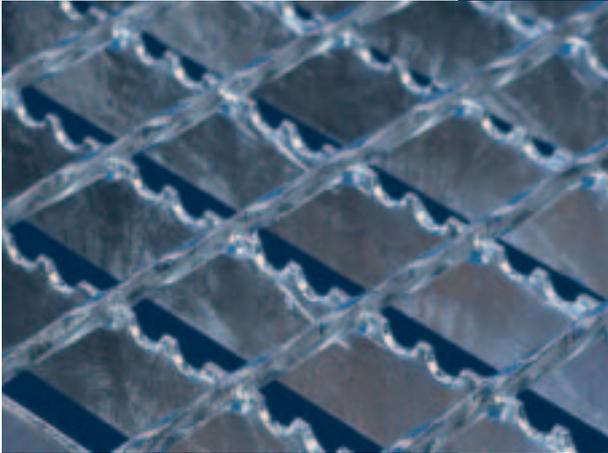


MEISEGrate® Press Welded Grating

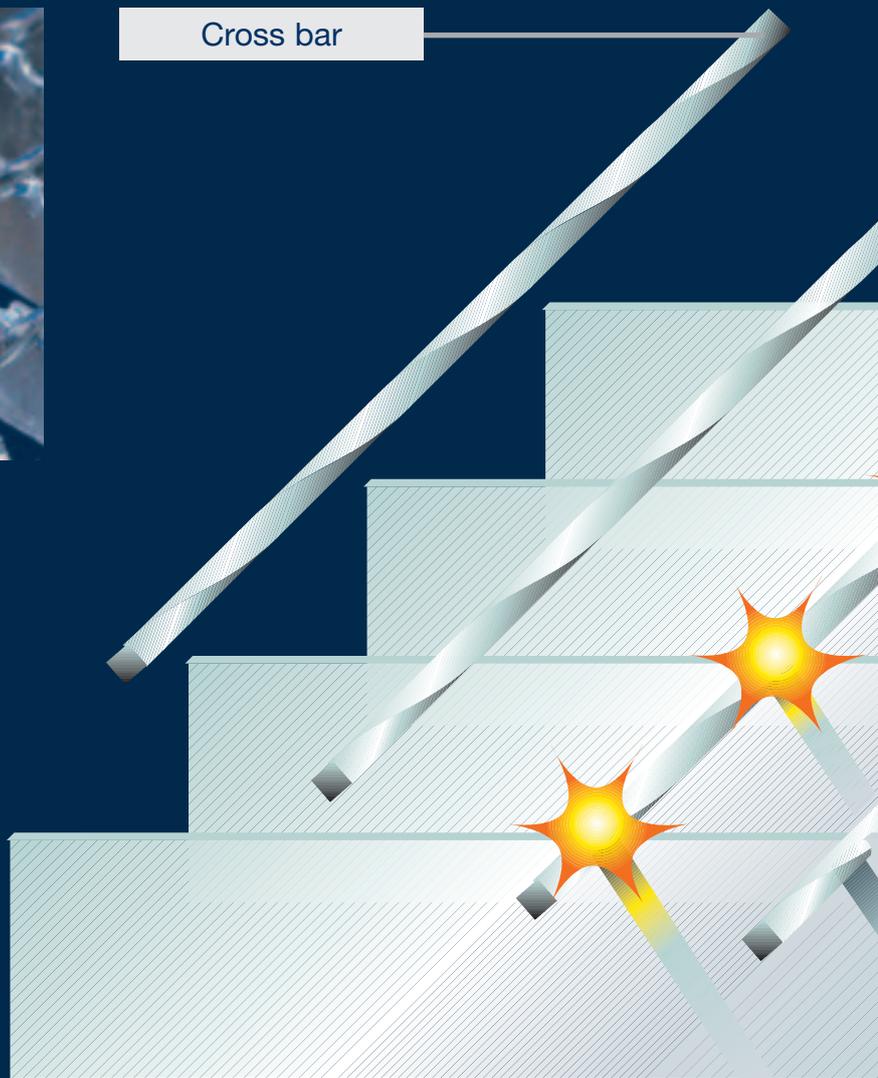




Due to the construction of the bearing bars, press welded gratings have a natural anti-skid property. See page 37.

We offer press welded gratings in stainless steel with round steel rods of 4 mm diameter.

