

STUD WELDING BASICS - FASTENERS

The following summarises the hardware associated with stud welding supplied with the reduced based studs welded by DGC AFRICA.

NYLOC NUTS

Mechanical Standard is DIN 985, Class 6 minimum. Summary of dimensional information tabled below.


NUT	PROOF LOAD (kN)	AF MIN/MAX (mm)	HEIGHT MAX (mm)	PITCH
M10	35	16.73 / 17	10	1.50
M12	50.5	18.67 / 1	12	1.75
M16	94	23.67 / 24	16	2.00
M20	147	29.16 / 30	20	2.50
M24	212	35 / 36	24	3.00



Note: The above is a guide only; actual values may vary depending on brand of Nyloc™ Nut.

FLAT WASHERS

The flat washers are supplied as High Tensile to ASTM F436M Type 1, Zinc Plated (38-45 HRC), or Mild Steel Over Sized Washers (Nearest standard BS3410 & AS1237). Summary of the nominal dimensional information tabled below.

Z/P ASTM F436M 38-45 HRC	WASHER	ASTM F436M TYPE 1			STUD	MILD STEEL - OVERSIZE		
		OD (mm)	ID (mm)	T (mm)		OD (mm)	ID (mm)	T (mm)
 METRIC FLAT ROUND SAMPSON™	M10*	20.0-22.0	10.5-10.8	1.9-2.6	M10	22.5	10.8	2
	M12	25.7-27.0	14.0-14.4	3.1-4.6	M12	32	14.0	2.25
	M16	32.4-34.0	18.0-18.4	3.1-4.6	M16	38	18.0	2.4-2.75
	M20	40.4-42.0	22.0-22.5	3.1-4.6	M20	45	22.0	3
	M24*	48.4-50.0	26.0-26.6	3.4-4.6	M24*	55	26.0	4

Notes:

Unless specified the above covers the typical specifications and standards applicable to all studs and associated hardware. Details are subject to change, without notice.

Additional Fasteners:

Alternative hardware is available upon request, refer to separate datasheet TS-SW-03 for details.

