

NELSON STUD WELDING

SPECIFICATION: *TATC, TATS, TATA* Auto-feed Capacitor Discharge Studs

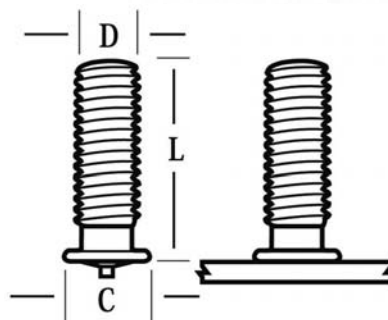
These studs are designed to be welded to thin gauge sheet material by the initial “gap” or “contact” method of stud welding using tip ignition according to the capacitor discharge (CD) process. These applications generally provide a weld bond whose strength is greater than that of the base material to which they are welded.

These studs have a special flanged weld base that is about 1/32”, or 1mm, greater than the nominal stud diameter. The “A” flange allows automatic stud feeding for increased production speeds. The flange also increases the stress area welded to the base material. These Nelson studs are fully threaded, and come in lengths up to 1.25”.

Whereas these studs are designated as auto-feed studs, they are manual feed capable. Shown below is the equipment required for manual loading of TATC, TATS, and TATA studs.

For similar function studs, see Nelson **ANC Unthreaded Stored Arc®** studs, **ATC Threaded Stored Arc®** studs, and **AXC “Fir Tree”** studs.

TATC, TATS, TATA



When ordering, specify Type, Description, Material, Quantity, and Part Number

Example: TATC #10-32 x 5/16”; Mild Steel; 10,000 pieces; #101218258

Thread Size	Stud Diameter D	Flange Diameter C	Minimum Length L	Required Standard Accessories	
				Chuck* Series 650 Style Gun	Chuck Assembly CD-Lite Gun
#4-40	0.112	0.142	0.250	500001355	521322
#6-32	0.138	0.168	0.250	500001356	521323
#8-32	0.164	0.194	0.250	500001357	215502
#10-24	0.187	0.220	0.250	500001358	215503
#10-32	0.187	0.220	0.250	500001358	215503
1/4-20	0.250	0.280	0.375	500001359	215504
5/16-18	0.312	0.355	0.375	500001360	520327
3/8-16	0.375	0.418	0.375	500001369	N/A

* A back-up pin or stud stop is required for use with these chucks. The list below shows part numbers and corresponding stud lengths for each pin length.

Back-up Pin Part Number	For Stud Lengths (inches)
500017017	1/4 to 5/8
500017018	3/4 to 1-1/8
500017019	1-1/4 to 1-5/8
500017020	1-3/4 to 2-1/8

MATERIALS: Studs are available in Low Carbon Mild Steel (TATC), 18-8 Stainless Steel (TATS), and 5356 Aluminum (TATA). Some materials may be available by special order. For specific grade information and physical and chemical properties, conforming standards, and information on stud plating and heat treating, please see **General Material Specifications**.

THREADS: Standard external threads are typically UNC-2A, or UNF-2A for #10-32.

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