



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D125 -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: 12,500

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	149.55	833	963	1056	1127	1186	1235	1278	1315	1349	1380	1408	1433	1457	1479	1500	1519	1538	1555	1571
59	1.27	155.68	853	985	1080	1153	1212	1263	1306	1345	1379	1410	1439	1465	1489	1512	1533	1553	1571	1589	1606
58	1.32	161.81	872	1007	1103	1177	1238	1290	1334	1373	1409	1440	1469	1496	1521	1544	1565	1586	1605	1623	1640
57	1.37	167.94	891	1028	1126	1202	1264	1316	1362	1402	1437	1470	1499	1527	1552	1575	1597	1618	1637	1655	1673
56	1.42	174.07	909	1049	1149	1226	1289	1342	1389	1429	1466	1499	1529	1556	1582	1606	1628	1649	1669	1688	1705
55	1.47	180.20	927	1070	1171	1250	1314	1368	1415	1456	1493	1527	1558	1586	1612	1636	1659	1680	1700	1719	1737
54	1.52	186.33	945	1090	1193	1273	1338	1393	1441	1483	1521	1555	1586	1615	1641	1666	1689	1711	1731	1750	1769
53	1.58	193.68	966	1114	1219	1300	1367	1423	1472	1515	1553	1588	1620	1649	1676	1701	1724	1747	1767	1787	1806
52	1.62	198.58	980	1129	1236	1318	1385	1442	1492	1535	1574	1609	1642	1671	1698	1724	1748	1770	1791	1811	1830
51	1.68	205.94	1000	1152	1261	1345	1413	1471	1521	1566	1605	1641	1674	1704	1732	1758	1782	1805	1826	1847	1866
50	1.75	214.52	1023	1179	1289	1375	1445	1504	1555	1601	1641	1678	1711	1742	1770	1797	1822	1845	1867	1888	1907
49	1.83	224.33	1049	1208	1321	1409	1480	1541	1593	1640	1681	1718	1753	1784	1813	1840	1866	1889	1912	1933	1953
48	1.91	234.13	1075	1237	1353	1442	1515	1577	1631	1678	1720	1758	1793	1825	1855	1883	1909	1933	1956	1978	1998
47	1.98	242.71	1096	1262	1379	1471	1545	1608	1663	1711	1754	1793	1828	1861	1891	1919	1946	1970	1994	2016	2037
46	2.08	254.97	1127	1297	1417	1510	1587	1651	1707	1757	1801	1840	1877	1910	1941	1970	1997	2023	2047	2069	2091
45	2.19	268.46	1160	1334	1457	1553	1632	1698	1755	1806	1851	1892	1929	1964	1995	2025	2053	2079	2103	2127	2149
44	2.29	280.72	1189	1367	1493	1591	1671	1739	1798	1849	1896	1937	1976	2011	2043	2074	2102	2129	2154	2177	2200
43	2.39	292.97	1217	1399	1528	1628	1710	1779	1839	1892	1939	1982	2021	2057	2090	2121	2150	2177	2203	2227	2250
42	2.49	305.23	1245	1431	1562	1665	1748	1819	1880	1934	1982	2026	2066	2102	2136	2168	2197	2225	2251	2276	2299
41	2.62	321.17	1280	1471	1606	1711	1796	1869	1932	1987	2036	2081	2122	2160	2194	2227	2257	2286	2313	2338	2362
40	2.74	335.88	1312	1507	1645	1752	1840	1914	1978	2035	2085	2131	2173	2211	2247	2280	2311	2340	2368	2394	2418
39	2.90	355.49	1354	1554	1696	1806	1897	1973	2039	2097	2149	2196	2239	2279	2315	2349	2381	2411	2440	2466	2492
38	3.05	373.88	1391	1597	1743	1856	1948	2026	2094	2154	2207	2255	2300	2340	2378	2413	2445	2476	2505	2533	2559
37	3.20	392.27	1428	1639	1788	1904	1999	2079	2148	2209	2264	2313	2359	2400	2439	2474	2508	2539	2569	2597	2624
36	3.40	416.78	1476	1693	1847	1967	2064	2147	2218	2281	2337	2388	2435	2478	2518	2554	2589	2621	2652	2681	2708