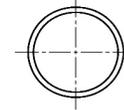




HSS28.000–
HSS18.000

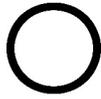
ASTM A1085/A1085M Round HSS

Dimensions and Properties



Shape	Design Wall Thickness, <i>t</i>	Nominal Wt.	Area, <i>A</i>	<i>D/t</i>	<i>I</i>	<i>S</i>	<i>r</i>	<i>Z</i>	Torsion		Surface Area
									<i>J</i>	<i>C</i>	
									in. ⁴	in. ³	
HSS28.000×1.000	1.000	288.63	84.8	28.0	7740	729	553	9.55	15500	1100	7.33
×0.875	0.875	253.72	74.6	32.0	6860	644	490	9.60	13700	979	7.33
×0.750	0.750	218.48	64.2	37.3	5960	557	426	9.64	11900	851	7.33
×0.625	0.625	182.90	53.8	44.8	5040	468	360	9.68	10100	719	7.33
×0.500	0.500	146.99	43.2	56.0	4080	378	292	9.72	8170	583	7.33
×0.375	0.375	110.74	32.5	74.7	3110	286	222	9.77	6210	443	7.33
HSS26.000×0.750	0.750	202.44	59.5	34.7	4750	478	365	8.93	9490	729	6.81
×0.625	0.625	169.54	49.8	41.6	4010	403	309	8.97	8030	617	6.81
×0.500	0.500	136.30	40.1	52.0	3260	325	251	9.02	6510	501	6.81
×0.375	0.375	102.73	30.2	69.3	2480	246	191	9.06	4960	381	6.81
×0.313	0.313	85.81	25.2	83.2	2080	206	160	9.08	4160	320	6.81
HSS24.000×1.000	1.000	245.87	72.3	24.0	4790	529	399	8.14	9570	795	6.28
×0.875	0.875	216.31	63.6	27.4	4260	468	355	8.18	8510	707	6.28
×0.750	0.750	186.41	54.8	32.0	3710	406	309	8.22	7410	616	6.28
×0.625	0.625	156.18	45.9	38.4	3140	342	261	8.27	6270	522	6.28
×0.500	0.500	125.61	36.9	48.0	2550	276	212	8.31	5100	425	6.28
×0.375	0.375	94.71	27.8	64.0	1940	209	162	8.35	3880	324	6.28
×0.313	0.313	79.13	23.3	76.8	1630	175	136	8.38	3260	272	6.28
HSS22.000×0.750	0.750	170.37	50.1	29.3	2830	339	257	7.52	5660	513	5.76
×0.625	0.625	142.81	42.0	35.2	2400	286	218	7.56	4800	436	5.76
×0.500	0.500	114.92	33.8	44.0	1950	231	177	7.60	3900	355	5.76
×0.375	0.375	86.69	25.5	58.7	1490	175	135	7.65	2980	271	5.76
×0.313	0.313	72.45	21.3	70.4	1250	147	114	7.67	2500	228	5.76
HSS20.000×1.000	1.000	203.11	59.7	20.0	2700	361	270	6.73	5400	538	5.24
×0.875	0.875	178.89	52.6	22.9	2410	320	241	6.77	4820	480	5.24
×0.750	0.750	154.34	45.4	26.7	2100	278	210	6.81	4210	420	5.24
×0.625	0.625	129.45	38.0	32.0	1790	235	179	6.85	3570	357	5.24
×0.500	0.500	104.23	30.6	40.0	1460	190	146	6.90	2910	291	5.24
×0.375	0.375	78.67	23.1	53.3	1110	144	111	6.94	2230	223	5.24
×0.313	0.313	65.77	19.3	64.0	937	121	93.7	6.96	1870	187	5.24
×0.250	0.250	52.78	15.5	80.0	756	97.5	75.6	6.98	1510	151	5.24
HSS18.000×1.000	1.000	181.73	53.4	18.0	1940	289	215	6.02	3870	428	4.71
×0.875	0.875	160.19	47.1	20.6	1730	257	192	6.06	3460	383	4.71
×0.750	0.750	138.30	40.6	24.0	1510	223	168	6.10	3030	335	4.71
×0.625	0.625	116.09	34.1	28.8	1290	189	143	6.15	2580	286	4.71
×0.500	0.500	93.54	27.5	36.0	1050	153	117	6.19	2110	234	4.71
×0.375	0.375	70.66	20.8	48.0	807	117	89.6	6.23	1610	179	4.71
×0.313	0.313	59.09	17.4	57.6	679	97.8	75.5	6.25	1360	151	4.71
×0.250	0.250	47.44	13.9	72.0	549	78.8	61.0	6.28	1100	122	4.71

