

## NELSON STUD WELDING

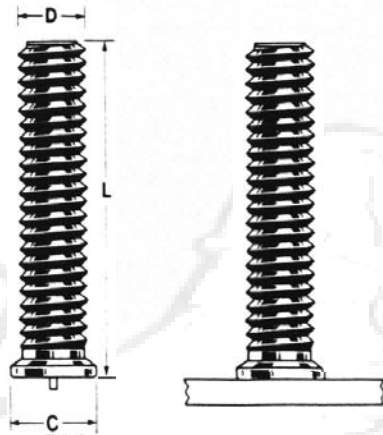
**SPECIFICATION: TFTC, TFTS, TFTA Metric Flanged Capacitor Discharge Studs**

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

These studs have a flanged weld base that is about 2mm greater than the nominal stud diameter. The studs are fully threaded, and come in lengths up to 50mm.

For similar function studs, see Nelson [ANC Unthreaded Stored Arc® studs](#) and [TPC Tipped Insulation pins](#). In the imperial line of Nelson studs, see [TATC Auto-Feed Capacitor Discharge studs](#) and [TFNC Flanged Unthreaded Capacitor Discharge studs](#).

**Check Standard Stock**  
**TFTC, TFTS, TFTA**



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

**Example: TFTC M4 x 16mm; Mild Steel; 10,000 pieces; #101217117**

| Thread Size | Stud Diameter D | Flange Diameter C | Minimum Length L | Required Standard Accessories |                            |
|-------------|-----------------|-------------------|------------------|-------------------------------|----------------------------|
|             |                 |                   |                  | Chuck* Series 650 Style Gun   | Chuck Assembly CD-Lite Gun |
| M3 x 0.50   | 3.00            | 5.00              | 6.00             | 500001355                     | 215500                     |
| M4 x 0.70   | 4.00            | 6.00              | 6.00             | 500001361                     | 215501                     |
| M5 x 0.80   | 5.00            | 7.00              | 6.00             | 500001358                     | 215502                     |
| M6 x 1.00   | 6.00            | 8.00              | 8.00             | 500001362                     | 215503                     |
| M8 x 1.25   | 8.00            | 10.50             | 10.00            | 500001360                     | 250104                     |

\* 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 (millimeters) |
|-------------------------|--------------------------------|
| 500017017               | 6 – 16                         |
| 500017018               | 20 – 30                        |
| 500017019               | 32 – 40                        |
| 500017020               | 45 – 55                        |

**MATERIALS:** Studs are available in Low Carbon Mild Steel (TFTC), 18-8 Stainless Steel (TFTS), and 5356 Aluminum (TFTA). 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 metric threads meet ISO 6g.

Visit our website [www.NelsonStudWelding.com](http://www.NelsonStudWelding.com) for a list of our standard stock products.