RODINOX®

Rodacciai

STAINLESS STEEL REINFORCING BARS

TECHNICAL DATA SHEET

STAINLESS STEEL REINFORCING BARS

Rodinox® stainless ribbed round is the **answer to concrete reinforcement problems** when high durability is required in the presence of **particular climatic and environmental conditions**, such as for example the possibility of contact with chlorides due to proximity to the sea or due to anti-ice salting of the streets.

In these situations, in fact, concrete reinforcement with carbon steel is not sufficient and it is therefore opportune to use stainless steel, whose characteristics are optimally exploited in the construction field as:

- it is suitable for use in **seismic areas** thanks to high plasticity, a high fatigue limit, and the absence of fragility;
- it **resists to low temperatures** without brittleness phenomena;
- it **resists to high temperatures**, including flame and fires;
- it is suitable for use in the hospitals and in the airport control towers thanks to a **very low magnetic permeability** so that it does not alter the operation of sensitive electronic equipment.

The use of Rodinox® stainless steel, furthermore, **drastically reduces maintenance costs**, lengthening the life cycle of the object, with appreciable results even in the first years.

RODINOX® GRADES

In order to meet the various needs, Rodinox® is manufactured in the following types

GRADE	TYPE	REFERENCE STEEL	
RODINOX® R1*	austenitic al Cr - Ni	304L / 304LN	1.4301 / 1.4307 / 1.4315
RODINOX® R2	austenitic al Cr - Ni - Mo	316L / 316LN	1.4404 / 1.4406
RODINOX® R3*	austenitic al Cr - Ni - Mo	316HMo / 316LNMo	1.4436 / 1.4429
RODINOX® R4*	duplex	2304	1.4362
RODINOX® R5*	duplex	2205	1.4462

* conforms to BS 6744 standard

RODINOX®

THE SIZE RANGE RODINOX®

It is available in rolls in the range from 6 to 16 mm and in bars in the range from 6 to 40 mm

CHEMICAL COMPOSITION

The average chemical composition of Rodinox® is as follows:

GRADE	C	Mn	Si	S	P	Cr	Ni	Mo	N	Cu
RODINOX® R1*	0,02	1,6	0,5	<0,010	≤ 0,045	18,5	8,1	-	0,20	-
RODINOX® R2	0,02	1,6	0,5	<0,010	≤ 0,04	18,0	10,1	2,1	0,20	-
RODINOX® R3*	0,02	1,6	0,5	<0,010	≤ 0,04	17,1	11,1	2,6	0,20	-
RODINOX® R4*	0,02	0,8	0,5	<0,010	≤ 0,035	23,2	4,1	0,2	0,10	0,30
RODINOX® R5*	0,02	0,8	0,5	<0,010	≤ 0,035	22,8	5,2	3,1	0,20	-

* conforms to BS 6744 standard

RODINOX® REFERENCE STANDARDS

It can be produced in accordance with the following standards:

GRADE	Ministerial Decree 17.01.2018 "Technical Standards for Construction" class B450C	BS 6744: 2016
RODINOX® R1	Coils 6 - 14 mm Bars 6 - 32 mm	Coils 6 - 14 mm Bars 6 - 32 mm
RODINOX® R2	Coils 6 - 14 mm Bars 6 - 32 mm	-
RODINOX® R3	Coils 6 - 14 mm Bars 6 - 32 mm	Coils 6 - 14 mm Bars 6 - 32 mm
RODINOX® R4*	Bars 6 - 32 mm	Coils 6 - 14 mm Bars 6 - 40 mm
RODINOX® R5*	-	Coils 6 - 14 mm Bars 6 - 32 mm

* conforms to BS 6744 standard

THE WEIGHT OF RODINOX®

Mass per linear meter as a function of the type of steel (units kg/m)

GRADE	∅ nom. mm	6	8	10	12	14	16	18	20	22	24	25	26	32	40
	section mm²	28,3	50,3	78,5	113,1	153,9	201,1	254,5	314,2	380,1	452,4	490,9	530,9	804,2	1256,6
RODINOX® R1		0,224	0,397	0,620	0,893	1,216	1,589	2,011	2,482	3,574	3,003	3,878	4,194	6,353	9,927
RODINOX® R2		0,226	0,402	0,628	0,905	1,231	1,609	2,036	2,514	3,619	3,041	3,927	4,247	6,434	10,053
RODINOX® R3		0,226	0,402	0,628	0,905	1,231	1,609	2,036	2,514	3,619	3,041	3,927	4,247	6,434	10,053
RODINOX® R4*		0,221	0,392	0,612	0,882	1,200	1,569	1,985	2,451	3,529	2,965	3,829	4,141	6,273	9,801
RODINOX® R5*		0,221	0,392	0,612	0,882	1,200	1,569	1,985	2,451	3,529	2,965	3,829	4,141	6,273	9,801

* conforms to BS 6744 standard

Rodinox conforms to the well-known British Standard BS 6744:2016, widely used in the construction sites all over the world, and to the Italian Ministry Decree for buildings.
In addition, on request, it may conform also to other national and international standards, so it can be used in various Countries.

CARES 850102

UKAS PRODUCT CERTIFICATION

RODINOX®

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