

Heavy Duty Grating

19 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:
19-W-4 and 19-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	0.421 0.526 0.632	0.211 0.263 0.316	9.7 11.9 14.0	1'-0" 1'-1" 1'-2"	0'-10" 1'-0" 1'-1"	0'-9" 0'-10" 0'-11"	1'-0" 1'-2" 1'-4"	0'-7" 0'-8" 0'-9"	0'-6" 0'-7" 0'-8"	0'-7" 0'-8" 0'-9"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.658 0.822 0.987	0.411 0.514 0.617	11.9 14.5 17.2	1'-3" 1'-4" 1'-6"	1'-1" 1'-3" 1'-4"	1'-0" 1'-1" 1'-2"	1'-5" 1'-8" 1'-11"	0'-9" 0'-10" 1'-0"	0'-8" 0'-9" 0'-10"	0'-10" 1'-0" 1'-2"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	0.947 1.184 1.421	0.711 0.888 1.066	14.0 17.2 20.4	1'-6" 1'-8" 1'-10"	1'-4" 1'-6" 1'-8"	1'-2" 1'-4" 1'-6"	1'-11" 2'-3" 2'-6"	0'-11" 1'-1" 1'-2"	0'-10" 0'-11" 1'-1"	1'-1" 1'-4" 1'-7"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	1.289 1.612 1.934	1.128 1.410 1.692	16.2 19.9 23.7	1'-9" 1'-11" 2'-2"	1'-7" 1'-9" 1'-11"	1'-5" 1'-7" 1'-9"	2'-5" 2'-11" 3'-2"	1'-2" 1'-4" 1'-6"	1'-0" 1'-3" 1'-5"	1'-5" 1'-9" 2'-1"
2 x 1/4 2 x 5/16 2 x 3/8	1.684 2.105 2.526	1.684 2.105 2.526	18.3 22.6 26.9	2'-0" 2'-3" 2'-6"	1'-10" 2'-1" 2'-4"	1'-8" 1'-11" 2'-2"	3'-1" 3'-6" 3'-10"	1'-4" 1'-7" 1'-10"	1'-3" 1'-6" 1'-9"	1'-10" 2'-4" 2'-9"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	2.132 2.664 3.197	2.398 2.998 3.597	20.4 25.3 30.1	2'-3" 2'-7" 2'-10"	2'-1" 2'-5" 2'-8"	1'-11" 2'-3" 2'-7"	3'-9" 4'-2" 4'-5"	1'-7" 1'-11" 2'-2"	1'-6" 1'-10" 2'-2"	2'-4" 2'-11" 3'-5"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	2.632 3.289 3.947	3.289 4.112 4.934	22.6 28.0 33.3	2'-6" 2'-11" 3'-4"	2'-4" 2'-9" 3'-2"	2'-3" 2'-7" 3'-0"	4'-4" 4'-8" 4'-11"	1'-10" 2'-3" 2'-7"	1'-10" 2'-3" 2'-7"	2'-10" 3'-6" 4'-2"
3 x 1/4 3 x 5/16 3 x 3/8	3.789 4.737 5.684	5.684 7.105 8.526	26.9 33.3 39.8	3'-3" 3'-9" 4'-4"	3'-1" 3'-7" 4'-2"	2'-11" 3'-6" 4'-1"	5'-2" 5'-7" 5'-11"	2'-6" 3'-0" 3'-7"	2'-6" 3'-1" 3'-8"	4'-1" 4'-9" 5'-1"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	5.158 6.447 7.737	9.026 11.283 13.539	31.2 38.7 46.2	4'-0" 4'-9" 5'-0"	3'-10" 4'-8" 5'-0"	3'-9" 4'-7" 5'-0"	6'-0" 6'-6" 6'-11"	3'-3" 4'-0" 4'-8"	3'-4" 4'-1" 4'-10"	5'-2" 5'-7" 5'-11"
4 x 1/4 4 x 5/16 4 x 3/8	6.737 8.421 10.105	13.474 16.842 20.211	35.5 44.1 52.7	4'-11" 5'-5" 5'-8"	4'-10" 5'-5" 5'-8"	4'-9" 5'-5" 5'-9"	6'-11" 7'-5" 7'-11"	4'-2" 5'-1" 5'-6"	4'-3" 5'-3" 5'-8"	5'-11" 6'-4" 6'-9"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	8.526 10.658 12.879	19.184 23.980 28.776	39.8 49.4 59.1	5'-7" 6'-0" 6'-5"	5'-7" 6'-0" 6'-5"	5'-8" 6'-1" 6'-5"	7'-9" 8'-4" 8'-11"	5'-1" 5'-10" 6'-2"	5'-4" 6'-0" 6'-4"	6'-8" 7'-2" 7'-7"
5 x 1/4 5 x 3/8 5 x 1/2	10.526 15.789 21.053	26.316 39.474 52.632	44.1 65.5 87.0	6'-3" 7'-1" 7'-10"	6'-3" 7'-1" 7'-10"	6'-3" 7'-2" 7'-11"	8'-8" 9'-11" 10'-11"	6'-0" 6'-11" 7'-7"	6'-2" 7'-1" 7'-9"	7'-5" 8'-6" 9'-4"
6 x 1/4 6 x 3/8 6 x 1/2	15.158 22.737 30.316	45.474 68.211 90.947	52.7 78.4 104.2	7'-5" 8'-6" 9'-4"	7'-5" 8'-6" 9'-4"	7'-6" 8'-7" 9'-5"	10'-4" 11'-10" 13'-1"	7'-3" 8'-3" 9'-1"	7'-5" 8'-6" 9'-4"	8'-11" 10'-2" 11'-2"
7 x 1/4 7 x 3/8 7 x 1/2	20.632 30.947 41.263	72.211 108.316 144.421	61.2 91.3 121.4	8'-8" 9'-11" 10'-10"	8'-8" 9'-11" 10'-11"	8'-9" 10'-0" 11'-0"	12'-1" 13'-10" 15'-3"	8'-5" 9'-8" 10'-7"	8'-8" 9'-11" 10'-11"	10'-4" 11'-10" 13'-1"