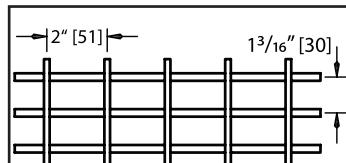
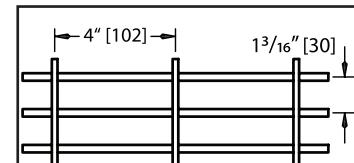


BORDEN GRATINGS

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Heavy Duty Grating

LOAD TABLE



BORDEN TYPE HD19

BORDEN TYPE HD19F

Size No.	Bearing Bar Size	Weight (lbs/ft ²)	Moment of Inertia (in. ⁴)	Section Modulus (in. ³)	Span in Inches													
					24	30	36	42	48	54	60	66	72	78	84	96	108	
4HD19-4	1" x 1/4"	9.23 9.87	0.2105	0.4211	U 1404 898 624 458 351 277 225 186 156 133 115 88 69	Du 0.083 0.129 0.186 0.253 0.331 0.419 0.517 0.626 0.745 0.874 1.014 1.324 1.676	C 1404 1123 936 802 702 624 561 510 468 432 401 351 312	D 0.066 0.103 0.149 0.203 0.265 0.335 0.414 0.501 0.596 0.699 0.811 1.059 1.341	Dc 0.053 0.083 0.119 0.162 0.203 0.265 0.335 0.414 0.501 0.596 0.699 0.811 1.059	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
6HD19-4	1 1/4" x 1/4"	11.38 12.02	0.4112	0.6579	U 2193 1404 975 716 548 433 351 290 244 208 179 137 108	Du 0.066 0.103 0.149 0.203 0.265 0.335 0.414 0.501 0.596 0.699 0.811 1.059	C 2193 1754 1462 1253 1096 975 877 797 731 675 627 548 548	D 0.053 0.083 0.119 0.162 0.212 0.268 0.331 0.401 0.477 0.559 0.649 0.847 1.073	Dc 0.044 0.073 0.109 0.158 0.217 0.274 0.341 0.417 0.497 0.583 0.676 0.883	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
8HD19-4	1 1/2" x 1/4"	14.33 15.77	0.7105	0.9474	U 3158 2021 1404 1031 789 624 505 418 351 299 258 197 156	Du 0.055 0.086 0.124 0.169 0.221 0.279 0.345 0.417 0.497 0.583 0.676 0.883	C 3158 2526 2105 1805 1579 1404 1263 1148 1053 972 902 789 702	D 0.044 0.074 0.109 0.159 0.223 0.276 0.334 0.409 0.486 0.574 0.651 0.894	Dc 0.034 0.064 0.099 0.135 0.177 0.233 0.301 0.374 0.454 0.541 0.626 0.894	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
8HD19-6	1 1/2" x 3/8"	21.26 23.17	1.0658	1.4211	U 4737 3032 2105 1547 1184 936 758 626 526 448 387 296 234	Du 0.055 0.086 0.124 0.169 0.221 0.279 0.345 0.417 0.497 0.583 0.676 0.883	C 4737 3789 3158 2707 2368 2105 1895 1722 1579 1457 1353 1184 1053	D 0.044 0.074 0.109 0.159 0.223 0.276 0.334 0.409 0.486 0.574 0.651 0.894	Dc 0.034 0.064 0.099 0.135 0.177 0.233 0.301 0.374 0.454 0.541 0.626 0.894	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
9HD19-4	1 3/4" x 1/4"	16.48 17.91	1.1283	1.2895	U 4298 2751 1910 1404 1075 849 688 568 478 407 351 269 212	Du 0.047 0.074 0.106 0.145 0.189 0.239 0.296 0.358 0.426 0.500 0.579 0.757 0.958	C 4298 3439 2865 2456 2149 1910 1719 1563 1433 1323 1228 1075 955	D 0.038 0.068 0.105 0.146 0.191 0.240 0.296 0.360 0.436 0.510 0.589 0.766	Dc 0.028 0.059 0.085 0.116 0.151 0.201 0.256 0.326 0.396 0.471 0.546 0.726	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
9HD19-6	1 3/4" x 3/8"	24.48 26.39	1.6924	1.9342	U 6447 4126 2865 2105 1612 1274 1032 853 716 610 526 403 318	Du 0.047 0.074 0.106 0.145 0.189 0.239 0.296 0.358 0.426 0.500 0.579 0.757 0.958	C 6447 5158 4298 3684 3224 2865 2579 2344 2149 1984 1842 1612 1433	D 0.038 0.068 0.105 0.146 0.191 0.236 0.296 0.360 0.436 0.510 0.589 0.766	Dc 0.028 0.059 0.085 0.116 0.151 0.201 0.256 0.326 0.396 0.471 0.546 0.726	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
