MS Pipe Weight Chart

Updated 8 November 2026 · Checked against IS 1239 (Part 1)

MS Pipe Weight Chart (IS 1239)

Thickness (mm) / weight (kg per meter) for light, medium and heavy class pipes, by nominal bore.

Nominal bore	OD (mm)	Light: t / kg/m	Medium: t / kg/m	Heavy: t / kg/m
15 NB (½")	21.3	2.0 / 0.95	2.6 / 1.20	3.2 / 1.43
20 NB (¾")	26.9	2.35 / 1.42	2.6 / 1.56	3.2 / 1.87
25 NB (1")	33.7	2.65 / 2.03	3.2 / 2.41	4.0 / 2.93
32 NB (1¼")	42.4	2.65 / 2.60	3.2 / 3.09	4.0 / 3.79
40 NB (1½")	48.3	2.9 / 3.25	3.2 / 3.56	4.0 / 4.37
50 NB (2")	60.3	2.9 / 4.10	3.6 / 5.03	4.5 / 6.19
65 NB (2½")	76.1	3.25 / 5.84	3.6 / 6.44	4.5 / 7.95
80 NB (3")	88.9	3.25 / 6.86	4.0 / 8.37	4.85 / 10.05
100 NB (4")	114.3	3.65 / 9.96	4.5 / 12.18	5.4 / 14.50

Weights are calculated for plain-end pipe from OD and wall thickness with steel density 7.85. Published IS 1239 tables can differ by a small amount because of rounding and socket ends.

Square & Rectangular Pipe Weight Chart

Size	Weight per m	Per 6 m length
40 × 40 × 2 mm	2.386	14.32
25 × 25 × 2 mm	1.444	8.67
50 × 50 × 2 mm	3.014	18.09
50 × 50 × 3 mm	4.427	26.56
75 × 75 × 3 mm	6.782	40.69
100 × 100 × 4 mm	12.058	72.35
40 × 20 × 2 mm	1.758	10.55
60 × 40 × 2 mm	3.014	18.09
80 × 40 × 3 mm	5.369	32.22

Pipe Weight Formula

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Weight (kg/m) = (OD − t) × t × 0.02466
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OD is the outside diameter and t is the wall thickness, both in mm.

Example: a 40 NB medium pipe (OD 48.3 mm, 3.2 mm thick) weighs (48.3 − 3.2) × 3.2 × 0.02466 = **3.56 kg/m**, or 21.36 kg for a 6 m length.

For a square or rectangular pipe:

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Weight (kg/m) = [A × B − (A − 2t) × (B − 2t)] × 0.00785
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Sources & Standards

- IS 1239 (Part 1) – Steel tubes: OD and wall thickness for light, medium and heavy class
- Density of mild steel: 7,850 kg/m³ (7.85 g/cm³); SS 304: 7,930 kg/m³

Weights are theoretical. Found an error? Tell us and we will fix it.