



Certificate Number:

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Revision 3 – Engl. Vers.

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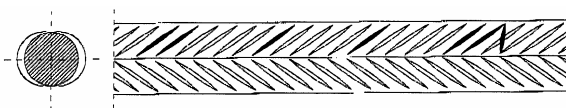
**TECNICAL DATA OF STAINLESS STEEL RE-BARS PRODUCED BY COGNE ACCIAI SPECIALI**

Tests made according to BS6744:2001 under the supervision of UK CARES

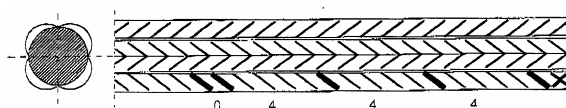
Nominal Size (mm)	Transverse Rib Height (mm)	Transverse Rib Length (mm)	Transverse Rib Angle (°)	Transverse Rib spacing (mm)	Relative Rib Area $f_R$ (min.0,039 $\emptyset \leq 6$ mm) (min.0,045 $\emptyset 6.5-8.5$ mm) (min.0,052 $\emptyset 9-10.5$ mm) (min.0,056 $\emptyset \geq 11$ mm)	Bar length (mm) Standard 1	Bar length (mm) Standard 2
6-8	0,52	5,67	55,77	3,85	0,072	6000-6100	12000-12100
10-12	0,60-0,71	7,13-7,40	56,1-55,5	5,70-6,50	0,080-0,070	6000-6100	12000-12100
14-25	0,77-1,20	33,58-41,33	44,13-57,97	10,20-14,92	0,071-0,075	6000-6100	12000-12100
>25					0,069	6000-6100	12000-12100
Steel Type AISI - EN10088- BS	COGNE Steel grade	MECHANICAL PROPERTIES <b>GRADE 500</b>	DIAM. 6-12 mm		DIAM. 14-40 mm		
			Characteristic values*	Stress Ratio ( $R_m/R_{p0.2}$ ) <sub>average</sub> (min. 1.10)	Characteristic values*	Stress Ratio ( $R_m/R_{p0.2}$ ) <sub>average</sub> (min. 1.10)	
304 - 1.4301 - 304S31  316/316L - 1.4429/1.4436-316S33  F51 -1.4462 - 318S13	<b>304HT</b>	0.2% Proof Strength $R_{p0.2}$ MPa (min. 500)	<b>670</b>	<b>1,21</b>	<b>540</b>	<b>1,44</b>	
	<b>316HTM</b>	Tensile strength $R_m$ MPa	<b>810</b>		<b>780</b>		
	<b>329HTM</b>	Elongation at Fracture $A_5$ % (min. 14)	<b>20</b>		<b>35</b>		
* calculated according to 3.1.22 of BS6744:2001							

Marking:

Diameter > 12 mm

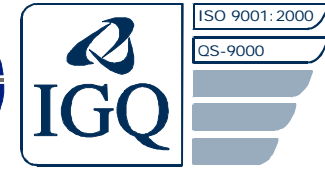


Diameter ≤ 12 mm





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Steel Type AISI -EN10088-BS Average chemical composition	COGNE Steel grade	MAGNETIC PROPERTIES % of magnetic phase	Service Condition in Corrosive environments				
			Class *	For structures or components with either a long design life or which are inaccessible for future maintenance	For structures or components exposed to Chloride contamination with no relaxation in durability design (e.g. concrete cover, quality or water proofing treatment requirements)	Reinforcement bridging joints, or penetrating the concrete surface and also subject to chloride contamination (e.g. dowel bars or holding down bolts)	Structures subject to chloride contamination where reduction in normal durability requirements are proposed (e.g. reduced cover, concrete quality or omission of water proofing treatment)
<b>304 - 1.4301 - 304S31</b> <hr/> C Cr Ni 0.03 18 8	<b>304HT</b>	$\varnothing 6 \text{ , } 12 \text{ mm}$ $< 1$	<b>A</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>3</b>
$\varnothing 14 \text{ , } 40 \text{ mm}$ <b>0</b>							
<b>316/316L - 1.4436/1.4429 - 316S33</b> <hr/> C Cr Ni Mo 0.03 17 11 2.5	<b>316HTM</b>	$\varnothing 6 \text{ , } 12 \text{ mm}$ $< 1$	<b>D</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>
$\varnothing 14 \text{ , } 40 \text{ mm}$ <b>0</b>							
<b>F51 -1.4462 – 318S13</b> <hr/> C Cr Ni Mo 0.03 22 4.7 2.7	<b>329HTM</b>	$\varnothing 6 \text{ , } 40 \text{ mm}$ <b>50</b>	<b>Duplex</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>

**Key** 1. Appropriate choice for corrosion resistance and cost  
 3. Maybe suitable in some instances: specialist advise should be obtained

2. Over-specification of corrosion resistance for the application  
 5. Unsuitable for the application

\* **Class** (in accordance with Handbook of Corrosion Data ASM):

**A** – Cr-Ni austenitic stainless steels series 301-302-304  
**D** – Cr-Ni-Mo austenitic stainless steels series 316-317