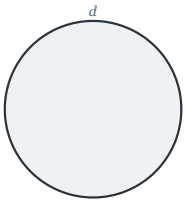
Stainless Steel Round Bar

OMEGA STEEL CO.
Istanbul · Dilovası plant

Stainless steel bar in the grades machine shops and fabricators use every day: 304 / 304L and 316L round bar from Ø 3 to 300 mm (bright-drawn h9 to Ø 60, peeled and polished h11 above), 303 free-machining bar for automatic lathes, 431 and 17-4 PH for shafts and pump parts, plus hexagon (AF 6–60 mm) and square (10–100 mm) bar; 3 m and 6 m random lengths or cut to length on our saws, EN 10088-3 / ASTM A276 certified, from stock in Dilovası for the Gulf, Balkans and Central Asia.

304 · 316L · 303 · 431 | Ø 3 – 300 mm | Hex AF 6–60 · square 10–100 | Bright h9 / h11 · peeled | 3 / 6 m · cut to length



Ø 20 mm

Round bar is the stainless product that becomes something else within a day — a shaft, a pin, a stud, a valve stem, a handrail post — so what matters is the diameter tolerance, the straightness and the certificate that lets the machinist start without re-testing. We hold 304, 316L and 303 in the sizes that turn on a lathe, and cut them to the length you feed.

SIZES, TOLERANCES AND WEIGHT PER METRE

Diameter	Finish	Tolerance	kg/m	Stock grades	Length
Ø 3 – 5 mm	bright drawn	h9	0.06 – 0.15	304, 303	3 m
Ø 6 mm	bright drawn	h9	0.22	304, 316L, 303	3 m
Ø 8 mm	bright drawn	h9	0.40	304, 316L, 303	3 m
Ø 10 mm	bright drawn	h9	0.62	304, 316L, 303	3 m
Ø 12 mm	bright drawn	h9	0.89	304, 316L, 303	3 / 6 m
Ø 16 mm	bright drawn	h9	1.58	304, 316L, 303	3 / 6 m
Ø 20 mm	bright drawn	h9	2.48	304, 316L, 303	3 / 6 m
Ø 25 mm	bright drawn	h9	3.88	304, 316L, 303	3 / 6 m
Ø 30 mm	bright drawn	h9	5.58	304, 316L	3 / 6 m
Ø 40 mm	bright drawn	h9	9.93	304, 316L	3 / 6 m
Ø 50 mm	bright drawn / peeled	h9 / h11	15.5	304, 316L	3 / 6 m
Ø 60 mm	peeled, polished	h11	22.3	304, 316L	3 / 6 m
Ø 80 mm	peeled, polished	h11	39.7	304, 316L, 431	3 / 6 m
Ø 100 mm	peeled, polished	h11	62.0	304, 316L, 431	3 / 6 m

First 14 of 16 rows — the full table is on the product page.

kg/m = 0.00620 × Ø² (mm) for density 7.9; 316L is 0.6 % heavier. Bright bar straightness ≤ 1 mm/m; h9 = +0/−0.052 mm at Ø 40. Intermediate sizes (Ø 14, 18, 22, 28, 32, 35, 45, 55, 65, 70, 90, 110) on request.

HEXAGON AND SQUARE BAR

Section	Sizes	kg/m (examples)	Use
Hexagon (AF = across flats)	AF 6, 8, 10, 12, 13, 14, 17, 19, 22, 24, 27, 30, 32, 36, 41, 46, 50, 55, 60 mm	AF 13: 1.16 · AF 24: 3.94 · AF 36: 8.87 · AF 50: 17.1	nuts, plugs, fittings, valve bodies on automatic lathes (303 preferred)
Square	10, 12, 15, 20, 25, 30, 40, 50, 60, 80, 100 mm	20: 3.16 · 30: 7.11 · 50: 19.8	keys, machine parts, architectural spindles, balustrade infill
Flat bar (see stainless flat)	20 × 3 to 200 × 20 mm	40 × 8: 2.53	brackets, trims, strips

Hexagon kg/m = 0.00684 × AF²; square kg/m = 0.0079 × a². Bright h11, 3 m lengths; 316L hexagon from AF 10 to order.

GRADES AND WHERE EACH BAR IS USED

Grade	EN	Condition	Yield / tensile (MPa)	Machinability	Choose for
304 / 304L	1.4301 / 1.4307	annealed, bright	≥ 190 / 500–700	moderate	general parts, food, water, architecture
316L	1.4404	annealed, bright	≥ 190 / 500–700	moderate	chlorides, sea water, chemical, pharma, pools
303	1.4305	annealed, bright	≥ 190 / 500–750	excellent (S ≥ 0.15 %)	automatic lathes, fasteners, fittings — not for welding or marine

Grade	EN	Condition	Yield / tensile (MPa)	Machinability	Choose for
430F	1.4104	annealed, bright	≥ 250 / 430–630	excellent	magnetic free-machining parts, solenoids
431	1.4057	QT800 (quenched and tempered)	≥ 600 / 800–950	fair	shafts, pump spindles, bolts needing strength and corrosion resistance
17-4 PH	1.4542	solution-annealed / H1150–H900	≥ 720–1 170 / 930–1 310	fair	valve stems, gears, aerospace and pump parts
2205 duplex	1.4462	annealed	≥ 450 / 650–880	hard	brine, desalination pump shafts

STANDARDS

EN 10088-3 — stainless bars, semi-finished products · ASTM A276 / A479 — stainless bars and shapes · EN 10278 — dimensions and tolerances of bright steel products (h9, h10, h11) · EN 10060 / 10059 — hot-rolled round and square bar dimensions · EN 10204 3.1