

## NELSON STUD WELDING

**SPECIFICATION:** Metric **ANC**, **ANS**, **ANA** Unthreaded Stored Arc® Studs

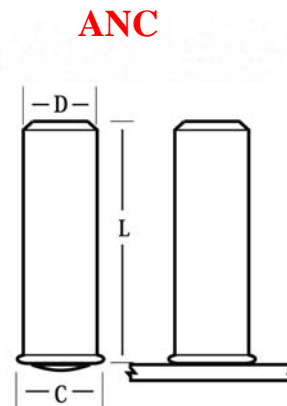
Metric Nelson ANC, ANS and ANA unthreaded studs are designed to be welded to thin gauge sheet metal using the Stored-Arc® method of stud welding, or a transformer/rectifier power-control source in the short-cycle mode. These applications generally provide a weld bond that is greater than the strength of the sheet to which they are welded.

Nelson Stored Arc studs have a flanged weld base that is 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 on the sheet. Standard studs come in lengths up to 30mm.

Unthreaded Stored Arc® studs are commonly used as locator or stop points. They may also be tapped with internal threads, or have smaller diameter externally threaded extensions. They also may have Speed Clips or self-threading nuts installed on them, and can be made with special chamfers to aid in the installation of such clips or nuts.

Mild steel studs are copper flash plated, stainless studs are passivated, and aluminum studs are acid etched to assure superior weld results.

For similar function metric studs, see Nelson **ATC Threaded Stored Arc® studs**, **AXC “Fir Tree” studs**, **Grounding studs**, **H8X “T” studs**, and **“W” Top Wide Flange studs**. In the imperial line of Nelson studs, see **TATC Auto-Feed Capacitor Discharge studs**, **TFNC Flanged Capacitor Discharge studs**, **TFTC Flanged Capacitor Discharge studs**, and **TUTC Unflanged Capacitor Discharge Studs**.



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

**Example:** ANC M4 x 8.25mm; Mild Steel; 10,000 pieces; #10121133

Stud Diameter D	Flange Thickness A	Flange Diameter C	Minimum Length L*	Required Standard Accessories		
				Chuck	Foot	Spark Shield
3.00	0.75	4.00	8.00	5000011355	502001137	511001108
4.00	0.90	5.00	8.00	500001003	501001137	511001108
5.00	1.10	6.00	8.00	500001003	502001137	511001108
6.00	1.30	7.00	10.00	500001276	502001137	511001108
8.00	1.65	9.00	12.00	500001009	502001137	511001108

**MATERIALS:** Studs are available in Low Carbon Mild Steel with copper flash plate (ANC), 18-8 Stainless Steel (ANS), and 1100 Aluminum (ANA). 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**.

**\*AUTO FEED:** For automatic feed applications, stud length must be a minimum of 1-1/2 times the flange diameter. Studs to be used in automatic feed systems must be 100% sorted (Auto Feed quality). Therefore, “Auto Feed (AF) Quality” must be requested and specified at time of quotation and order entry.

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