Cross bar



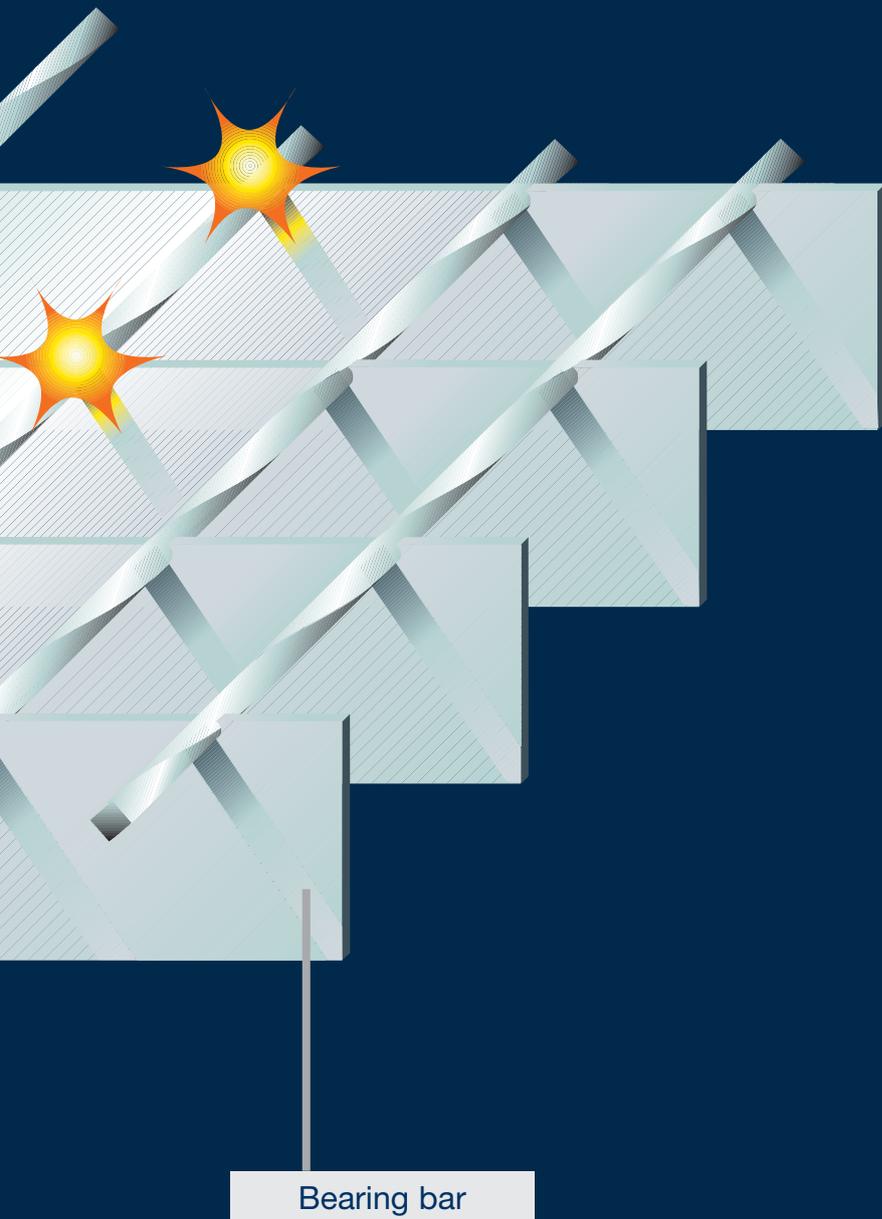
Press Welded Gratings

MeiseGrate press welded gratings are produced from steel. The bearing bars (I-bar or Flat Bar) and the twisted square cross bars are cut to grating size before the cross bars are locked into the bearing bars at a pressure of 1000 kN and – simultaneously – electrically welded with 2500 KVA. into one unit.

In combination with welded cross bars, bearing bars make for high torsion rigidity.

Press welded gratings are banded with flat bars which, as a rule, will be the same dimension as the bearing bar.

In addition to our standard press-welded gratings, we offer offshore grating (O-SP-SS) and gratings with perforated sheet, details of which you will find on p42.



