

# Stainless Steel Metric Studding



**Stainless UK produce standard threaded bars using the thread rolling process. This ensures a smooth form and enhances tensile strength. A full range of sizes are available.**

## Benefits

- High strength thread rolled stainless steel bars
- M10 to M52 to BS3643 in 6 metre lengths
- Superior ductility for seismic activity
- Large stocks
- Unique corrosive resistant product
- Full strength nuts, couplers, accessories available

## Applications

- Rock bolts
- Soil nails
- Bridge strengthening
- Building and bridge cross ties
- Ground anchors
- Holding down bolts

# Stainless Steel Metric Studding

## Technical Specifications

- Strength grade class 50, 70, 80 and 100
- Manufactured from A2 (304) and A4 (316) stainless
- Steel to BS3506 other grades available to order
- Partially threaded ends available to order
- 45° chisel point ends available to order
- Machine capacity up to M100

It is important to clearly specify both the grade of material and strength class when ordering.

For partially threaded bars the specification should include the finish on the smooth portion, e.g as rolled, or class of polish.



Below are the properties and strengths which are in accordance with BS 3506

Strength Class	Min. UTS (N/mm <sup>2</sup> )	Min. Yield (N/mm <sup>2</sup> )	Elongation at Failure
50	500	210	0.6D
70	700	450	0.4D
80	800	600	0.3D

Thread	Weight per metre	Strength			
		Class 70		Class 80	
		0.2% proof	UTS	0.2% proof	UTS
	Kg/m	kN	kN	kN	kN
M12	0.72	41	64	54	73
M16	1.31	70.7	109.9	94.2	125.6
M20	2.05	110.3	171.5	147.0	196.0
M24	2.96	158.9	247.1	211.8	282.4
M27	3.83	206.6	321.3	275.4	367.2
M30	4.70	252.6	392.7	336.6	448.8
M33	5.78	312.3	485.8	416.4	555.2
M36	6.84	367.7	571.9	490.2	653.6
M39	8.14	439.2	683.2	585.6	780.8
M42	9.38	504.5	784.7	672.6	896.6
M45	10.90	587.7	914.2	783.6	1044.8
M48	12.32	662.9	1031.1	883.8	1178.4
M52	14.65	791.1	1230.6	1054.8	1406.4

## System Accessories

Stainless Steel Metric Studding can be supplied with a range of accessories, which can be manufactured to meet individual contract requirements.

### 1. Nuts and Couplers



Nuts and couplers have been designed to provide a strength equal to the theoretical minimum required by the threaded bar.

### 2. Pattress Plates



Available in ductile iron or fabricated to customers specific requirements. Please see Pattress Plates Data sheet.

### 3. Stainless Plate Washer



Manufactured either flat which can take up to 8 degree misalignments or dished to suit up to 45 degree misalignment. Can be supplied with a hemi nut or washer to suit.

### 4. Eye Nut



To be fitted to the end of the bar for passing rock netting wire through and many other applications.

### 5. Turnbuckle



To be used for shortening a bar system.

### 6. Lantern Spacers



Centralisation of single bar within a bore hole enables an even flow of grout around the bar.

### 7. Threaded Ends



Threaded ends for plain and ribbed bars for fixing applications. ISO metric threads to BS3643.

### 8. Reducer Connector



Allows a small diameter bar to be used with a larger pattress or washer plate.

Stainless UK has taken care to ensure that this information is accurate, but cannot be responsible for interpretation of the details nor is any liability implied or accepted.



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