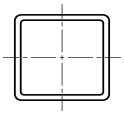
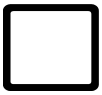
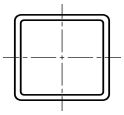


ASTM A1085 Square HSS

Dimensions and Properties

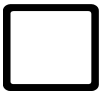


Shape	Design Wall Thickness, *t*	Nominal Wt.	Area, *A*	*b*/*t*	*h*/*t*	*I*	*S*	*r*	*Z*	Torsion		Surface Area
										J	*C*	
	in.	lb/ft	in.^{2}			in.^{4}	in.^{3}	in.	in.^{3}	in.^{4}	in.^{3}	ft^2/ft
HSS22×22×⅞	0.875	244.88	72.0	22.1	22.1	5280	480	8.56	565	8420	778	7.08
×¾	0.750	212.00	62.3	26.3	26.3	4630	421	8.62	492	7330	676	7.12
HSS20×20×⅞	0.875	221.06	65.0	19.9	19.9	3900	390	7.75	461	6260	638	6.42
×¾	0.750	191.58	56.3	23.7	23.7	3430	343	7.81	403	5460	554	6.45
×⅝	0.625	161.40	47.4	29.0	29.0	2940	294	7.88	342	4620	468	6.49
×½	0.500	130.52	38.4	37.0	37.0	2410	241	7.92	279	3760	380	6.52
HSS18×18×⅞	0.875	197.24	58.0	17.6	17.6	2780	309	6.92	368	4500	511	5.75
×¾	0.750	171.16	50.3	21.0	21.0	2460	273	6.99	322	3930	445	5.79
×⅝	0.625	144.39	42.4	25.8	25.8	2110	234	7.05	274	3340	376	5.82
×½	0.500	116.91	34.4	33.0	33.0	1740	193	7.11	224	2720	306	5.86
HSS16×16×⅞	0.875	173.43	51.0	15.3	15.3	1900	238	6.10	285	3100	398	5.08
×¾	0.750	150.75	44.3	18.3	18.3	1690	211	6.18	250	2720	347	5.12
×⅝	0.625	127.37	37.4	22.6	22.6	1450	181	6.23	214	2320	295	5.15
×½	0.500	103.30	30.4	29.0	29.0	1200	150	6.28	175	1890	240	5.19
×⅜	0.375	78.52	23.1	39.7	39.7	931	116	6.35	134	1450	183	5.23
×5⁄16	0.313	65.87	19.4	48.1	48.1	790	98.8	6.38	114	1220	154	5.24
HSS14×14×⅞	0.875	149.61	44.0	13.0	13.0	1230	176	5.29	213	2030	299	4.42
×¾	0.750	130.33	38.3	15.7	15.7	1100	157	5.36	188	1790	262	4.45
×⅝	0.625	110.36	32.4	19.4	19.4	952	136	5.42	161	1530	223	4.49
×½	0.500	89.68	26.4	25.0	25.0	791	113	5.47	132	1250	182	4.52
×⅜	0.375	68.31	20.1	34.3	34.3	615	87.9	5.53	102	963	139	4.56
×5⁄16	0.313	57.36	16.9	41.7	41.7	523	74.7	5.56	86.2	813	117	4.58
HSS12×12×¾	0.750	109.91	32.3	13.0	13.0	666	111	4.54	134	1100	188	3.79
×⅝	0.625	93.34	27.4	16.2	16.2	580	96.7	4.60	116	943	161	3.82
×½	0.500	76.07	22.4	21.0	21.0	486	81.0	4.66	95.4	777	132	3.86
×⅜	0.375	58.10	17.1	29.0	29.0	380	63.3	4.71	73.9	599	101	3.89
×5⁄16	0.313	48.86	14.4	35.3	35.3	324	54.0	4.74	62.6	507	85.4	3.91
×¼	0.250	39.43	11.6	45.0	45.0	265	44.2	4.78	50.8	410	69.0	3.93
×3⁄16	0.188	29.84	8.79	60.8	60.8	203	33.8	4.81	38.8	313	52.4	3.95
HSS10×10×¾	0.750	89.50	26.3	10.3	10.3	364	72.8	3.72	89.4	610	127	3.12
×⅝	0.625	76.33	22.4	13.0	13.0	321	64.2	3.79	77.6	529	109	3.15
×½	0.500	62.46	18.4	17.0	17.0	271	54.2	3.84	64.6	439	89.8	3.19
×⅜	0.375	47.90	14.1	23.7	23.7	214	42.8	3.90	50.4	341	69.3	3.23
×5⁄16	0.313	40.35	11.9	28.9	28.9	184	36.8	3.93	42.8	289	58.6	3.24
×¼	0.250	32.63	9.59	37.0	37.0	151	30.2	3.97	34.9	235	47.5	3.26
×3⁄16	0.188	24.73	7.29	50.2	50.2	116	23.2	3.99	26.7	180	36.2	3.28
HSS9×9×⅝	0.625	67.82	19.9	11.4	11.4	227	50.4	3.38	61.5	377	86.7	2.82
×½	0.500	55.66	16.4	15.0	15.0	193	42.9	3.43	51.4	315	71.8	2.86
×⅜	0.375	42.79	12.6	21.0	21.0	154	34.2	3.50	40.3	246	55.6	2.89
×5⁄16	0.313	36.10	10.6	25.8	25.8	132	29.3	3.53	34.3	209	47.1	2.91
×¼	0.250	29.23	8.59	33.0	33.0	109	24.2	3.56	28.0	170	38.2	2.93
×3⁄16	0.188	22.18	6.54	44.9	44.9	84.0	18.7	3.58	21.5	130	29.2	2.95