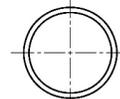
Note: Confirm ASTM A1085/A1085M material availability before specifying.



HSS16.000–
HSS11.750

ASTM A1085/A1085M Round HSS

Dimensions and Properties



Shape	Design Wall Thickness, <i>t</i>	Nominal Wt.	Area, <i>A</i>	<i>D/t</i>	<i>I</i>	<i>S</i>	<i>r</i>	<i>Z</i>	Torsion		Surface Area
									<i>J</i>	<i>C</i>	
	in.	lb/ft	in. ²	in. ⁴	in. ³	in.	in. ³	in. ⁴	in. ³	ft ² /ft	
HSS16.000×1.000	1.000	160.35	47.1	16.0	1330	225	166	5.32	2660	330	4.19
×0.875	0.875	141.48	41.6	18.3	1190	200	149	5.36	2390	296	4.19
×0.750	0.750	122.27	35.9	21.3	1050	175	131	5.40	2090	261	4.19
×0.625	0.625	102.73	30.2	25.6	894	148	112	5.44	1790	223	4.19
×0.500	0.500	82.85	24.3	32.0	732	120	91.5	5.48	1460	183	4.19
×0.438	0.438	72.87	21.4	36.5	649	106	81.1	5.50	1300	162	4.19
×0.375	0.375	62.64	18.4	42.7	562	91.6	70.3	5.53	1120	140	4.19
×0.313	0.313	52.41	15.4	51.2	474	76.9	59.2	5.55	948	118	4.19
×0.250	0.250	42.09	12.4	64.0	384	62.0	48.0	5.57	767	95.9	4.19
HSS14.000×1.000	1.000	138.97	40.8	14.0	868	169	124	4.61	1740	245	3.67
×0.875	0.875	122.77	36.1	16.0	780	151	111	4.65	1560	221	3.67
×0.750	0.750	106.23	31.2	18.7	687	132	98.2	4.69	1370	195	3.67
×0.625	0.625	89.36	26.3	22.4	589	112	84.1	4.73	1180	168	3.67
×0.500	0.500	72.16	21.2	28.0	484	91.2	69.1	4.78	968	138	3.67
×0.375	0.375	54.62	16.1	37.3	373	69.6	53.3	4.82	746	106	3.67
×0.313	0.313	45.73	13.4	44.8	315	58.6	45.0	4.84	630	89.9	3.67
×0.250	0.250	36.75	10.8	56.0	255	47.3	36.5	4.86	511	72.9	3.67
×0.188	0.188	27.69	8.14	74.7	194	35.8	27.7	4.88	388	55.4	3.67
HSS13.375×0.625	0.625	85.19	25.0	21.4	510	102	76.3	4.51	1020	152	3.50
×0.500	0.500	68.82	20.2	26.8	420	82.9	62.8	4.56	839	125	3.50
×0.375	0.375	52.11	15.3	35.7	324	63.4	48.4	4.60	648	96.7	3.50
×0.313	0.313	43.64	12.8	42.8	274	53.3	40.9	4.62	547	81.8	3.50
×0.250	0.250	35.08	10.3	53.5	222	43.1	33.2	4.64	444	66.4	3.50
×0.188	0.188	26.43	7.77	71.3	169	32.6	25.3	4.66	338	50.5	3.50
HSS12.750×0.750	0.750	96.21	28.3	17.0	511	108	80.1	4.25	1020	159	3.34
×0.625	0.625	81.01	23.8	20.4	439	92.0	68.8	4.29	877	137	3.34
×0.500	0.500	65.48	19.2	25.5	362	75.1	56.7	4.33	723	113	3.34
×0.375	0.375	49.61	14.6	34.0	279	57.4	43.8	4.38	559	87.5	3.34
×0.250	0.250	33.41	9.82	51.0	192	39.1	30.1	4.42	384	60.1	3.34
×0.188	0.188	25.18	7.40	68.0	146	29.6	22.9	4.44	292	45.8	3.34
HSS12.000×0.625	0.625	76.00	22.3	19.2	362	81.0	60.4	4.03	725	120	3.14
×0.500	0.500	61.47	18.1	24.0	299	66.2	49.9	4.07	598	99.4	3.14
×0.375	0.375	46.60	13.7	32.0	232	50.7	38.6	4.11	463	77.1	3.14
×0.250	0.250	31.40	9.23	48.0	159	34.5	26.6	4.16	319	53.1	3.14
HSS11.750×0.625	0.625	74.33	21.8	18.8	339	77.4	57.7	3.94	678	115	3.08
×0.500	0.500	60.13	17.7	23.5	280	63.3	47.7	3.98	560	95.0	3.08
×0.375	0.375	45.60	13.4	31.3	217	48.5	36.9	4.02	434	73.7	3.08
×0.337	0.337	41.12	12.1	34.9	197	43.9	33.5	4.04	394	66.9	3.08
×0.250	0.250	30.73	9.03	47.0	149	33.1	25.4	4.07	299	50.8	3.08

