



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D70 -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: 7,000

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	83.75	592	689	758	811	855	892	924	952	978	1001	1021	1041	1058	1075	1090	1105	1119	1132	1144
59	1.27	87.18	606	705	776	830	875	913	946	974	1000	1023	1045	1064	1083	1099	1115	1130	1144	1157	1170
58	1.32	90.61	621	722	793	849	895	933	966	996	1022	1046	1068	1088	1106	1123	1139	1155	1169	1182	1195
57	1.37	94.05	635	738	811	867	914	953	987	1017	1044	1068	1090	1110	1129	1147	1163	1179	1193	1207	1220
56	1.42	97.48	648	753	828	885	933	973	1007	1038	1065	1090	1112	1133	1152	1170	1186	1202	1217	1231	1244
55	1.47	100.91	662	769	844	903	951	992	1027	1058	1086	1111	1134	1155	1174	1192	1209	1225	1240	1255	1268
54	1.52	104.34	675	784	861	921	969	1011	1046	1078	1106	1132	1155	1176	1196	1215	1232	1248	1264	1278	1292
53	1.58	108.46	691	802	880	941	991	1033	1069	1101	1130	1156	1180	1202	1222	1241	1259	1275	1291	1305	1319
52	1.62	111.21	701	813	893	954	1005	1047	1084	1117	1146	1172	1196	1219	1239	1258	1276	1293	1309	1323	1338
51	1.68	115.33	716	830	911	974	1026	1069	1107	1140	1169	1196	1221	1243	1264	1284	1302	1319	1335	1350	1365
50	1.75	120.13	734	850	933	997	1049	1094	1132	1166	1196	1224	1249	1272	1293	1313	1331	1349	1365	1381	1395
49	1.83	125.62	753	872	957	1022	1076	1121	1160	1195	1226	1254	1280	1303	1325	1345	1364	1382	1399	1415	1430
48	1.91	131.11	772	894	980	1047	1102	1148	1188	1224	1255	1284	1310	1334	1356	1377	1396	1415	1432	1448	1463
47	1.98	135.92	789	912	1000	1069	1124	1171	1212	1248	1280	1310	1336	1361	1383	1404	1424	1443	1460	1477	1492
46	2.08	142.78	811	938	1028	1098	1155	1204	1246	1282	1315	1345	1373	1398	1421	1442	1463	1482	1500	1517	1533
45	2.19	150.34	836	966	1059	1130	1189	1239	1281	1319	1353	1384	1412	1437	1461	1483	1504	1524	1542	1559	1576
44	2.29	157.20	858	991	1085	1159	1219	1269	1313	1352	1387	1418	1446	1473	1497	1520	1541	1561	1580	1598	1614
43	2.39	164.07	879	1015	1112	1187	1248	1299	1344	1384	1419	1451	1480	1507	1532	1555	1577	1597	1617	1635	1652
42	2.49	170.93	900	1039	1137	1214	1276	1329	1375	1415	1451	1484	1514	1541	1567	1590	1612	1633	1653	1671	1689
41	2.62	179.85	926	1069	1170	1248	1312	1367	1413	1455	1492	1525	1556	1584	1610	1634	1657	1678	1699	1718	1736
40	2.74	188.09	950	1096	1199	1279	1345	1400	1448	1491	1529	1563	1594	1623	1650	1674	1698	1719	1740	1759	1778
39	2.90	199.07	981	1131	1237	1320	1387	1444	1494	1537	1576	1612	1644	1673	1701	1726	1750	1773	1794	1814	1833
38	3.05	209.37	1009	1163	1272	1357	1426	1484	1535	1580	1620	1656	1689	1719	1747	1774	1798	1821	1843	1863	1883
37	3.20	219.67	1037	1194	1306	1393	1464	1524	1575	1621	1662	1699	1733	1764	1793	1820	1845	1868	1891	1912	1931
36	3.40	233.40	1073	1235	1350	1440	1513	1574	1628	1675	1717	1755	1790	1822	1852	1880	1905	1930	1953	1974	1995