

### 3 Stainless steel tubes

## Round products

Basic standards applicable to stainless steel tubular products	
Standard	Description
EN 10296-2	Welded circular steel tubes for mechanical and general engineering purposes. Technical delivery conditions.
EN10305-5	Steel tubes for precision applications. Technical delivery conditions. Welded and cold sized square and rectangular tubes.
ISO 1127	Stainless steel tubes. Dimensions, tolerances and conventional masses per unit length.
EN10219-2	Cold formed welded structural hollow sections of non-alloy and fine grain steels. Tolerances, dimensions and sectional properties.

Material grades available for the manufacturing of continuous welded tube						
Grades EN	AISI	Rp 0,2 mín <sup>(4)</sup> (N/mm <sup>2</sup> )	Rm mín (N/mm <sup>2</sup> )	R <sub>80</sub> (%) min L <sup>(2)</sup> T <sup>(3)</sup>		Intergranular corrosion resistance
1.4362	2304	400	600	20	-	Yes
1.4462	2205	450	700	22	-	Yes
1.4410	2507	500	800	15	-	Yes
1.4301	304	195	500	40	35	Yes <sup>(1)</sup>
1.4307	304L	180	470	40	35	Yes
1.4401	316	205	510	40	30	Yes <sup>(1)</sup>
1.4432	316L	190	490	40	30	Yes
1.4541	321	200	500	35	30	Yes
1.4016	430	240	430	20	18	Yes <sup>(1)</sup>
1.4509	441	230	430	18	16	Yes
1.4510	439	230	420	23	21	Yes
1.4511	430Ti	240	430	20	18	Yes
1.4512	409	210	380	25	23	No

1 Normally, this requirement is not complied in sensitized condition or gross welding.

2 Lengthwise.

3 Transverse.

4 Conventional yield limit.

## Surface finishes

Available surface finishes for square and rectangular tube	
Standard	Description
Normal	Machine raw (gross welding seam).
Machined	Outside welding seam removed.
Satin finish	Belt grinded.