

CHS STEEL WEIGHT CHART

Comprehensive Technical Specification & Theoretical Mass Table for Circular Hollow Sections (EN 10210 / EN 10219 / ASTM A500 / AS 1163)

Theoretical Weight Formula: $W \text{ (kg/m)} = 0.0246615 \times t \times (D - t)$ | Where D = Outside Diameter (mm), t = Wall Thickness (mm), Density = 7.85 g/cm³

Small CHS Weight Chart

Weight values for small circular hollow sections commonly used in fabrication and light structural applications.

DN / NB	NPS (IN)	OD (MM)	WALL THICKNESS T (MM)	SCHEDULE / CLASS	LINEAR MASS (KG/M)	WEIGHT PER 6M (KG)	WEIGHT PER 12M (KG)
DN15	1/2"	21.3	2.00	Light	0.95	5.715	11.43
DN15	1/2"	21.3	2.77	Sch 40 / STD	1.27	7.598	15.20
DN15	1/2"	21.3	3.20	Heavy	1.43	8.568	17.14
DN15	1/2"	21.3	3.73	Sch 80 / XS	1.62	9.713	19.43
DN20	3/4"	26.9	2.30	Light	1.40	8.380	16.76
DN20	3/4"	26.9	2.87	Sch 40 / STD	1.70	10.20	20.40
DN20	3/4"	26.9	3.20	Heavy	1.87	11.22	22.44
DN20	3/4"	26.9	3.91	Sch 80 / XS	2.22	13.31	26.62
DN25	1"	33.7	2.60	Light	1.99	11.96	23.92
DN25	1"	33.7	3.20	Medium / STD	2.41	14.44	28.88
DN25	1"	33.7	3.38	Sch 40	2.53	15.17	30.34
DN25	1"	33.7	4.00	Heavy	2.93	17.58	35.16
DN25	1"	33.7	4.55	Sch 80 / XS	3.27	19.61	39.22
DN32	1-1/4"	42.4	2.60	Light	2.55	15.31	30.62
DN32	1-1/4"	42.4	3.20	Medium	3.09	18.56	37.12
DN32	1-1/4"	42.4	3.56	Sch 40 / STD	3.41	20.46	40.92
DN32	1-1/4"	42.4	4.00	Heavy	3.79	22.73	45.46
DN32	1-1/4"	42.4	4.85	Sch 80 / XS	4.49	26.96	53.92
DN40	1-1/2"	48.3	2.90	Light	3.25	19.48	38.96
DN40	1-1/2"	48.3	3.20	Medium	3.56	21.35	42.70
DN40	1-1/2"	48.3	3.68	Sch 40 / STD	4.05	24.30	48.60
DN40	1-1/2"	48.3	4.00	Heavy	4.37	26.22	52.44
DN40	1-1/2"	48.3	5.08	Sch 80 / XS	5.41	32.47	64.94
DN50	2"	60.3	2.90	Light	4.11	24.63	49.26
DN50	2"	60.3	3.60	Medium	5.03	30.20	60.40
DN50	2"	60.3	3.91	Sch 40 / STD	5.44	32.61	65.22
DN50	2"	60.3	4.50	Heavy	6.19	37.15	74.30
DN50	2"	60.3	5.54	Sch 80 / XS	7.48	44.89	89.78

Medium CHS Weight Chart

Weight values for medium circular hollow sections commonly used in general structural engineering, columns, and framework applications.