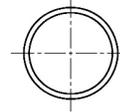
Note: Confirm ASTM A1085/A1085M material availability before specifying.



HSS10.750–
HSS6.875

ASTM A1085/A1085M Round HSS

Dimensions and Properties



Shape	Design Wall Thickness, <i>t</i>	Nominal Wt.	Area, <i>A</i>	<i>D/t</i>	<i>I</i>	<i>S</i>	<i>r</i>	<i>Z</i>	Torsion		Surface Area
									<i>J</i>	<i>C</i>	
									in. ⁴	in. ³	
HSS10.750×0.625	0.625	67.65	19.9	17.2	256	64.2	47.6	3.59	511	94.5	2.81
×0.500	0.500	54.79	16.1	21.5	212	52.6	39.4	3.63	424	78.5	2.81
×0.375	0.375	41.59	12.2	28.7	165	40.4	30.6	3.67	329	61.1	2.81
×0.313	0.313	34.87	10.2	34.4	140	34.1	26.0	3.69	279	51.9	2.81
×0.250	0.250	28.06	8.25	43.0	114	27.6	21.2	3.71	227	42.3	2.81
×0.188	0.188	21.17	6.22	57.3	86.8	20.9	16.1	3.73	174	32.3	2.81
HSS10.000×0.625	0.625	62.64	18.4	16.0	203	55.0	40.6	3.32	406	80.6	2.62
×0.500	0.500	50.78	14.9	20.0	169	45.2	33.8	3.36	338	67.2	2.62
×0.375	0.375	38.58	11.3	26.7	132	34.8	26.3	3.41	263	52.5	2.62
×0.313	0.313	32.36	9.51	32.0	112	29.3	22.3	3.43	223	44.6	2.62
×0.250	0.250	26.06	7.66	40.0	91.1	23.8	18.2	3.45	182	36.4	2.62
×0.188	0.188	19.67	5.78	53.3	69.6	18.1	13.9	3.47	139	27.8	2.62
HSS9.625×0.625	0.625	60.13	17.7	15.4	180	50.7	37.4	3.19	360	74.1	2.52
×0.500	0.500	48.77	14.3	19.3	150	41.7	31.1	3.23	299	61.9	2.52
×0.375	0.375	37.08	10.9	25.7	117	32.1	24.3	3.27	233	48.4	2.52
×0.313	0.313	31.11	9.14	30.8	99.2	27.1	20.6	3.29	198	41.2	2.52
×0.250	0.250	25.06	7.36	38.5	81.0	22.0	16.8	3.32	162	33.6	2.52
