

# PLANT LOADINGS

## PILING RIG & CRAWLER CRANE BEARING PRESSURES

Plant Manufacturer & Model	Track Pad Width (m)	Track Bearing length (m)	Working Weight (Te)	Max Crowd Force (kN)	Max Extraction Force (kN)	Case 1 Loading Standing or Travelling		Case 1 Loading Handling		Case 2 Loading Installation		Case 2 Loading Extraction [1]		Notes [2]
						Max Rectangular Bearing Pressure (kN/m <sup>2</sup> )	Equivalent Track Bearing Length (m)	Max Rectangular Bearing Pressure (kN/m <sup>2</sup> )	Equivalent Track Bearing Length (m)	Max Rectangular Bearing Pressure (kN/m <sup>2</sup> )	Equivalent Track Bearing Length (m)	Max Rectangular Bearing Pressure (kN/m <sup>2</sup> )	Equivalent Track Bearing Length (m)	
<b>Sheet Piling Rigs</b>														
<b>ABI TM 20 LR Long Reach</b>	0.90	4.40	84	180	180	260	2.38	N/A	N/A	199	2.36	315	1.87	Maximum Working Radius = 8.04m Maximum Crowd Force = 120kN Maximum Extraction Force = 120kN
ABI TM 20	0.90	4.50	74	200	235	194	2.64	N/A	N/A	218	1.48	371	1.51	Maximum Working Radius = 6.05m Maximum Crowd Force = 145kN Maximum Extraction Force = 185kN
ABI TM 18/22 HD	0.70	4.80	82	120	200	203	3.49	N/A	N/A	215	2.52	313	2.64	Maximum Working Radius = 5.70m Maximum Crowd Force = 120kN Maximum Extraction Force = 200kN
ABI TM 13/16 SL	0.60	3.85	50	90	175	200	3.08	N/A	N/A	204	2.32	291	2.30	Maximum Working Radius = 5.79m Maximum Crowd Force = 58kN Maximum Extraction Force = 109kN
ABI TM 12/15 LR Long Reach	0.70	4.51	62	90	100	194	2.77	N/A	N/A	121	3.56	320	1.70	Maximum Working Radius = 8.08m Maximum Crowd Force = 72kN Maximum Extraction Force = 80kN <b>Handling of Sheet Pile is NOT Permitted</b>
Bauer RTG 21T	0.70	4.42	78	140	260	343	2.23	N/A	N/A	222	2.91	372	1.85	Maximum Working Radius = 5.91m Maximum Crowd Force = 60kN Maximum Extraction Force = 20kN
Bauer RTG 19T	0.70	4.15	60	140	200	243	2.38	N/A	N/A	147	3.19	335	1.68	Maximum Working Radius = 5.29m Maximum Crowd Force = 60kN Maximum Extraction Force = 50kN
Kobelco SK380 SRLC Excavator Piling Rig	0.80	4.05	40	60	60	154	2.29	201	1.91	162	1.76	178	2.08	Maximum Working Radius = 8.0m Maximum Load = 5Te (Bundle Piles)
Kobelco SK350 LC Excavator Piling Rig	0.80	4.05	40	60	60	128	2.90	148	2.41	165	1.80	171	2.20	Maximum Working Radius = 8.0m Maximum Load = 5Te (Bundle Piles)
CAT 328D LCR Excavator Piling Rig	0.85	4.05	38	60	60	138	2.30	182	1.91	182	1.19	179	1.93	Maximum Working Radius = 8.0m Maximum Load = 5Te (Bundle Piles)
<b>Crawler Cranes</b>														
Sennebogen 673R	0.70	5.10	70	N/A	N/A	184	2.66	291	2.46	-	-	-	-	Maximum Radius / Maximum Load Minimum Radius / Maximum Load
Sennebogen 653E	0.70	4.40	50	N/A	N/A	94	3.82	241	1.92	-	-	-	-	Maximum Radius / Maximum Load Minimum Radius / Maximum Load
Sennebogen 643R	0.70	4.40	42	N/A	N/A	121	2.94	237	3.28	-	-	-	-	Maximum Radius / Maximum Load Minimum Radius / Maximum Load
<b>Kobelco CKG900E</b>	0.80	5.44	90	N/A	N/A	163	3.40	357	2.78	-	-	-	-	Maximum Radius / Maximum Load Minimum Radius / Maximum Load 3.5Te Hook Block / 3 Fall Duties Jib Length = 24.4m (Min) / 45.7m (Max)

1. Extraction load case applicable to both pile extraction and pre-augering activities.

2. Maximum crowd and extraction force only possible with reduced reach.