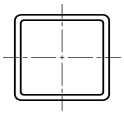


ASTM A1085 Square HSS

Dimensions and Properties

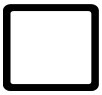


Shape	Design Wall Thickness, *t*	Nominal Wt.	Area, *A*	*b*/*t*	*h*/*t*	*I*	*S*	*r*	*Z*	Torsion		Surface Area
										J	*C*	
	in.	lb/ft	in.^{2}			in.^{4}	in.^{3}	in.	in.^{3}	in.^{4}	in.^{3}	ft^2/ft
HSS8×8×⅝	0.625	59.32	17.4	9.80	9.80	153	38.3	2.97	47.2	258	67.0	2.49
×½	0.500	48.85	14.4	13.0	13.0	131	32.8	3.02	39.7	217	55.8	2.52
×⅜	0.375	37.69	11.1	18.3	18.3	106	26.5	3.09	31.3	170	43.4	2.56
×5/16	0.313	31.84	9.37	22.6	22.6	91.0	22.8	3.12	26.8	145	36.9	2.58
×¼	0.250	25.82	7.59	29.0	29.0	75.2	18.8	3.15	21.9	118	30.0	2.60
×3/16	0.188	19.63	5.78	39.6	39.6	58.4	14.6	3.18	16.9	90.8	22.9	2.61
HSS7×7×⅝	0.625	50.81	14.9	8.20	8.20	97.6	27.9	2.56	34.8	166	49.9	2.15
×½	0.500	42.05	12.4	11.0	11.0	84.7	24.2	2.61	29.6	141	41.8	2.19
×⅜	0.375	32.58	9.58	15.7	15.7	68.7	19.6	2.68	23.5	112	32.7	2.23
×5/16	0.313	27.59	8.12	19.4	19.4	59.6	17.0	2.71	20.1	95.7	27.9	2.24
×¼	0.250	22.42	6.59	25.0	25.0	49.4	14.1	2.74	16.5	78.3	22.7	2.26
×3/16	0.188	17.08	5.03	34.2	34.2	38.6	11.0	2.77	12.8	60.3	17.4	2.28
HSS6×6×⅝	0.625	42.30	12.4	6.60	6.60	57.4	19.1	2.15	24.3	99.5	35.2	1.82
×½	0.500	35.24	10.4	9.00	9.00	50.5	16.8	2.20	20.9	85.6	29.8	1.86
×⅜	0.375	27.48	8.08	13.0	13.0	41.6	13.9	2.27	16.8	68.5	23.5	1.89
×5/16	0.313	23.34	6.87	16.2	16.2	36.3	12.1	2.30	14.5	59.0	20.1	1.91
×¼	0.250	19.02	5.59	21.0	21.0	30.3	10.1	2.33	11.9	48.5	16.5	1.93
×3/16	0.188	14.53	4.28	28.9	28.9	23.8	7.93	2.36	9.26	37.5	12.7	1.95
HSS5½×5½×⅜	0.375	24.93	7.33	11.7	11.7	31.3	11.4	2.07	13.8	51.9	19.5	1.73
×5/16	0.313	21.21	6.24	14.6	14.6	27.4	9.96	2.10	12.0	44.8	16.7	1.74
×¼	0.250	17.32	5.09	19.0	19.0	23.0	8.36	2.13	9.91	37.0	13.7	1.76
×3/16	0.188	13.25	3.90	26.3	26.3	18.1	6.58	2.15	7.71	28.7	10.6	1.78
HSS5×5×½	0.500	28.43	8.36	7.00	7.00	27.1	10.8	1.80	13.7	46.8	19.8	1.52
×⅜	0.375	22.37	6.58	10.3	10.3	22.8	9.12	1.86	11.2	38.2	15.8	1.56
×5/16	0.313	19.08	5.62	13.0	13.0	20.1	8.04	1.89	9.71	33.1	13.6	1.58
×¼	0.250	15.62	4.59	17.0	17.0	16.9	6.76	1.92	8.07	27.4	11.2	1.60
×3/16	0.188	11.97	3.53	23.6	23.6	13.4	5.36	1.95	6.31	21.4	8.68	1.61
HSS4½×4½×½	0.500	25.03	7.36	6.00	6.00	18.7	8.31	1.59	10.7	32.7	15.5	1.36
×⅜	0.375	19.82	5.83	9.00	9.00	16.0	7.11	1.66	8.81	27.1	12.6	1.39
×5/16	0.313	16.96	4.99	11.4	11.4	14.2	6.31	1.69	7.69	23.6	10.9	1.41
×¼	0.250	13.91	4.09	15.0	15.0	12.1	5.38	1.72	6.43	19.7	8.97	1.43
×3/16	0.188	10.70	3.15	20.9	20.9	9.62	4.28	1.75	5.05	15.4	6.97	1.45
HSS4×4×½	0.500	21.63	6.36	5.00	5.00	12.3	6.15	1.39	8.02	21.8	11.8	1.19
×⅜	0.375	17.27	5.08	7.67	7.67	10.7	5.35	1.45	6.72	18.4	9.65	1.23
×5/16	0.313	14.83	4.36	9.78	9.78	9.59	4.80	1.48	5.91	16.1	8.39	1.24
×¼	0.250	12.21	3.59	13.0	13.0	8.22	4.11	1.51	4.97	13.5	6.97	1.26
×3/16	0.188	9.42	2.78	18.3	18.3	6.61	3.31	1.54	3.92	10.7	5.44	1.28
HSS3½×3½×⅜	0.375	14.72	4.33	6.33	6.33	6.74	3.85	1.25	4.91	11.7	7.12	1.06
×5/16	0.313	12.70	3.74	8.18	8.18	6.11	3.49	1.28	4.36	10.4	6.24	1.08
×¼	0.250	10.51	3.09	11.0	11.0	5.29	3.02	1.31	3.69	8.82	5.22	1.10
×3/16	0.188	8.15	2.40	15.6	15.6	4.30	2.46	1.34	2.94	7.00	4.10	1.11