10HD19-4	2" x 1/4"	18.63 20.06	1.6842	1.6842	U 5614 3593 2495 1833 1404 1109 888 742 624 532 458 351 277	Du 0.041 0.065 0.093 0.127 0.166 0.209 0.259 0.313 0.372 0.437 0.507 0.662 0.838	C 5614 4491 3743 3008 2807 2495 2246 2041 1871 1727 1604 1404 1248	D 0.033 0.052 0.082 0.124 0.163 0.207 0.256 0.315 0.375 0.441 0.509 0.667 0.838	Dc 0.023 0.043 0.074 0.115 0.153 0.201 0.250 0.316 0.376 0.445 0.511 0.669 0.838	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
10HD19-6	2" x 3/8"	27.70 29.62	2.5263	2.5263	U 8421 5389 3743 2750 2105 1663 1347 1114 936 797 687 526 416	Du 0.041 0.065 0.093 0.127 0.166 0.209 0.259 0.313 0.372 0.437 0.507 0.662 0.838	C 8421 6737 5614 4812 4211 3743 3368 3062 2807 2591 2406 2105 1871	D 0.033 0.052 0.082 0.124 0.163 0.207 0.256 0.315 0.375 0.441 0.509 0.667 0.838	Dc 0.023 0.043 0.074 0.115 0.153 0.201 0.250 0.316 0.376 0.445 0.511 0.669 0.838	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
11HD19-4	2 1/4" x 1/4"	20.78 22.21	2.3980	2.1316	U 7105 4547 3158 2320 1776 1404 1137 940 789 673 580 444 351	Du 0.037 0.057 0.083 0.113 0.147 0.186 0.230 0.278 0.331 0.389 0.451 0.589 0.745	C 7105 5684 4737 4060 3553 3158 2842 2584 2368 2186 2030 1776 1579	D 0.029 0.049 0.086 0.118 0.149 0.184 0.223 0.265 0.311 0.360 0.421 0.559 0.745	Dc 0.029 0.046 0.076 0.109 0.140 0.178 0.213 0.254 0.305 0.354 0.413 0.546 0.745	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
11HD19-6	2 1/4" x 3/8"	30.93 32.84	3.5970	3.1974	U 10658 6821 4737 3480 2664 2105 1705 1409 1184 1009 870 666 526	Du 0.037 0.057 0.083 0.113 0.147 0.186 0.230 0.278 0.331 0.389 0.451 0.589 0.745	C 10658 8526 7105 6090 5329 4737 4263 3876 3553 3279 3045 2664 2368	D 0.029 0.046 0.086 0.118 0.149 0.184 0.223 0.265 0.311 0.360 0.421 0.559 0.745	Dc 0.029 0.046 0.086 0.118 0.149 0.184 0.223 0.265 0.311 0.360 0.421 0.559 0.745	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
12HD19-4	2 1/2" x 1/4"	23.41 25.32	3.2895	2.6316	U 8772 5614 3899 2864 2193 1733 1404 1160 975 830 716 548 433	Du 0.033 0.052 0.074 0.101 0.132 0.168 0.207 0.250 0.298 0.350 0.406 0.530 0.670	C 8772 7018 5848 5013 4386 3899 3509 3190 2924 2699 2506 2193 1949	D 0.026 0.041 0.060 0.090 0.118 0.149 0.184 0.223 0.265 0.311 0.360 0.421 0.556	Dc 0.026 0.041 0.060 0.081 0.106 0.134 0.166 0.200 0.238 0.280 0.324 0.424 0.556	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
12HD19-6	2 1/2" x 3/8"	34.79 37.34	4.9342	3.9474	U 13158 8421 5848 4296 3289 2599 2105 1740 1462 1246 1074 822 650	Du 0.033 0.052 0.074 0.101 0.132 0.168 0.207 0.250 0.298 0.350 0.406 0.530 0.670	C 13158 10526 8772 7519 6579 5848 5263 4785 4386 4049 3759 3289 2924	D 0.026 0.041 0.060 0.081 0.106 0.134 0.166 0.200 0.238 0.280 0.324 0.424 0.556	Dc 0.026 0.041 0.060 0.081 0.106 0.134 0.166 0.200 0.238 0.280 0.324 0.424 0.556	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
