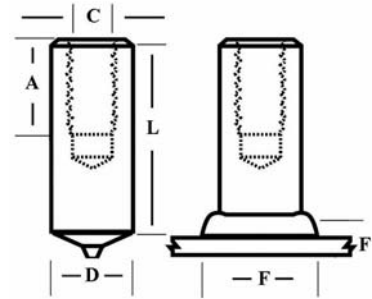


NELSON STUD WELDING

SPECIFICATION: TBA Internally Threaded Aluminum Studs

TBA

Nelson TBA internally threaded aluminum studs are available with weld base diameters of 1/4" through 1/2", with thread sizes of #10-24 through 1/2-13. They are used as mounting points on aluminum structures. They are welded using ceramic ferrules in conjunction with argon as a shielding gas.



The shielding gas is introduced to the weld area through a gas foot assembly, #751020000, which is used for all diameters of TBA studs. Gas hose #515001001 and gas regulator #514001001 are needed to deliver and control the gas flow from a pressurized cylinder.

An aluminum Tranquil-Arc® plunge dampener kit is also needed as an accessory on the gun to control the rate of the stud's return in to the molten weld metal at the end of the weld cycle.

The minimum length of Nelson TBA studs, shown below, is the before weld length of the stud, and is dependent on the thread depth.

For similar function aluminum studs, please refer to Nelson **HBA Externally Threaded Aluminum studs**, **SBA Aluminum Shoulder studs**, and **CKA Aluminum Collar studs**.

When ordering, specify Type, Diameter, Before Weld Length, Tap Size, Tap Depth, Material, Quantity, and Part Number

Example: TBA 1/2 x 1"; tap 3/8-16 x 9/16"; 5356 Aluminum; 10,000 pieces; #10108478

Stud Diameter D	Maximum Tap Diameter C	Minimum Stud Length, L		Weld Base Diameter	Burn Off	Weld Flash Size		Flash Clearance	Required Standard Accessories	
		D = 1/2 max	D = 5/8 & 3/4			E	F		Ferrule	Chuck
1/4	10-24	0.937	N/A	1/4	0.093	0.406	0.125	0.469	100101047	500001007
5/16	1/4-20	1.062	1.500	5/16	0.093	0.468	0.156	0.531	100101048	500001009
3/8	5/16-18	1.187	1.593	3/8	0.093	0.603	0.187	0.656	100101049	500001011
7/16	3/8-16	1.312	1.718	7/16	0.093	0.656	0.218	0.750	100101050	500001012
1/2	7/16-14	N/A	1.906	1/2	0.125	0.750	0.250	0.843	100101051	500001014
5/8	1/2-13	N/A	2.000	1/2	0.125	0.750	0.250	0.843	100101051	500001016
3/4	1/2-13	N/A	2.000	1/2	0.125	0.750	0.250	0.843	100101051	500001018

MATERIALS: TBA Studs are only available in Aluminum. For specific grade information and physical and chemical properties, as well as information on heat treating, please see **General Material Specifications..**

THREADS: Standard depth of useable threads, A, is 1-1/2 times the tap diameter. All internal threads are UNC-2B.

Visit our website www.NelsonStudWelding.com for a list of our standard stock products.