

Steel Grating Loading Table of 60 mm Spacing Bearing Bar

MILD STEEL GRATING TABLE OF LOADS AND DEFLECTIONS

Bearing Bar Center 60mm

TYPE	Mass kg/m ²		SPAN																
			200	400	600	800	1000												
WE(20x5)	19.82	U	173	43	19	10	6												
WEF(20x5)	22.84	D	0.35	1.4	3.15	5.26	7.79		SPAN										
WE(25x3)	15.62	U	180	45	20	11	7												
WEF(25x3)	18.64	D	0.28	1.12	2.54	4.44	6.95		1200										
WE(25x5)	24.02	U	301	75	22	18	12	10		SPAN									
WEF(25x5)	27.04	D	0.28	1.12	2.51	4.35	7.13	9.95		1400									
WE(32x3)	19.15	U	295	73	32	18	11	8											
WEF(32x3)	22.17	D	0.22	0.87	1.93	3.45	5.17	7.85		6									
										10.95									
WE(32x5)	29.9	U	493	123	54	30	19	13	10		SPAN								
WEF(32x5)	32.92	D	0.22	0.88	0.94	1.09	5.35	7.64	10.96		1600								
WE(40x3)	23.18	U	462	115	51	28	18	12	9										
WEF(40x3)	26.21	D	0.17	0.7	1.57	2.47	4.32	6.01	8.4		7								
											11.2								
WE(38x5)	34.94	U	695	173	77	43	27	19	14	10		SPAN							
WEF(38x5)	37.96	D	0.18	0.73	1.66	2.94	4.54	6.65	9.14	11.24		1800							
WE(40x5)	36.62	U	770	192	85	48	30	21	15	12									
WEF(40x5)	39.64	D	0.18	0.7	1.57	2.82	4.33	6.3	9.38	11.52		11							
											13.96								
WE(50x3)	28.22	U	722	180	80	45	28	20	14	11	8		SPAN						
WEF(50x3)	32.24	D	0.14	0.56	1.26	2.25	3.43	5.1	6.66	8.97	10.52		2000						
WE(45x5)	40.82	U	975	243	108	60	39	27	19	15	12								
WEF(45x5)	43.84	D	0.18	0.62	1.4	2.47	3.93	5.68	7.44	10.08	13		9						
													15.01						
WE(50x5)	45.02	U	1204	301	133	75	48	33	24	18	14	12		SPAN					
WEF(50x5)	48.04	D	0.14	0.56	1.26	2.26	3.52	5.05	6.84	8.8	11.03	14.49		2200					
WE(65x5)	57.62	U	2035	508	228	127	81	56	41	31	25	20							
WEF(65x5)	60.64	D	0.06	0.24	0.54	0.97	1.51	2.17	2.97	3.85	5.01	6.16		16					
														7.3					
															14				
																12			
																	10.87		

U=Uniform load kN/ m² D=Maximum deflection mm

Spans in the table above have a deflection, D<4mm for U=2kN/ m², which is a limiting deflection for pedestrian comfort if single plate area is less than 1 m², mass will increase.

STANDARD WIDTH													
grating size	20×5	25×3	25×5	32×3	32×5	38×5	40×3	40×5	45×5	50×3	50×5	85×5	
Multiply U by:	-	0.77	0.77	0.81	0.81	0.84	0.87	0.87	0.85	0.88	0.88	0.9	
Multiply deflection by:	-	1.14	1.14	1.11	1.11	1.09	1.07	1.07	1.08	1.07	1.07	1.05	

NOTE:all deflections are theoretical and are based on standard engineering practices.They are provided for design selection only and should not be consider as absolute

STANDARD WIDTH															
Number of bearing bars	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Nominal width	125	185	245	305	385	425	485	545	605	665	725	785	845	905	965
															MAX

Sino Composite Structures Co.,Ltd.

☎ Mobile: +86-18921275456

📞 WhatsApp: +86-18921275456

✉ Email: sales@sino-grating.com