13HD19-4	2 3/4" x 1/4"	25.55 27.47	4.3783	3.1842	U 10614 6793 4717 3466 2654 2097 1698 1404 1179 1005 866 663 524	Du 0.030 0.047 0.068 0.092 0.120 0.152 0.188 0.228 0.271 0.318 0.369 0.482 0.609	C 10614 8491 7076 6065 5307 4717 4246 3860 3538 3266 3033 2654 2359	D 0.024 0.040 0.068 0.094 0.125 0.156 0.190 0.231 0.270 0.317 0.365 0.488	Dc 0.024 0.040 0.068 0.094 0.125 0.156 0.190 0.231 0.270 0.317 0.365 0.488	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
13HD19-6	2 3/4" x 3/8"	38.01 40.56	6.5674	4.7763	U 15921 10189 7076 5199 3980 3145 2547 2105 1769 1507 1300 995 786	Du 0.030 0.047 0.068 0.092 0.120 0.152 0.188 0.228 0.271 0.318 0.369 0.482 0.609	C 15921 12737 10614 9098 7961 7076 6368 5789 5307 4899 4549 3980 3538	D 0.024 0.040 0.068 0.092 0.120 0.152 0.188 0.228 0.271 0.318 0.369 0.482	Dc 0.024 0.040 0.068 0.092 0.120 0.152 0.188 0.228 0.271 0.318 0.369 0.482	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
14HD19-4	3" x 1/4"	27.70 29.62	5.6842	3.7895	U 12632 8084 4125 3158 2495 2021 1760 1470 1104 1031 866 663 524	Du 0.028 0.043 0.063 0.084 0.110 0.140 0.172 0.209 0.248 0.291 0.338 0.441 0.559	C 12632 10105 8421 7218 6316 5614 5053 4593 4211 3887 3609 3158 2807	D 0.022 0.040 0.063 0.084 0.110 0.140 0.172 0.209 0.248 0.291 0.338 0.441 0.559	Dc 0.022 0.040 0.063 0.084 0.110 0.140 0.172 0.209 0.248 0.291 0.338 0.441 0.559	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
14HD19-6	3" x 3/8"	41.24 43.79	8.5263	5.6842	U 18947 12126 10827 9474 7579 6890 6316 5830 5414 4737 4211 3743 3070	Du 0.028 0.043 0.063 0.084 0.110 0.140 0.172 0.209 0.248 0.291 0.338 0.441 0.559	C 18947 15158 12632 10827 9474 7579 6890 6316 5830 5414 4737 4211 3743 3070	D 0.022 0.040 0.063 0.084 0.110 0.140 0.172 0.209 0.248 0.291 0.338 0.441 0.559	Dc 0.022 0.040 0.063 0.084 0.110 0.140 0.172 0.209 0.248 0.291 0.338 0.441 0.559	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
16HD19-4	3 1/2" x 1/4"	32.00 33.92	9.0263	5.1579	U 17193 11004 7641 5614 4298 3396 2751 2273 1910 1628 1404 1075 849	Du 0.024 0.037 0.053 0.072 0.095 0.120 0.148 0.179 0.211 0.231 0.266 0.296 0.335	C 17193 13754 11462 10452 8677 7641 6877 5731 5290 4912 4298 3821 3383	D 0.019 0.030 0.043 0.058 0.076 0.105 0.132 0.163 0.194 0.223 0.253 0.282 0.313	Dc 0.019 0.030 0.043 0.058 0.076 0.105 0.132 0.163 0.194 0.223 0.253 0.282 0.313	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]	13/16" [30]
16HD19-6	3 1/2" x 3/8"	47.68 50.24	13.5395	7.7368	U 22456 14372 9981 7333 5614 4436 3593 2969 2495 2126 1833 1404 1109	Du 0.024 0.037 0.053 0.072 0.095 0.120 0.148 0.179 0.211 0.231 0.266 0.296 0.335	C 22456 17965 14971 12832 11228 9981 8982 8166 7485 6910 6416 5614 4990	D 0.019 0.030 0.043 0.058 0.076 0.105 0.132 0.163 0.194 0.223 0.253 0.282 0.313	Dc 0									