



## Stainless steel Threaded Anchors

Security and life long confidence is assured when using stainless reinforcing bar for Rock Bolts and Soil Nails. Stainless steel provides an economic strength to cost ratio when compared to other corrosion protection systems

### Stainless Threaded anchors

Anchors are supplied with the benefit of a BS3643 Metric thread, giving an assured quality with the benefit of using a standard fittings. The choice of the BS 3643 coarse thread gives a robust and site friendly anchorage.



The standard threaded connection is provided with a strength in accordance with the table below, the parallel thread provides a high strength connection which is resistant to the vagaries of site assembly.

Bar Diameter	Thread		
	Size	Strength	
		Yield kN	UTS kN
S12	M12	42	46
S16	M16	78	86
S20	M20	122	134
S25	M24	176	194
S32	M30	280	308
S40	M39	488	536
S50	M48	736	810

Anchor lengths up to 6 m are available, supplied to your specification, and requirements, with plates and ball washers to complete the system.

Stainless Reinforcement in accordance with BS6744 is supplied in three grades, as shown in the table below. **Application**

BS 6744 Strength grade	02% proof n/mm <sup>2</sup>	Ultimate tensile Stress n/mm <sup>2</sup>
200	200	220
500	500	550
650*	650	715

\*Please check availability before specifying.

- **Holding down bolts:** threaded anchorages in shape code 13 (walking stick) are regularly used for portal frame building and mooring bollard anchorages.
- **Soil Nails Rock Bolts and Ground Anchors:** these are regularly installed in Grade 1.4301 (304) and 1.4436 (316) stainless steel. Guidance on the selection of steel grade is given in the CIREA guidance note describing how to use soil nails.
- **Seismic anchors:** because of the high ductility between yield stress and ultimate tensile stress the use of stainless steel anchors and reinforcing bars in seismic zones, is particularly advantageous.
- **Reinforced concrete bar splicing,** jointing two stainless steel reinforcing bar using standard couplers, providing continuity connections. This will provide joint strengths in accordance with the table opposite.
- **Resin Anchors:** supplied with the appropriate Polyester or Acrylic resin for general construction bolting applications. Resins suitable for potable water applications are available to special order.

### Bar grade selection



Generally the grade 1.4301 is selected for the non marine and areas away from high chloride concentration. For road bridge parapets, abutments and similar applications we would suggest that 1.4401 or 1.4436 is used; with their superior Pitting Corrosion and Chloride resistance. See the Cogne technical bulletin "Stainless steel tendons used for soil nails" which provides references for the most appropriate selection of steel grade for any particular application. The recent introduction of the BS EN 10088 stan-

BS10088 Grade	BS970 Grade
1.4301	304S31
1.4436	316S33
*1.4462	318S13 Duplex

dard to replace BS970 has brought the grades of steel in line with the rest of Europe, the table above shows the equivalent grades.

### Quality

Much of the steel supplied by Cogne Stainless Reinforcement UK is from the Italian Mill Cogne Acciai Specialai S. R. L. which has recently been awarded certification by UK CARES for concrete reinforcement products affirming our continued commitment to quality.

### Stock

Cogne Stainless reinforcement UK Ltd. not only hold a full stock of stainless reinforcing bar, in grades 1.4301 and 1.4436 and but also offers a comprehensive cut and bend service. This enables rebar to be supplied at mill prices and be delivered direct to your site. Service is assured with access to over 2000 tonnes of stock in the UK as well as the production facilities of the Rolling Mill in Italy.



Products available from Cogne Stainless reinforcement UK Limited are:

- Threaded reinforcing bar
- Reinforcing bar to BS 6744
- Mesh fabric generally in accordance with BS 4483
- 1.2 mm Grade 1.4301 Tying wire
- Reinforcing accessories

For information please call our sales desk on +44(0) 114 221 2039

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

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