

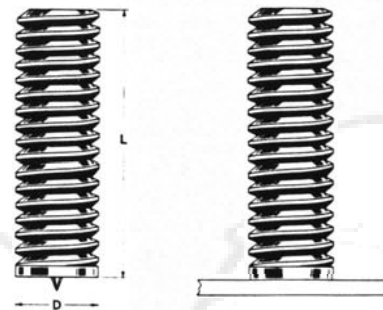
## NELSON STUD WELDING

*SPECIFICATION: TUTC, TUTS, TUTA Unflanged Capacitor Discharge Studs*

These unflanged studs are designed to be welded to thin sheet material by the initial “gap” or “contact” method of stud welding using tip ignition according to the capacitor discharge process. These applications generally provide a weld bond whose strength is sufficient for the application when considering the strength of the sheet to which they are welded.

These studs have a flanged weld base which is about the same as the stud diameter. The unflanged “U” studs are used where weld fillet control is more important than weld strength and reliability. The studs are fully threaded, and come in lengths up to 2”.

### TUTC, TUTS, TUTA



For similar function, see Nelson [ANC Unthreaded Stored Arc studs](#) and [AXC Fir Tree studs](#).

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

*Example: TATC #4-40 x 1/2”; Mild Steel; 10,000 pieces; #101208604*

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	0.111	0.250	500001355	521322
#6-32	0.138	0.137	0.250	500001356	521323
#8-32	0.164	0.163	0.250	500001357	215502
#10-24	0.187	0.189	0.250	500001366	215503
#10-32	0.187	0.189	0.250	500001366	215503
1/4-20	0.250	0.250	0.375	500001359	215504
5/16-18	0.312	0.312	0.375	500001360	520327
3/8-16	0.375	0.375	0.375	500001369	N/A

\* A backup 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 (TUTC), 18-8 Stainless Steel (TUTS), and 5356 Aluminum (TUTA). 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](http://www.NelsonStudWelding.com) for a list of our standard stock products.