ASTM A1085 Square HSS

Dimensions and Properties



Shape	Design Wall Thickness, *t*	Nominal Wt.	Area, *A*	*b*/*t*	*h*/*t*	*I*	*S*	*r*	*Z*	Torsion		Surface Area
										J	*C*	
	in.	lb/ft	in.^{2}			in.^{4}	in.^{3}	in.	in.^{3}	in.^{4}	in.^{3}	ft^2/ft
HSS3×3×⅜	0.375	12.17	3.58	5.00	5.00	3.89	2.59	1.04	3.38	6.89	4.96	0.893
×5/16	0.313	10.58	3.11	6.58	6.58	3.59	2.39	1.07	3.04	6.22	4.40	0.910
×¼	0.250	8.81	2.59	9.00	9.00	3.16	2.11	1.10	2.61	5.35	3.72	0.928
×3/16	0.188	6.87	2.02	13.0	13.0	2.61	1.74	1.14	2.10	4.29	2.95	0.946
HSS2½×2½×5/16	0.313	8.45	2.49	4.99	4.99	1.88	1.50	0.869	1.96	3.33	2.88	0.744
×¼	0.250	7.11	2.09	7.00	7.00	1.69	1.35	0.899	1.71	2.92	2.47	0.762
×3/16	0.188	5.59	1.65	10.3	10.3	1.43	1.14	0.931	1.40	2.39	1.98	0.780
HSS2¼×2¼×¼	0.250	6.26	1.84	6.00	6.00	1.17	1.04	0.797	1.33	2.05	1.94	0.678
×3/16	0.188	4.96	1.46	8.97	8.97	1.00	0.889	0.828	1.10	1.70	1.57	0.696
HSS2×2×¼	0.250	5.41	1.59	5.00	5.00	0.769	0.769	0.695	1.00	1.36	1.47	0.595
×3/16	0.188	4.32	1.27	7.64	7.64	0.670	0.670	0.726	0.841	1.15	1.21	0.613