	.500"	.625"	.750"
	Diameter	.250"	.313"	.375"	.437"	.500"	.625"	.875"
Fillet	Height	.12 ± .02"	.12 ± .02"	.14 ± .02"	.16 ± .02"	.17 ± .02"	.25 ± .02"	.39 ± .02"
	Diameter	.36 ± .02"	.43 ± .02"	.49 ± .02"	.57 ± .02"	.63 ± .02"	.77 ± .02"	1.08 ± .02"
After Weld Length Reduction (approx)	.12"	.12"	.12"	.12"	.12"	.19"	.19"	.19"

STANDARD ACCESSORIES								
Chuck	C16	C19	C25	C31	C37	C50	C62	C75
Grip	G25	G31	G37	G43	G50	G62	G75	G87
Foot	FTS20	FTS20	FTS20	FTS20	FTS20	FTM20	FTM20	FTL20
Ferrule	25F	31F	37F	43F	50F	62F	75F	87F

MECHANICAL PROPERTIES								
(see appendix tables for calculation details particularly when comparing different manufacturers)								
Thread								
Min Working Tensile	473 lb	592 lb	1,074 lb	1,770 lb	2,615 lb	4,789 lb	7,628 lb	11,288 lb
Min Yield Shear	468 lb	602 lb	918 lb	1,513 lb	2,236 lb	4,094 lb	6,520 lb	9,649 lb
Min Working Torque	16 in•lb	22 in•lb	4.5 ft•lb	9.3 ft•lb	16.3 ft•lb	39.9 ft•lb	79.4 ft•lb	141.1 ft•lb
Min Yield Torque	18.6 in•lb	27 in•lb	5.4 ft•lb	11.1 ft•lb	19.6 ft•lb	47.9 ft•lb	95.3 ft•lb	169.3 ft•lb
Base								
Min Yield Shear	1,416 lb	2,213 lb	3,186 lb	4,337 lb	5,665 lb	8,851 lb	12,746 lb	12491 lb

A Shoulder Base Stud provides a boss area for mating parts to seat against. Shoulder Base Studs are made to order. If you are thinking of using a Shoulder Base Stud, consider a Collar Stud. A Collar Stud will provide a similar boss / land area as a Shoulder Base Stud at a cost / delivery time savings. The fundamental difference between a Shoulder Base Stud and a Collar Stud is that the base of a Shoulder Base Stud can handle more shear than the base of a Collar Stud for a given thread size. However, a Collar Stud can be welded to a thinner gage of metal than a Shoulder Base Stud for a given thread size.



IMAGE INDUSTRIES INC.

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Shoulder Base Stud Stainless Steel

	BODY DIAMETER							
	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8
Example Part No.	SBS2531-1640	SBS3134-1946	SBS3737-2562	SBS4343-3178	SBS5050-3793	SBS6262-50125	SBS7562-62156	SBS8775-75187
Thread Pitch	#8-32	#10-24	1/4-20	5/16-18	3/8-16	1/2-13	5/8-11	3/4-10
Min Thread Length	.40"	.46"	.62"	.78"	.93"	1.25"	1.56"	1.87"
Max Length	Most sizes are made to order.							
Base	Min Length	.312"	.343"	.375"	.437"	.500"	.625"	.750"
	Diameter	.250"	.313"	.375"	.437"	.500"	.625"	.875"
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	Diameter	.36 ± .02"	.43 ± .02"	.49 ± .02"	.57 ± .02"	.63 ± .02"	.77 ± .02"	1.08 ± .02"
After Weld Length Reduction (approx)	.12"	.12"	.12"	.12"	.12"	.19"	.19"	.19"

STANDARD ACCESSORIES								
Chuck	C16	C19	C25	C31	C37	C50	C62	C75
Grip	G25	G31	G37	G43	G50	G62	G75	G87
Foot	FTS20	FTS20	FTS20	FTS20	FTS20	FTM20	FTM20	FTL20
Ferrule	25F	31F	37F	43F	50F	62F	75F	87F

MECHANICAL PROPERTIES								
(see appendix tables for calculation details particularly when comparing different manufacturers)								
Thread								
Min Working Tensile	284 lb	355 lb	644 lb	1,062 lb	1,569 lb	2,873 lb	4,577 lb	6,773 lb
Min Yield Shear	242 lb	303 lb	551 lb	908 lb	1,341 lb	2,456 lb	3,912 lb	5,790 lb
Min Working Torque	9 in•lb	13 in•lb	2.7 ft•lb	5.5 ft•lb	9.8 ft•lb	23.9 ft•lb	47.7 ft•lb	84.7 ft•lb
Min Yield Torque	11 in•lb	16 in•lb	3.3 ft•lb	6.7 ft•lb	11.8 ft•lb	28.8 ft•lb	57.2 ft•lb	101.6 ft•lb
Base								
Min Yield Shear	850 lb	1,328 lb	1,912 lb	2,602 lb	3,399 lb	5,311 lb	7,647 lb	12491 lb

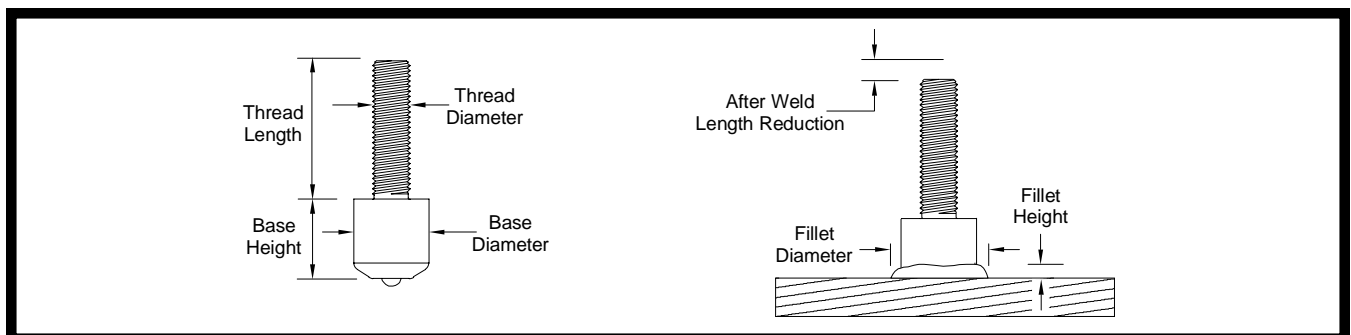


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DRAWN ARC WELD STUD