DN / NB	NPS (IN)	OD (MM)	WALL THICKNESS T (MM)	SCHEDULE / CLASS	LINEAR MASS (KG/M)	WEIGHT PER 6M (KG)	WEIGHT PER 12M (KG)
DN65	2-1/2"	76.1	3.20	Light	5.75	34.52	69.04
DN65	2-1/2"	76.1	3.60	Medium	6.44	38.62	77.24
DN65	2-1/2"	76.1	5.16	Sch 40 / STD	9.03	54.16	108.32
DN65	2-1/2"	76.1	7.01	Sch 80 / XS	11.95	71.70	143.40
DN80	3"	88.9	3.20	Light	6.76	40.57	81.14
DN80	3"	88.9	4.00	Medium	8.38	50.25	100.50
DN80	3"	88.9	5.49	Sch 40 / STD	11.29	67.74	135.48
DN80	3"	88.9	7.62	Sch 80 / XS	15.27	91.64	183.28
DN90	3-1/2"	101.6	3.60	Light	8.70	52.20	104.40
DN90	3-1/2"	101.6	4.00	Medium	9.63	57.77	115.54
DN90	3-1/2"	101.6	5.74	Sch 40 / STD	13.57	81.42	162.84
DN90	3-1/2"	101.6	8.08	Sch 80 / XS	18.60	111.60	223.20
DN100	4"	114.3	3.60	Light	9.83	58.97	117.94
DN100	4"	114.3	4.50	Medium	12.18	73.11	146.22
DN100	4"	114.3	6.02	Sch 40 / STD	16.07	96.44	192.88
DN100	4"	114.3	8.56	Sch 80 / XS	22.32	133.93	267.86
DN125	5"	139.7	4.00	Light	13.39	80.32	160.64
DN125	5"	139.7	5.00	Medium	16.61	99.66	199.32
DN125	5"	139.7	6.55	Sch 40 / STD	21.77	130.62	261.24
DN125	5"	139.7	9.52	Sch 80 / XS	30.94	185.64	371.28
DN150	6"	168.3	4.50	Light	18.18	109.07	218.14
DN150	6"	168.3	5.00	Medium	20.14	120.82	241.64
DN150	6"	168.3	7.11	Sch 40 / STD	28.26	169.56	339.12
DN150	6"	168.3	10.97	Sch 80 / XS	42.56	255.36	510.72

Large CHS Weight Chart

Weight values for large circular hollow sections commonly used in heavy industrial, piling, bridge construction, and major structural applications.

DN / NB	NPS (IN)	OD (MM)	WALL THICKNESS T (MM)	SCHEDULE / CLASS	LINEAR MASS (KG/M)	WEIGHT PER 6M (KG)	WEIGHT PER 12M (KG)
DN200	8"	219.1	5.90	Sch 20	31.02	186.12	372.24
DN200	8"	219.1	6.35	Sch 30	33.31	199.86	399.72
DN200	8"	219.1	8.18	Sch 40 / STD	42.55	255.30	510.60
DN200	8"	219.1	12.70	Sch 80 / XS	64.64	387.84	775.68
DN250	10"	273.0	6.35	Sch 20	41.77	250.62	501.24
DN250	10"	273.0	7.80	Sch 30	50.99	305.94	611.88
DN250	10"	273.0	9.27	Sch 40 / STD	60.29	361.74	723.48
DN250	10"	273.0	12.70	Sch 80 / XS	81.53	489.18	978.36
DN300	12"	323.9	6.35	Sch 20	49.73	298.38	596.76
DN300	12"	323.9	8.38	Sch 30	65.20	391.20	782.40
DN300	12"	323.9	9.52	STD	73.81	442.86	885.72
DN300	12"	323.9	10.31	Sch 40	79.73	478.38	956.76
DN300	12"	323.9	12.70	Sch 80 / XS	97.46	584.76	1169.52
DN350	14"	355.6	6.35	Sch 10	54.69	328.14	656.28
DN350	14"	355.6	7.92	Sch 20	67.90	407.40	814.80
DN350	14"	355.6	9.52	STD / Sch 30	81.26	487.56	975.12
DN350	14"	355.6	11.13	Sch 40	94.55	567.30	1134.60
DN350	14"	355.6	12.70	XS	107.39	644.34	1288.68
DN400	16"	406.4	6.35	Sch 10	62.64	375.84	751.68
DN400	16"	406.4	7.92	Sch 20	77.83	466.98	933.96
DN400	16"	406.4	9.52	STD / Sch 30	93.18	559.08	1118.16
DN400	16"	406.4	12.70	XS / Sch 40	123.30	739.80	1479.60
DN450	18"	457.0	6.35	Sch 10	70.57	423.42	846.84
DN450	18"	457.0	9.52	STD / Sch 20	105.07	630.42	1260.84
DN450	18"	457.0	12.70	XS / Sch 30	139.15	834.90	1669.80
DN500	20"	508.0	6.35	Sch 10	78.55	471.30	942.60
DN500	20"	508.0	9.52	STD / Sch 20	117.04	702.24	1404.48
DN500	20"	508.0	12.70	XS / Sch 30	155.12	930.72	1861.44