×0.188	0.188	18.92	5.56	51.3	61.9	16.7	12.9	3.34	124	25.7	2.52
HSS8.625×0.625	0.625	53.45	15.7	13.8	126	40.1	29.3	2.84	253	58.0	2.26
×0.500	0.500	43.43	12.8	17.3	106	33.0	24.5	2.88	211	48.7	2.26
×0.375	0.375	33.07	9.72	23.0	82.9	25.5	19.2	2.92	166	38.3	2.26
×0.322	0.322	28.58	8.40	26.8	72.5	22.2	16.8	2.94	145	33.5	2.26
×0.250	0.250	22.38	6.58	34.5	57.7	17.5	13.4	2.96	115	26.7	2.26
×0.188	0.188	16.91	4.97	46.0	44.3	13.4	10.3	2.98	88.5	20.5	2.26
HSS7.500×0.500	0.500	37.42	11.0	15.0	67.7	24.5	18.1	2.48	135	35.8	1.96
×0.375	0.375	28.56	8.39	20.0	53.4	19.1	14.2	2.52	107	28.4	1.96
×0.313	0.313	24.01	7.06	24.0	45.7	16.2	12.2	2.54	91.3	24.3	1.96
×0.250	0.250	19.38	5.69	30.0	37.5	13.1	9.99	2.56	74.9	19.9	1.96
×0.188	0.188	14.66	4.31	40.0	28.8	10.0	7.68	2.59	57.6	15.3	1.96
HSS7.000×0.500	0.500	34.74	10.2	14.0	54.2	21.2	15.5	2.30	108	30.7	1.83
×0.375	0.375	26.56	7.80	18.7	43.0	16.5	12.3	2.35	85.9	24.4	1.83
×0.313	0.313	22.34	6.57	22.4	36.8	14.0	10.5	2.37	73.6	20.9	1.83
×0.250	0.250	18.04	5.30	28.0	30.2	11.4	8.64	2.39	60.5	17.2	1.83
×0.188	0.188	13.65	4.01	37.3	23.3	8.70	6.66	2.41	46.6	13.3	1.83
HSS6.875×0.375	0.375	26.06	7.66	18.3	40.6	15.9	11.8	2.30	81.2	23.5	1.80
×0.313	0.313	21.92	6.44	22.0	34.8	13.5	10.1	2.32	69.5	20.1	1.80
×0.250	0.250	17.71	5.20	27.5	28.6	11.0	8.32	2.34	57.2	16.6	1.80
×0.188	0.188	13.40	3.94	36.7	22.0	8.39	6.41	2.37	44.1	12.8	1.80

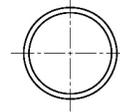
Note: Confirm ASTM A1085/A1085M material availability before specifying.



