

# Heavy Duty Grating

## 22 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:  
22-W-4 and 22-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



1 Ton Forklift

Bearing Bar size	Section Modulus psf	Moment of Inertia psf	Approx. Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1 x 1/4 1 x 5/16 1 x 3/8	0.364 0.455 0.545	0.182 0.227 0.273	8.5 10.4 12.2	0'-11" 1'-0" 1'-1"	0'-10" 0'-11" 1'-0"	0'-9" 0'-10" 0'-11"	0'-11" 1'-1" 1'-3"	0'-7" 0'-8" 0'-9"	0'-6" 0'-6" 0'-7"	0'-6" 0'-7" 0'-9"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.568 0.710 0.852	0.355 0.444 0.533	10.4 12.7 15.0	1'-2" 1'-3" 1'-5"	1'-0" 1'-2" 1'-3"	0'-11" 1'-0" 1'-1"	1'-4" 1'-6" 1'-9"	0'-9" 0'-10" 0'-11"	0'-7" 0'-8" 0'-9"	0'-9" 0'-11" 1'-1"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	0.818 1.023 1.227	0.614 0.767 0.920	12.2 15.0 17.8	1'-5" 1'-7" 1'-8"	1'-3" 1'-5" 1'-6"	1'-1" 1'-3" 1'-4"	1'-9" 2'-1" 2'-5"	0'-11" 1'-0" 1'-1"	0'-9" 0'-11" 1'-0"	1'-0" 1'-3" 1'-6"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	1.114 1.392 1.670	0.974 1.218 1.462	14.1 17.3 20.6	1'-8" 1'-10" 2'-0"	1'-6" 1'-8" 1'-10"	1'-3" 1'-6" 1'-8"	2'-3" 2'-8" 3'-0"	1'-1" 1'-2" 1'-4"	0'-11" 1'-1" 1'-3"	1'-4" 1'-8" 1'-11"
2 x 1/4 2 x 5/16 2 x 3/8	1.455 1.818 2.182	1.455 1.818 2.182	16.0 19.7 23.4	1'-10" 2'-1" 2'-4"	1'-8" 1'-11" 2'-1"	1'-6" 1'-9" 2'-0"	2'-10" 3'-4" 3'-8"	1'-3" 1'-5" 1'-8"	1'-2" 1'-5" 1'-7"	1'-9" 2'-1" 2'-6"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	1.841 2.301 2.761	2.071 2.589 3.107	17.8 22.0 26.2	2'-1" 2'-4" 2'-8"	1'-11" 2'-2" 2'-6"	1'-9" 2'-0" 2'-4"	3'-5" 4'-0" 4'-3"	1'-6" 1'-9" 2'-0"	1'-5" 1'-8" 2'-0"	2'-2" 2'-8" 3'-2"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	2.273 2.841 3.409	2.841 3.551 4.261	19.7 24.3 28.9	2'-4" 2'-8" 3'-0"	2'-2" 2'-6" 2'-10"	2'-0" 2'-5" 2'-9"	4'-2" 4'-6" 4'-9"	1'-8" 2'-0" 2'-4"	1'-8" 2'-0" 2'-4"	2'-7" 3'-3" 3'-10"
3 x 1/4 3 x 5/16 3 x 3/8	3.273 4.091 4.909	4.909 6.136 7.364	23.4 28.9 34.5	2'-11" 3'-5" 3'-11"	2'-9" 3'-3" 3'-9"	2'-8" 3'-2" 3'-8"	5'-0" 5'-4" 5'-8"	2'-3" 2'-9" 3'-2"	2'-3" 2'-9" 3'-4"	3'-8" 4'-7" 4'-11"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	4.455 5.568 6.682	7.795 9.744 11.693	27.1 33.6 40.1	3'-8" 4'-4" 4'-10"	3'-6" 4'-2" 4'-10"	3'-5" 4'-1" 4'-10"	5'-10" 6'-3" 6'-8"	2'-11" 3'-7" 4'-2"	3'-0" 3'-8" 4'-5"	5'-0" 5'-5" 5'-9"
4 x 1/4 4 x 5/16 4 x 3/8	5.818 7.273 8.727	11.636 14.545 17.455	30.8 38.2 45.6	4'-5" 5'-2" 5'-6"	4'-4" 5'-2" 5'-6"	4'-3" 5'-2" 5'-6"	6'-8" 7'-2" 7'-7"	3'-9" 4'-6" 5'-3"	3'-10" 4'-9" 5'-5"	5'-9" 6'-2" 6'-7"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	7.364 9.205 11.045	16.568 20.710 24.852	34.5 42.8 51.2	5'-4" 5'-9" 6'-2"	5'-3" 5'-9" 6'-2"	5'-3" 5'-10" 6'-2"	7'-6" 8'-1" 8'-7"	4'-7" 5'-7" 5'-11"	4'-10" 5'-9" 6'-1"	6'-5" 6'-11" 7'-5"
5 x 1/4 5 x 3/8 5 x 1/2	9.091 13.636 18.182	22.727 34.091 45.455	38.2 56.8 75.3	5'-11" 6'-9" 7'-6"	6'-0" 6'-10" 7'-6"	6'-0" 6'-10" 7'-7"	8'-4" 9'-6" 10'-6"	5'-7" 6'-7" 7'-3"	5'-11" 6'-10" 7'-6"	7'-2" 8'-3" 9'-1"
6 x 1/4 6 x 3/8 6 x 1/2	13.091 19.636 26.182	39.273 58.909 78.545	45.6 67.9 90.1	7'-1" 8'-1" 8'-11"	7'-2" 8'-2" 9'-0"	7'-2" 8'-3" 9'-1"	10'-0" 11'-5" 12'-7"	6'-11" 7'-11" 8'-9"	7'-2" 8'-2" 9'-0"	8'-7" 9'-10" 10'-10"
7 x 1/4 7 x 3/8 7 x 1/2	17.818 26.727 35.636	62.364 93.545 124.727	53.1 79.0 105.0	8'-3" 9'-5" 10'-5"	8'-4" 9'-6" 10'-6"	8'-5" 9'-7" 10'-7"	11'-8" 13'-4" 14'-8"	8'-1" 9'-3" 10'-2"	8'-4" 9'-6" 10'-6"	10'-1" 11'-6" 12'-8"