



PILECO, INC.  
 P.O.Box 16099 Houston, TX 77222  
 Tel: 713-691-3000 800-474-5326  
 Fax: 713-691-0089 e-mail: pileco@pileco.com  
 Web: www.pileco.com

## PILECO Diesel Hammer D250 Pile Hammer Bearing Chart

This chart is based on the Engineering News Record (ENR) formula for pile bearing capacity and is provided as a convenience only.

**Pile bearing (Tons) =  $2E/(S + 0.1)/2000$**  , where **E** = Hammer energy (given by the Saximeter formula)  
**S** = Pile set (inch per blow)

Blow per Minute	Ram Stroke (ft)	Hammer Energy (lb.ft)	Pile Set (Blows per inch)											
			1	2	3	4	5	6	7	8	9	10	11	12
35	11.52	635,094	577	1058	1466	1815	2117	2382	2615	2823	3008	3175	3327	3464
36	10.88	599,395	545	999	1383	1713	1998	2248	2468	2664	2839	2997	3140	3269
37	10.28	566,551	515	944	1307	1619	1889	2125	2333	2518	2684	2833	2968	3090
38	9.73	536,266	488	894	1238	1532	1788	2011	2208	2383	2540	2681	2809	2925
39	9.22	508,281	462	847	1173	1452	1694	1906	2093	2259	2408	2541	2662	2772
40	8.75	482,368	439	804	1113	1378	1608	1809	1986	2144	2285	2412	2527	2631
41	8.32	458,328	417	764	1058	1310	1528	1719	1887	2037	2171	2292	2401	2500
42	7.91	435,985	396	727	1006	1246	1453	1635	1795	1938	2065	2180	2284	2378
43	7.53	415,182	377	692	958	1186	1384	1557	1710	1845	1967	2076	2175	2265
44	7.18	395,782	360	660	913	1131	1319	1484	1630	1759	1875	1979	2073	2159
45	6.85	377,660	343	629	872	1079	1259	1416	1555	1678	1789	1888	1978	2060
46	6.54	360,708	328	601	832	1031	1202	1353	1485	1603	1709	1804	1889	1967
47	6.26	344,826	313	575	796	985	1149	1293	1420	1533	1633	1724	1806	1881
48	5.99	329,926	300	550	761	943	1100	1237	1359	1466	1563	1650	1728	1800
49	5.73	315,929	287	527	729	903	1053	1185	1301	1404	1497	1580	1655	1723
50	5.49	302,763	275	505	699	865	1009	1135	1247	1346	1434	1514	1586	1651
51	5.27	290,365	264	484	670	830	968	1089	1196	1291	1375	1452	1521	1584
52	5.06	278,674	253	464	643	796	929	1045	1147	1239	1320	1393	1460	1520

**Caution:** Driving at more than 20 blows per inch (set of 0.05 inch per blow) is considered practical refusal.



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## PILECO Diesel Hammer D250 Pile Hammer Bearing Chart

This chart is based on the Engineering News Record (ENR) formula for pile bearing capacity and is provided as a convenience only.

**Pile bearing (kN) =  $100E/(S + 0.254)/6$ ,** where  $E$  = Hammer energy (given by the Saximeter formula)  
 $S$  = Pile set (cm per blow)

Blows per Minute	Ram Stroke (m)	Hammer Energy (kJ)	Pile Set (Blows per 2cm)											
			5	6	7	8	9	10	11	12	13	14	15	16
35	3.51	862	21960	24453	26611	28496	30158	31635	32954	34141	35215	36190	37080	37895
36	3.32	813	20727	23079	25115	26895	28464	29857	31103	32223	33236	34156	34996	35766
37	3.13	769	19591	21815	23740	25422	26905	28222	29399	30458	31416	32286	33079	33807
38	2.97	728	18545	20650	22471	24064	25467	26714	27828	28831	29737	30561	31312	32000
39	2.81	690	17577	19572	21299	22809	24139	25321	26377	27327	28186	28966	29679	30331
40	2.67	655	16682	18575	20214	21646	22909	24030	25033	25935	26750	27490	28166	28786
41	2.54	622	15851	17650	19207	20568	21768	22833	23786	24643	25417	26121	26763	27352
42	2.41	592	15078	16790	18271	19566	20707	21721	22627	23442	24179	24848	25459	26019
43	2.30	563	14359	15989	17400	18633	19720	20685	21548	22324	23026	23664	24245	24779
44	2.19	537	13689	15243	16588	17763	18799	19719	20542	21282	21951	22559	23113	23621
45	2.09	513	13063	14545	15829	16950	17939	18817	19602	20308	20946	21526	22056	22541
46	2.00	490	12477	13893	15118	16190	17134	17973	18723	19397	20007	20561	21066	21529
47	1.91	468	11928	13281	14453	15477	16380	17182	17899	18544	19126	19656	20139	20582
48	1.83	448	11413	12708	13829	14809	15673	16440	17126	17743	18301	18807	19270	19694
49	1.75	429	10929	12169	13243	14181	15009	15743	16400	16991	17525	18010	18453	18859
50	1.68	411	10474	11663	12692	13591	14384	15088	15717	16283	16795	17260	17685	18073
51	1.61	394	10045	11185	12172	13035	13795	14470	15074	15617	16108	16554	16961	17334
52	1.54	378	9641	10735	11683	12511	13240	13888	14468	14989	15460	15888	16279	16637

**Caution:** Driving at more than 8 blows per cm (set of 0.125 cm per blow) is considered practical refusal.