Satin Stainless Steel Tube

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Satin tube is stainless tube polished lengthwise with a 180–320 grit abrasive belt to a uniform brushed grain — the finish of almost every handrail, balustrade, furniture frame and shop fitting because it hides fingerprints and scratches and matches from batch to batch. We stock it in 304 (and 316 for coastal work) as round tube Ø 12–101.6 mm and square / rectangular 12–100 mm, 1–2 mm walls, 6 m, film-protected, and cut, bend and polish welded assemblies to match.

180 / 240 / 320 grit | Round · square · rectangular | 304 · 316 | Ø 12–101.6 mm | Film-protected, 6 m

Mirror shows every fingerprint; 2B looks industrial. Satin is what the architect draws and what the railing fabricator buys — the same 320-grit grain on the tube, the fittings and the finished weld.

WEIGHT TABLE — ROUND SATIN TUBE (KG/M AND PER 6 M)

OD (mm)	Wall (mm)	kg/m	kg per 6 m
20	1	0.473	2.84
20	1.2	0.562	3.37
20	1.5	0.691	4.15
20	2	0.897	5.38
20	2.5	1.09	6.54
20	3	1.271	7.63
21.3	1	0.506	3.04
21.3	1.2	0.601	3.61
21.3	1.5	0.74	4.44
21.3	2	0.962	5.77
21.3	2.5	1.171	7.03
21.3	3	1.368	8.21
22	1	0.523	3.14
22	1.2	0.622	3.73

First 14 of 156 rows — the full table is on the product page.

Welded EN 10217-7 / ASTM A554 (ornamental) and A312 (pressure); density 7.93 kg/dm³; 6 m lengths.

WEIGHT TABLE — SQUARE AND RECTANGULAR SATIN TUBE

Size (mm)	Wall (mm)	kg/m	kg per 6 m
12 × 12	1	0.358	2.15
15 × 10	1	0.37	2.22
15 × 10	1.2	0.44	2.64
15 × 10	1.5	0.54	3.24
15 × 15	1	0.453	2.72
15 × 15	1.2	0.538	3.23
15 × 15	1.5	0.661	3.97
16 × 16	1	0.485	2.91
16 × 16	1.2	0.576	3.46
16 × 16	1.5	0.709	4.25
19 × 19	1	0.567	3.4
19 × 19	1.2	0.675	4.05
19 × 19	1.5	0.832	4.99
19 × 19	2	1.09	6.54

First 14 of 357 rows — the full table is on the product page.

EN 10219 / ASTM A554; mill, 180/240 grit satin or mirror finish.

GRADES, STANDARDS AND TOLERANCES

Grade / standard	Yield (MPa)	Note
1.4301 / 304 satin	≥ 210	indoor, inland — the stock grade
1.4401 / 316 satin	≥ 220	coastal, pool, marine

Grade / standard	Yield (MPa)	Note
1.4307 / 304L	≥ 200	heavy welded assemblies
1.4016 / 430 satin	≥ 260	decorative trims, indoor dry, to order

Finish designations: EN 10088-2 2J (brushed) / 2K (satin, Ra ≤ 0.5 µm); ASTM No. 4. Grit 320 ≈ Ra 0.3–0.4 µm.

GRIT GUIDE AND HANDRAIL SIZES

Grit	Ra (µm)	Look	Typical use	Common sizes
180	0.6–0.8	coarse brushed, visible lines	industrial rails, trolleys, dairies	Ø 33.7–48.3 × 2; 40 × 40 × 2
240	0.4–0.5	standard commercial satin	handrails, shopfitting, furniture	Ø 42.4 / 50.8 × 1.5; 40 × 40 × 1.5
320	0.3–0.4	fine architectural satin	balustrades, lift trims, doors, kitchens	Ø 42.4 / 50.8 × 1.5; 50 × 50, 40 × 80 × 1.5
400 / hairline	0.2–0.3	long continuous lines	façade, cladding trims	square / rectangular 1.2–1.5
Scotch-Brite	0.3–0.5	random fine	site repair of 240–320	—

Handrail codes: EN 1090 / EN 13200 railings typically Ø 42.4 or 50.8 mm; balustrade posts 40 × 40 or Ø 42.4 × 2; infill Ø 12–16 mm bar or 10 mm glass.

STANDARDS

EN 10296-2 / ASTM A554 — welded mechanical / ornamental tube · EN 10088-2 finish 2J / 2K (satin); ASTM No. 4 · EN 10204 3.1