



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D46 -42 or -52 Diesel Impact Hammer

The energy output is based on the identical Piston/Travel calculations utilized in the FHWA Gates Formula.
The pile bearing chart is based on the FHWA Gates Formula for pile bearing and is provided for the user's convenience only.

$$\text{Pile Bearing (metric tons)} = (((1.75 * \text{SQRT "E" LOG}_{10}(10N) - 100) / 2000) * 0.00045359237$$

E = Developed Energy and N = Number of Blows Per Inch

APE has no preference for these particular formulas and calculations over any other.

Enter Ram Weight in kgs: 4,600

Blows (per minute)	Stroke (m)	Energy (kNm)	Pile Set (Blows per cm)																		
			2.5	5.1	7.62	10	13	15	18	20	23	25	28	30	33	36	38	41	43	46	48
60	1.22	55.03	456	534	590	634	669	699	725	748	769	787	804	820	834	847	860	872	883	893	903
59	1.27	57.29	467	548	605	649	685	716	742	766	787	806	823	839	853	867	880	892	903	914	924
58	1.32	59.55	479	561	619	664	701	732	759	783	805	824	841	858	873	887	900	912	923	934	945
57	1.37	61.80	490	574	633	679	717	749	776	800	822	842	860	876	891	906	919	931	943	954	965
56	1.42	64.06	502	587	647	694	732	764	792	817	839	859	877	894	910	924	938	950	962	974	985
55	1.47	66.31	512	599	660	708	747	780	808	834	856	876	895	912	928	943	956	969	982	993	1004
54	1.52	68.57	523	611	674	722	762	795	824	850	873	893	912	930	946	961	975	988	1000	1012	1023
53	1.58	71.27	536	626	689	739	779	813	843	869	892	913	933	950	967	982	996	1010	1022	1034	1046
52	1.62	73.08	544	635	700	750	791	825	855	881	905	926	946	964	980	996	1010	1024	1037	1049	1060
51	1.68	75.79	557	649	715	766	807	843	873	900	924	946	966	984	1001	1016	1031	1045	1058	1070	1082
50	1.75	78.94	571	665	732	784	827	863	894	921	946	968	988	1007	1024	1040	1055	1069	1082	1095	1107
49	1.83	82.55	586	683	752	805	848	885	917	945	970	993	1013	1032	1050	1066	1082	1096	1110	1123	1135
48	1.91	86.16	602	701	771	825	869	907	939	968	994	1017	1038	1057	1075	1092	1108	1123	1137	1150	1162
47	1.98	89.32	615	716	787	842	887	926	959	988	1014	1037	1059	1079	1097	1114	1130	1145	1160	1173	1186
46	2.08	93.83	634	737	810	866	913	952	986	1016	1042	1067	1089	1109	1128	1145	1162	1177	1192	1205	1218
45	2.19	98.79	654	759	834	892	940	980	1015	1045	1073	1098	1120	1141	1161	1179	1195	1211	1226	1240	1253
44	2.29	103.30	671	779	856	915	964	1005	1041	1072	1100	1125	1149	1170	1190	1208	1225	1241	1257	1271	1285
43	2.39	107.81	688	799	877	938	987	1029	1066	1098	1126	1152	1176	1198	1218	1237	1254	1271	1286	1301	1315
42	2.49	112.33	705	818	898	960	1010	1053	1090	1123	1152	1179	1203	1225	1246	1265	1283	1300	1316	1331	1345
41	2.62	118.19	727	842	924	988	1040	1084	1122	1155	1185	1213	1237	1260	1281	1301	1319	1337	1353	1368	1383
40	2.74	123.60	746	864	948	1013	1066	1111	1150	1184	1215	1243	1268	1292	1313	1333	1352	1370	1386	1402	1417
39	2.90	130.82	771	893	979	1046	1101	1147	1187	1222	1254	1282	1308	1332	1355	1375	1395	1413	1430	1446	1462
38	3.05	137.59	794	919	1007	1076	1132	1179	1220	1257	1289	1318	1345	1370	1392	1414	1434	1452	1470	1486	1502
37	3.20	144.35	817	944	1035	1105	1163	1211	1253	1290	1323	1353	1381	1406	1429	1451	1471	1491	1509	1526	1542
36	3.40	153.38	846	977	1071	1143	1202	1252	1296	1334	1368	1399	1427	1453	1477	1500	1521	1540	1559	1576	1593