MS Pipe Weight Chart

This MS pipe weight chart gives you the per-metre weight of every standard mild steel pipe size used in India and on export projects. It covers IS 1239 Part 1 Class A (Light), Class B (Medium) and Class C (Heavy) from 15 mm NB up to 150 mm NB; IS 3589 large diameters from 200 mm NB to 600 mm NB; and ASME Schedule 40 and Schedule 80 for international drawings. All weights are nominal at a steel density of 7.85 g/cm³ and apply to ERW and seamless pipes alike from any BIS-licensed Indian mill.

Mild Steel Pipe Weight Chart in Kg per Meter

The chart below is the master reference for mild steel pipes from 15 mm to 150 mm NB. The outer diameter is identical across all three classes for any given nominal bore — only the wall thickness and weight change.

NB (mm)	Size (in)	OD (mm)	A WT (mm)	A kg/m	B WT (mm)	B kg/m	C WT (mm)	C kg/m
15	½"	21.3	2.00	0.947	2.60	1.210	3.20	1.440
20	¾"	26.9	2.30	1.380	2.60	1.560	3.20	1.870
25	1"	33.7	2.60	1.980	3.20	2.410	4.00	2.930
32	1¼"	42.4	2.60	2.540	3.20	3.100	4.00	3.790
40	1½"	48.3	2.90	3.230	3.20	3.560	4.00	4.370
50	2"	60.3	2.90	4.080	3.60	5.030	4.50	6.190
65	2½"	76.1	3.20	5.710	3.60	6.420	4.50	7.930
80	3"	88.9	3.20	6.720	4.00	8.360	4.80	9.900
100	4"	114.3	3.60	9.750	4.50	12.100	5.40	14.400
125	5"	139.7	4.50	14.980	4.80	15.900	5.40	17.800
150	6"	165.1	4.50	17.800	4.80	19.000	5.40	21.200

Standard supply length: 6 metres (multiply kg/m by 6 for per-pipe weight). Weight tolerance per IS 1239: −8% Class A, −10% Class B and C.

MS Pipe Schedule 40 & Schedule 80 Weight Chart

ASME B36.10M is the American standard used in international project drawings, oil and gas documentation, and export purchase orders. Schedule 40 is broadly equivalent to IS 1239 Class B but the wall thicknesses are not identical — always specify the standard on every PO.

NPS	DN (mm)	OD (mm)	Sch 40 WT (mm)	Sch 40 kg/m	Sch 80 WT (mm)	Sch 80 kg/m
½"	15	21.3	2.77	1.27	3.73	1.62
¾"	20	26.7	2.87	1.69	3.91	2.20
1"	25	33.4	3.38	2.50	4.55	3.24
1¼"	32	42.2	3.56	3.39	4.85	4.47
1½"	40	48.3	3.68	4.05	5.08	5.41
2"	50	60.3	3.91	5.44	5.54	7.48
2½"	65	73.0	5.16	8.63	7.01	11.41
3"	80	88.9	5.49	11.29	7.62	15.27
4"	100	114.3	6.02	16.07	8.56	22.32
5"	125	141.3	6.55	21.77	9.52	30.97
6"	150	168.3	7.11	28.26	10.97	42.56
8"	200	219.1	8.18	42.55	12.70	64.64
10"	250	273.0	9.27	60.31	15.09	96.01
12"	300	323.9	10.31	79.73	17.48	132.06
14"	350	355.6	11.13	94.55	19.05	158.10
16"	400	406.4	12.70	123.30	21.44	203.53

Large Diameter MS Pipe Weight Chart

For pipes above 150 mm NB, the governing standard is IS 3589. These are the sizes used for water supply mains, sewage trunk lines, gas transmission and infrastructure works. The typical thickness band and weight range below apply to Fe 410 grade.

NB (mm)	Size (in)	OD (mm)	Typical WT range (mm)	Weight range (kg/m)
200	8"	219.1	4.0–8.0	21.20–41.65
250	10"	273.0	4.5–8.0	29.83–52.28
300	12"	323.9	5.0–10.0	39.32–77.42
350	14"	355.6	5.6–10.0	48.32–85.25
400	16"	406.4	5.6–12.5	55.34–121.46
450	18"	457.2	6.3–12.5	70.10–137.13
500	20"	508.0	6.3–12.5	77.99–152.79
600	24"	609.6	6.3–14.2	93.78–208.64

MS Square Hollow Section Weight Chart

Square hollow sections (SHS) are used for steel frames, gates, awnings, trolley chassis, racking and light structural work. The chart below lists the most-stocked sizes from 20 × 20 mm to 150 × 150 mm.

Size (mm)	1.6 mm	2.0 mm	2.5 mm	3.2 mm	4.0 mm	5.0 mm	6.0 mm
20 × 20	0.92	1.11	–	–	–	–	–
25 × 25	–	1.42	1.74	–	–	–	–
40 × 40	–	2.36	2.92	3.66	–	–	–
50 × 50	–	–	3.71	4.66	5.72	–	–
75 × 75	–	–	–	7.18	8.86	10.85	–
100 × 100	–	–	–	–	12.00	14.78	17.49
150 × 150	–	–	–	–	–	22.63	26.85

MS Rectangular Hollow Section Weight Chart

Rectangular hollow sections (RHS) are used for mezzanines, vehicle chassis, greenhouse frames, racking systems and rectangular structural members. The first dimension is the long side; the second is the short side.

Size (mm)	2.0 mm	2.5 mm	3.2 mm	4.0 mm	5.0 mm	6.0 mm
40 × 20	1.74	2.13	–	–	–	–
60 × 40	–	3.71	4.66	–	–	–
80 × 40	–	–	5.72	6.97	–	–
100 × 50	–	–	7.18	8.86	–	–
120 × 60	–	–	–	10.74	13.21	–
150 × 100	–	–	–	15.13	18.69	–
200 × 100	–	–	–	–	22.63	26.85

MS Pipe Weight Formula

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Weight (kg/m) = (OD − t) × t × 0.02466

OD = outer diameter (mm), t = wall thickness (mm), 0.02466 = π × steel density ÷ 1000

Worked example — 50 NB Class B: OD 60.3, t 3.6 → (60.3 − 3.6) × 3.6 × 0.02466 = 5.03 kg/m

Density of mild steel: 7.85 g/cm³ (7,850 kg/m³) | Tensile strength (Fe 410): 410 N/mm² min | Yield: 250 N/mm² min

For the full reference including IS 1239 standalone Class A / B / C tables, GI pipe weight chart, kg-per-foot conversions and detailed FAQs, visit our complete online MS pipe weight chart.