



(800) 248-8498

## Diesel Hammer Energy Output and Pile Bearing Chart APE Model D128 -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: 12,800

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	153.14	845	976	1070	1142	1201	1251	1294	1333	1367	1398	1426	1452	1476	1498	1519	1539	1558	1575	1592
59	1.27	159.42	865	999	1094	1168	1228	1279	1323	1362	1397	1429	1458	1484	1509	1531	1553	1573	1592	1610	1627
58	1.32	165.69	884	1021	1118	1193	1255	1307	1352	1391	1427	1459	1488	1515	1540	1564	1585	1606	1625	1643	1661
57	1.37	171.97	903	1042	1141	1218	1280	1333	1379	1420	1456	1489	1519	1546	1572	1595	1618	1638	1658	1677	1694
56	1.42	178.25	921	1063	1164	1242	1306	1360	1407	1448	1485	1518	1548	1577	1602	1627	1649	1670	1690	1709	1727
55	1.47	184.52	940	1084	1187	1266	1331	1386	1433	1475	1513	1547	1578	1606	1633	1657	1680	1702	1722	1741	1760
54	1.52	190.80	958	1105	1209	1289	1356	1411	1460	1502	1540	1575	1606	1635	1662	1687	1711	1733	1753	1773	1791
53	1.58	198.33	979	1129	1235	1317	1384	1441	1491	1534	1573	1608	1640	1670	1697	1723	1747	1769	1790	1810	1829
52	1.62	203.35	993	1144	1252	1335	1403	1461	1511	1555	1594	1630	1663	1693	1720	1746	1770	1793	1814	1834	1854
51	1.68	210.88	1013	1168	1277	1362	1432	1490	1541	1586	1626	1662	1695	1726	1754	1780	1805	1828	1850	1870	1890
50	1.75	219.67	1037	1194	1306	1393	1464	1524	1575	1621	1662	1699	1733	1764	1793	1820	1845	1868	1891	1912	1931
49	1.83	229.71	1063	1224	1339	1427	1500	1561	1614	1661	1703	1740	1775	1807	1836	1864	1889	1913	1936	1958	1978
48	1.91	239.75	1089	1254	1370	1461	1535	1597	1652	1699	1742	1781	1816	1849	1879	1907	1933	1958	1981	2003	2024
47	1.98	248.54	1111	1279	1397	1490	1565	1629	1684	1733	1776	1816	1851	1885	1915	1944	1970	1995	2019	2041	2063
46	2.08	261.09	1142	1314	1435	1530	1607	1673	1729	1779	1824	1864	1901	1935	1966	1995	2023	2048	2073	2095	2117
45	2.19	274.90	1175	1351	1476	1573	1652	1719	1778	1829	1875	1916	1954	1989	2021	2051	2079	2105	2130	2153	2176
44	2.29	287.45	1204	1385	1512	1612	1693	1761	1821	1873	1920	1962	2001	2036	2069	2100	2129	2156	2181	2205	2228
43	2.39	300.01	1233	1417	1548	1649	1732	1802	1863	1916	1964	2007	2047	2083	2117	2148	2177	2205	2231	2255	2279
42	2.49	312.56	1261	1449	1583	1686	1770	1842	1904	1958	2007	2051	2092	2129	2163	2195	2225	2253	2280	2305	2328
41	2.62	328.88	1297	1490	1627	1733	1819	1893	1956	2012	2062	2108	2149	2187	2222	2255	2286	2314	2342	2367	2392
40	2.74	343.94	1329	1526	1666	1775	1863	1938	2003	2061	2112	2158	2200	2239	2275	2309	2340	2370	2398	2424	2449
39	2.90	364.02	1371	1574	1718	1830	1921	1998	2065	2124	2176	2224	2267	2307	2345	2379	2411	2442	2470	2497	2523
38	3.05	382.85	1410	1618	1765	1880	1973	2052	2121	2181	2235	2284	2329	2370	2408	2443	2476	2507	2537	2564	2591
37	3.20	401.68	1447	1660	1811	1928	2024	2105	2175	2237	2292	2342	2388	2430	2469	2505	2539	2571	2601	2630	2657
36	3.40	426.79	1495	1715	1871	1992	2090	2174	2246	2310	2367	2418	2466	2509	2549	2586	2621	2654	2685	2714	2742