Maximum cross bar length
1050 mm

Maximum bearing bar length
6000 mm

Load Tables for Flat Bearing Bars

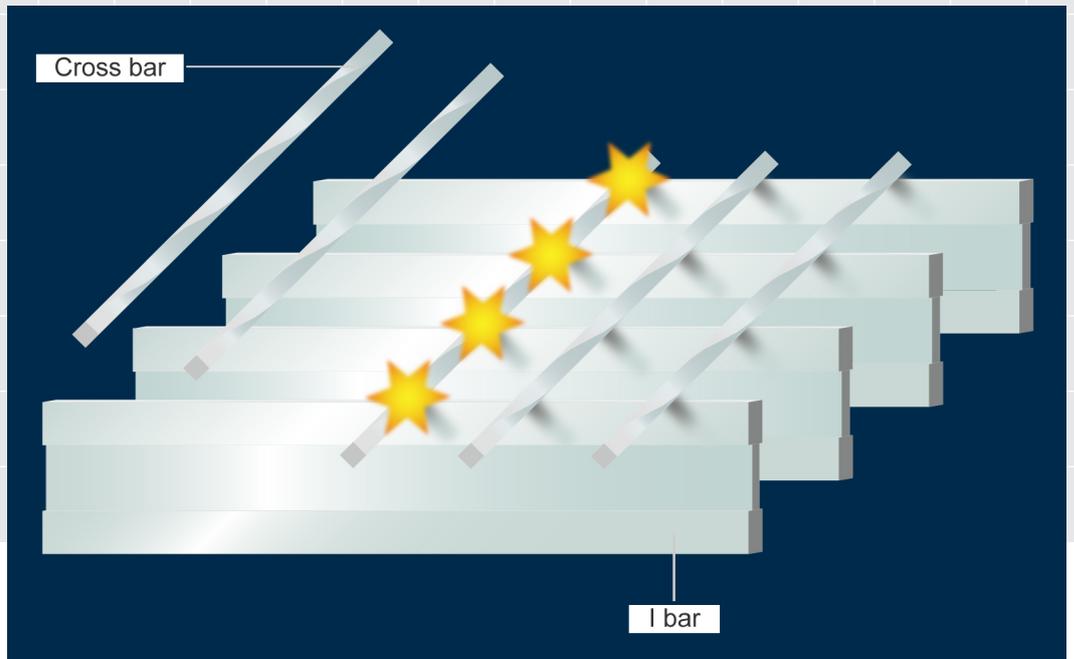
- Light duty
- Medium duty
- Vehicle access: trucks up to 3 tonnes in overall weight.
- Vehicle access: trucks up to 9 tonnes in overall weight.
- Vehicle access: trucks up to 30 tonnes in overall weight.

Conversion factor for kg into kN
 10 kN = 1 tonne
 1 kN = 100 kg

- F_P Point load in kN
- F_V uniformly distributed load in kN per sq. m.

Flat Bar 3 mm		Flat Bar 4mm		Flat Bar 5 mm	
20x3					
32x3		25x4		25x5	
35x3		32x4		30x5	
40x3		35x4		35x5	
		40x4		40x5	
		45x4		45x5	
		50x4		50x5	
		60x4		60x5	
Banding Flat or	3mm	4mm		5mm	
Angle per customers' request					

32 x 5		35 x 5		40 x 5		45 x 5		50 x 5		55 x 5		60 x 5	
F_P	F_V	F_P	F_V	F_P	F_V	F_P	F_V	F_P	F_V	F_P	F_V	F_P	F_V
78.33	510.46	91.10	631.54	119.01	815.88	140.40	1084.35	179.34	1416.74	221.03	1791.52	229.56	2142.34
48.92	238.09	57.28	251.60	78.49	321.99	93.15	407.59	117.97	496.28	138.72	623.46	152.91	724.90
34.03	113.34	38.17	127.28	49.86	166.22	63.11	210.37	77.91	259.72	94.27	314.26	112.20	374.00
27.15	72.56	30.54	81.44	39.89	106.38	50.49	134.64	62.33	166.22	75.24	201.12	89.76	239.36
22.59	50.24	25.45	56.56	33.24	73.87	42.07	93.50	51.94	115.43	62.85	139.67	74.80	166.22
19.25	32.05	21.81	41.56	28.49	52.47	36.06	68.69	44.52	84.80	53.87	102.61	64.11	122.12
16.00	21.32	19.08	28.34	24.93	41.55	31.55	52.59	38.95	64.93	47.13	78.56	56.10	93.50
12.53	14.84	16.79	19.90	22.16	29.71	28.05	41.55	34.62	51.30	41.90	62.07	49.96	73.87
10.03	10.70	13.60	14.51	19.94	21.66	25.24	30.84	31.16	41.55	37.71	50.28	44.88	59.64
8.18	7.93	11.24	10.90	16.78	16.27	22.96	23.17	28.33	31.78	34.28	41.56	40.80	49.45
6.75	6.00	9.44	8.39	14.10	12.53	20.08	17.85	25.97	24.48	31.42	32.59	37.40	41.55
5.64	4.62	8.05	6.60	12.01	9.86	17.11	14.03	23.47	19.25	29.00	25.63	34.52	33.27
		6.61	5.03	9.86	7.51	14.05	10.07	19.27	14.86	25.65	19.54	32.05	25.37
		5.37	3.82	8.02	5.70	11.42	8.12	15.67	11.14	20.85	14.85	27.07	19.25
				6.61	4.40	9.41	6.27	12.91	8.60	17.18	11.45	22.31	14.87
				5.51	3.45	7.94	4.92	10.76	6.75	14.32	8.99	18.60	11.67
						6.61	3.91	9.06	5.37	12.07	7.15	15.67	9.28
								7.71	4.32	10.26	5.76	13.32	7.48
								6.61	3.52	8.79	4.89	11.42	6.09