HSS6.625-
HSS4.000

ASTM A1085/A1085M Round HSS

Dimensions and Properties



Shape	Design Wall Thickness, <i>t</i>	Nominal Wt.	Area, <i>A</i>	<i>D/t</i>	<i>I</i>	<i>S</i>	<i>r</i>	<i>Z</i>	Torsion		Surface Area
									<i>J</i>	<i>C</i>	
									in. ⁴	in. ³	
HSS6.625×0.500	0.500	32.74	9.62	13.3	45.4	18.8	13.7	2.17	90.8	27.1	1.73
×0.432	0.432	28.60	8.40	15.3	40.5	16.6	12.2	2.19	81.0	24.2	1.73
×0.375	0.375	25.06	7.36	17.7	36.1	14.7	10.9	2.21	72.2	21.6	1.73
×0.313	0.313	21.09	6.20	21.2	30.9	12.5	9.34	2.23	61.9	18.6	1.73
×0.280	0.280	18.99	5.58	23.7	28.1	11.3	8.50	2.25	56.3	16.9	1.73
×0.250	0.250	17.04	5.01	26.5	25.5	10.2	7.69	2.26	50.9	15.3	1.73
×0.188	0.188	12.90	3.79	35.3	19.7	7.77	5.94	2.28	39.3	11.9	1.73
HSS6.000×0.500	0.500	29.40	8.64	12.0	32.9	15.2	11.0	1.95	65.9	21.6	1.57
×0.375	0.375	22.55	6.63	16.0	26.3	11.9	8.78	1.99	52.7	17.4	1.57
×0.313	0.313	19.00	5.58	19.2	22.6	10.1	7.55	2.01	45.3	15.0	1.57
×0.280	0.280	17.12	5.03	21.4	20.6	9.17	6.88	2.02	41.3	13.7	1.57
×0.250	0.250	15.37	4.52	24.0	18.7	8.27	6.23	2.03	37.4	12.4	1.57
×0.188	0.188	11.65	3.42	32.0	14.5	6.34	4.82	2.06	28.9	9.63	1.57
HSS5.563×0.500	0.500	27.06	7.95	11.1	25.7	12.9	9.25	1.80	51.5	18.2	1.46
×0.375	0.375	20.80	6.11	14.8	20.7	10.1	7.43	1.84	41.3	14.7	1.46
×0.258	0.258	14.63	4.30	21.6	15.2	7.27	5.45	1.88	30.3	10.9	1.46
×0.188	0.188	10.77	3.17	29.7	11.5	5.42	4.12	1.90	22.9	8.22	1.46
HSS5.500×0.500	0.500	26.73	7.85	11.0	24.8	12.5	9.01	1.78	49.6	17.7	1.44
×0.375	0.375	20.55	6.04	14.7	19.9	9.87	7.25	1.82	39.9	14.4	1.44
×0.258	0.258	14.46	4.25	21.3	14.6	7.10	5.32	1.86	29.3	10.6	1.44
HSS5.000×0.500	0.500	24.05	7.07	10.0	18.1	10.2	7.25	1.60	36.2	14.2	1.31
×0.375	0.375	18.54	5.45	13.3	14.7	8.04	5.87	1.64	29.3	11.6	1.31
×0.313	0.313	15.66	4.60	16.0	12.7	6.88	5.08	1.66	25.4	10.1	1.31
×0.258	0.258	13.08	3.84	19.4	10.8	5.81	4.33	1.68	21.7	8.62	1.31
×0.250	0.250	12.69	3.73	20.0	10.6	5.65	4.22	1.68	21.1	8.40	1.31
×0.188	0.188	9.65	2.83	26.7	8.22	4.34	3.29	1.70	16.4	6.56	1.31
HSS4.500×0.375	0.375	16.54	4.86	12.0	10.4	6.40	4.63	1.46	20.8	9.13	1.18
×0.337	0.337	15.00	4.41	13.4	9.61	5.85	4.27	1.48	19.2	8.45	1.18
×0.237	0.237	10.80	3.17	19.0	7.23	4.31	3.21	1.51	14.5	6.39	1.18
×0.188	0.188	8.64	2.54	24.0	5.92	3.49	2.63	1.53	11.8	5.24	1.18
HSS4.000×0.313	0.313	12.32	3.62	12.8	6.20	4.26	3.10	1.31	12.4	6.12	1.05
×0.250	0.250	10.02	2.95	16.0	5.20	3.52	2.60	1.33	10.4	5.16	1.05
×0.237	0.237	9.53	2.80	16.9	4.98	3.36	2.49	1.33	9.96	4.94	1.05
×0.226	0.226	9.12	2.68	17.7	4.79	3.22	2.39	1.34	9.58	4.76	1.05
×0.220	0.220	8.89	2.61	18.2	4.68	3.15	2.34	1.34	9.36	4.65	1.05
×0.188	0.188	7.64	2.25	21.3	4.09	2.73	2.05	1.35	8.18	4.07	1.05

