



(800) 248-8498

## Diesel Hammer Energy Output and Pile Bearing Chart

### APE Model D260-42 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.  
 Pile Bearing (tons) =  $((1.75 * \text{SQRT "E" LOG}_{10} * 10N) - 100) / 2000$

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

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

Ram Weight (lbs): 57,330

Blows (per minute)	Stroke (ft)	Energy (ft-lbs)	Pile Set (Blows per inch) *Measured in Tons																		
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
60	4.00	229,320	495	569	621	662	695	723	747	769	788	805	821	836	849	862	874	885	895	905	914
59	4.17	239,066	507	582	635	677	711	739	764	786	806	823	840	854	868	881	893	904	915	925	934
58	4.33	248,239	517	594	648	691	725	754	780	802	822	840	856	872	886	899	911	922	933	943	953
57	4.50	257,985	528	606	662	705	740	770	796	819	839	857	874	890	904	917	930	941	952	963	973
56	4.67	267,731	539	619	675	719	755	785	812	835	855	874	891	907	922	935	948	960	971	982	992
55	4.83	276,904	549	630	688	732	769	800	826	850	871	890	907	923	938	952	965	977	988	999	1009
54	5.00	286,650	559	642	701	746	783	814	842	866	887	906	924	940	955	969	983	995	1007	1018	1028
53	5.17	296,396	570	654	713	759	797	829	857	881	903	922	940	957	972	987	1000	1013	1024	1036	1046
52	5.33	305,569	579	664	725	772	810	842	870	895	917	937	956	972	988	1003	1016	1029	1041	1052	1063
51	5.50	315,315	589	676	737	785	824	857	885	910	933	953	972	989	1004	1019	1033	1046	1058	1070	1081
50	5.75	329,648	604	692	755	804	843	877	906	932	955	976	995	1012	1028	1043	1057	1071	1083	1095	1106
49	6.00	343,980	618	708	772	822	863	897	927	953	976	998	1017	1035	1051	1067	1081	1095	1107	1119	1131
48	6.25	358,313	631	724	789	840	881	916	947	974	998	1019	1039	1057	1074	1090	1104	1118	1131	1144	1155
47	6.50	372,645	645	739	806	857	900	936	967	994	1018	1040	1061	1079	1096	1112	1127	1141	1155	1167	1179
46	6.83	391,564	662	759	827	880	924	960	992	1020	1045	1068	1088	1107	1125	1141	1157	1171	1185	1198	1210
45	7.17	411,056	680	779	849	903	948	985	1018	1046	1072	1095	1116	1136	1154	1171	1186	1201	1215	1228	1241
44	7.50	429,975	696	798	869	925	970	1009	1042	1071	1098	1121	1143	1163	1181	1199	1215	1230	1244	1257	1270
43	7.83	448,894	713	816	889	946	992	1032	1066	1096	1122	1147	1169	1189	1208	1226	1242	1258	1272	1286	1299
42	8.17	468,386	729	835	909	967	1015	1055	1090	1120	1148	1172	1195	1216	1235	1253	1270	1286	1301	1315	1328
41	8.58	491,891	748	856	933	993	1041	1082	1118	1149	1177	1203	1226	1247	1267	1285	1303	1319	1334	1348	1362
40	9.00	515,970	768	878	957	1018	1068	1110	1146	1178	1207	1233	1257	1279	1299	1318	1335	1352	1367	1382	1396
39	9.50	544,635	790	904	985	1047	1098	1141	1179	1212	1241	1268	1293	1315	1336	1355	1373	1390	1406	1421	1436
38	10.00	573,300	812	929	1011	1076	1128	1172	1211	1245	1275	1302	1327	1351	1372	1392	1410	1428	1444	1460	1474
37	10.50	601,965	833	953	1038	1103	1157	1203	1242	1277	1308	1336	1362	1385	1407	1427	1446	1464	1481	1497	1512
36	11.17	640,376	861	984	1072	1140	1195	1242	1283	1318	1350	1379	1406	1430	1453	1474	1493	1512	1529	1546	1561