Standard Mesh Spacing					
I-bar		Cross bar			
30	x	30	50	60	100
40	x	30	50	60	100
60	x	30	50		
90	x	30		60	

* **Support width =**
clearance between the rests.

width * [mm]	Bearing Bar - I - Bars [mm]									
	25 x 5 x 3		32 x 5 x 3		38 x 5 x 3		44 x 5 x 3		50 x 5 x 3	
	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv
600	18.20	60.68	25.97	86.57	45.56	140.10	45.62	149.97	71.48	238.28
750	14.56	38.84	20.59	55.41	36.21	89.69	36.48	95.62	57.18	152.50
900	12.13	22.87	17.16	38.47	30.16	62.20	30.34	66.27	47.65	105.90
1050	9.45	14.40	14.70	24.67	25.81	45.61	25.96	48.61	40.48	77.00
1200	7.23	9.64	12.28	16.53	22.49	30.96	22.61	40.78	35.73	59.57
1350	5.72	6.78	9.70	11.60	19.70	21.62	20.01	29.24	31.76	47.06
1500	4.63	4.94	7.85	8.45	15.84	15.65	17.93	24.31	28.59	38.12
1650	3.82	3.71	6.49	6.35	12.98	11.66	16.22	18.36	25.99	29.16
1800	2.77	2.40	5.46	4.89	10.79	8.89	14.80	14.06	23.83	22.46
1950			4.46	3.84	9.08	6.90	13.27	10.98	21.53	17.66
2100			3.71	3.00	7.32	5.17	10.75	8.28	17.68	13.63
2250					5.80	3.82	8.59	6.20	14.38	10.22
2400					4.63	2.86	6.92	4.70	11.84	7.89
2550								3.61	9.87	6.19
2700									8.31	4.93
2850									7.07	3.96
3000									6.06	3.23



Load Tables for I Bars

Conversion factor for kg into kN
 10 kN = 1 tonne
 1 kN = 100 kg

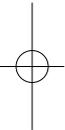
The values shown have been calculated for maximum admissible load rating (deflection 1/200) on the basis of a load carrying area of 200 x 200 mm and a bearing bar spacing of 30mm. To avoid trip up points the maximum deflection should not exceed 4 mm. Please note the coloured nominal line.

- Light duty
- Medium duty
- Vehicle access: trucks up to 3 tonnes in overall weight.
- Vehicle access: trucks up to 9 tonnes in overall weight.

F_P Point load in kN

F_V uniformly distributed load in kN per sq. m.

I - B A R 5 X 3 mm		I - B A R 7 X 4 mm	
25x5x3		50x7x4	
32x5x3		55x7x4	
38x5x3		60x7x4	
44x5x3		65x7x4	
50x5x3		75x7x4	
Banding	5mm	7mm	
Flat		Angle per customers' request	
or			



50 x 7 x 4		55 x 7 x 4		60 x 7 x 4		65 x 7 x 4		75 x 7 x 4	
F _P	F _V								
40.20	126.19	53.98	166.79	68.91	183.77	89.70	274.63	138.46	421.43
38.79	113.63	52.10	150.21	66.55	165.50	86.64	247.38	133.78	379.64
36.88	99.54	49.54	131.60	63.32	144.90	82.47	216.78	127.38	332.74
36.42	73.67	48.92	97.45	62.57	107.35	81.51	160.63	125.94	246.66
36.40	64.60	47.56	85.47	60.87	94.16	79.32	140.95	122.59	216.47
34.88	60.04	46.87	79.46	60.02	87.53	78.23	131.06	120.96	201.32
33.81	46.01	45.41	60.93	58.23	67.12	75.93	100.60	117.44	154.62
30.03	35.83	40.38	47.50	51.81	52.31	67.59	78.50	104.63	120.76
27.40	27.41	36.85	36.38	50.26	40.06	65.60	60.24	101.58	92.75
24.59	21.39	33.09	28.43	42.59	31.30	55.64	47.17	86.26	72.70
19.94	16.11	26.86	21.47	34.63	23.63	45.38	35.73	70.47	55.16
15.94	12.03	21.50	16.08	27.88	17.69	36.55	26.87	56.91	41.58
12.86	9.11	17.37	12.22	22.66	13.44	29.78	20.52	46.50	31.86
10.45	6.97	14.14	9.40	18.57	10.33	24.49	15.89	38.37	24.75
8.53	5.38	11.57	7.30	15.33	8.02	20.28	12.43	31.93	19.45
6.97	4.18	9.49	5.71	12.71	6.26	16.90	9.82	26.75	15.45
5.70	3.36	7.79	4.49	10.58	4.91	14.14	7.81	22.53	12.37