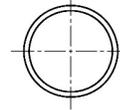
Note: Confirm ASTM A1085/A1085M material availability before specifying.



HSS3.500-
HSS1.900

ASTM A1085/A1085M Round HSS

Dimensions and Properties



Shape	Design Wall Thickness, <i>t</i>	Nominal Wt.	Area, <i>A</i>	<i>D/t</i>	<i>I</i>	<i>S</i>	<i>r</i>	<i>Z</i>	Torsion		Surface Area
									<i>J</i>	<i>C</i>	
									in. ⁴	in. ³	
HSS3.500×0.313	0.313	10.65	3.13	11.2	4.01	3.19	2.29	1.13	8.02	4.51	0.916
×0.300	0.300	10.26	3.02	11.7	3.89	3.08	2.23	1.14	7.79	4.38	0.916
×0.250	0.250	8.69	2.55	14.0	3.39	2.65	1.94	1.15	6.78	3.83	0.916
×0.216	0.216	7.58	2.23	16.2	3.02	2.33	1.72	1.16	6.03	3.42	0.916
×0.203	0.203	7.15	2.10	17.2	2.87	2.21	1.64	1.17	5.74	3.26	0.916
×0.188	0.188	6.64	1.95	18.7	2.68	2.06	1.53	1.17	5.37	3.05	0.916
HSS3.000×0.250	0.250	7.35	2.16	12.0	2.06	1.90	1.37	0.976	4.12	2.71	0.785
×0.216	0.216	6.43	1.89	13.9	1.84	1.68	1.23	0.987	3.68	2.43	0.785
×0.203	0.203	6.07	1.78	14.8	1.75	1.59	1.17	0.991	3.51	2.32	0.785
×0.188	0.188	5.64	1.66	16.0	1.65	1.49	1.10	0.997	3.29	2.18	0.785
×0.152	0.152	4.63	1.36	19.7	1.38	1.23	0.922	1.01	2.77	1.83	0.785
HSS2.875×0.250	0.250	7.02	2.06	11.5	1.79	1.73	1.25	0.932	3.58	2.45	0.753
×0.203	0.203	5.80	1.70	14.2	1.53	1.45	1.06	0.947	3.06	2.11	0.753
×0.188	0.188	5.39	1.58	15.3	1.44	1.36	0.999	0.952	2.87	1.98	0.753
HSS2.500×0.250	0.250	6.01	1.77	10.0	1.13	1.27	0.906	0.800	2.26	1.77	0.654
×0.188	0.188	4.64	1.36	13.3	0.917	1.00	0.733	0.820	1.83	1.45	0.654
HSS2.375×0.250	0.250	5.68	1.67	9.50	0.955	1.13	0.804	0.756	1.91	1.57	0.622
×0.218	0.218	5.03	1.48	10.9	0.868	1.02	0.731	0.766	1.74	1.44	0.622
×0.188	0.188	4.38	1.29	12.7	0.776	0.899	0.654	0.776	1.55	1.29	0.622
×0.154	0.154	3.66	1.07	15.4	0.666	0.761	0.561	0.787	1.33	1.11	0.622
HSS1.900×0.188	0.188	3.43	1.01	10.1	0.374	0.552	0.394	0.609	0.748	0.772	0.497

Note: Confirm ASTM A1085/A1085M material availability before specifying.