

# Steel Grating Loading Table of 40 mm Spacing Bearing Bar

## MILD STEEL GRATING TABLE OF LOADS AND DEFLECTIONS

### Bearing Bar Center 40mm

TYPE	Mas kg/m <sup>2</sup>		SPAN															
			200	400	600	800	1000	1200										
WC(20x5)	26.3	U	283	70	31	17	11	7										
WCF(20x5)	29.3	D	0.34	1.38	3.08	5.37	8.56	11.48										
WC(25x3)	21.3	U	265	66	29	16	10	7		SPAN								
WCF(25x3)	24.3	D	0.27	1.1	2.45	4.3	6.63	9.71		1400								
WC(25x5)	32.1	U	442	110	29	27	17	12	9									
WCF(25x5)	35.1	D	0.27	1.1	2.48	4.35	6.74	9.84	10.46									
WC(32x3)	26.4	U	435	108	48	27	17	12	8		SPAN							
WCF(32x3)	29.4	D	0.21	0.86	1.93	3.45	5.34	7.86	7.37		1600							
WC(32x5)	40.3	U	725	181	80	45	29	20	14	11		SPAN						
WCF(32x5)	43.3	D	0.21	0.86	1.93	3.45	5.45	7.84	7.7	13.86		1800						
WC(40x3)	32.3	U	880	170	75	42	27	18	12	10	8							
WCF(40x3)	35.3	D	0.17	0.69	1.54	2.74	4.32	8.01	6.08	10.71	13.84							
WC(38x5)	47.71	U	957	239	106	59	38	26	19	14	11		SPAN					
WCF(38x5)	50.74	D	0.18	0.75	1.7	2.99	4.73	6.73	9.16	11.63	14.93		2000					
WC(40x5)	49.6	U	1133	283	125	70	45	31	23	17	13							
WCF(40x5)	52.6	D	0.17	0.69	1.54	2.74	4.32	8.2	6.42	10.88	13.45		11	17.47				
WC(50x3)	39.6	U	1062	265	118	66	42	29	21	16	13	10		SPAN				
WCF(50x3)	42.6	D	0.14	0.55	1.24	2.2	3.43	4.94	4.99	8.71	11.4	13.49		2200				
WC(45x5)	55.4	U	1434	358	159	89	57	39	29	22	17	14						
WCF(45x5)	58.4	D	0.15	0.81	1.38	2.44	3.83	5.46	5.67	9.85	12.28	15.53		11	18.05			
WC(50x5)	61.2	U	1770	442	196	110	70	49	36	27	21	17	14		SPAN	SPAN	SPAN	
WCF(50x5)	64.2	D	0.14	0.55	1.24	2.2	3.43	5	5.12	8.79	11.02	13.69	16.64		2400	2600	2800	
WC(65x5)	78.7	U	2992	748	332	187	119	83	61	46	36	29	24		20	17	15	
WCF(65x5)	81.7	D	0.11	0.42	0.95	1.7	2.65	3.84	3.93	6.78	8.54	10.54	12.84		15.25	17.97	21.46	

U=Uniform load kN/ m<sup>2</sup> D=Maximum deflection mm

Spans in the table above have a deflection, D<4mm for U=2kN/ m<sup>2</sup>, which is a limiting deflection for pedestrian comfort

If single plate area is less than 1 m<sup>2</sup>, mass will increase.

#### CONVERSION DATA: SERRATED GRATING

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	4	5	6	7	8	9	10	11	12	13	14	15
Nominal width	125	165	205	245	285	325	365	405	445	485	525	585
Number of bearing bars	16	17	18	19	20	21	22	23	24	25	26	
Nominal width	605	645	685	725	765	805	845	885	925	965	1005	
											MAX	

Sino Composite Structures Co.,Ltd.

☎ Mobile: +86-18921275456

📞 WhatsApp: +86-18921275456

✉ Email: sales@sino-grating.com

