



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D160 -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: 16,000

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	191.43	959	1107	1211	1292	1358	1414	1462	1505	1543	1578	1609	1638	1665	1690	1714	1736	1756	1776	1795
59	1.27	199.27	982	1132	1238	1321	1388	1445	1495	1538	1577	1612	1645	1674	1702	1727	1751	1773	1795	1815	1834
58	1.32	207.12	1003	1156	1265	1349	1418	1476	1526	1571	1610	1646	1679	1709	1737	1763	1788	1810	1832	1852	1872
57	1.37	214.96	1024	1180	1291	1377	1447	1506	1557	1602	1643	1680	1713	1744	1772	1799	1824	1847	1869	1890	1909
56	1.42	222.81	1045	1204	1316	1404	1475	1535	1588	1634	1675	1712	1746	1778	1807	1834	1859	1883	1905	1926	1946
55	1.47	230.65	1066	1227	1342	1430	1503	1564	1618	1664	1706	1744	1779	1811	1840	1868	1893	1918	1940	1962	1982
54	1.52	238.50	1086	1250	1366	1457	1530	1593	1647	1695	1737	1776	1811	1844	1874	1901	1928	1952	1975	1997	2018
53	1.58	247.91	1109	1277	1396	1488	1563	1627	1682	1730	1774	1813	1849	1882	1913	1941	1968	1993	2016	2039	2060
52	1.62	254.19	1125	1294	1415	1508	1584	1649	1704	1754	1798	1837	1874	1907	1938	1967	1994	2019	2043	2066	2087
51	1.68	263.60	1148	1321	1443	1538	1616	1681	1738	1788	1833	1874	1911	1945	1976	2006	2033	2059	2083	2106	2128
50	1.75	274.59	1174	1350	1475	1572	1651	1718	1776	1828	1873	1915	1953	1987	2020	2049	2078	2104	2129	2152	2174
49	1.83	287.14	1204	1384	1512	1611	1692	1760	1819	1872	1919	1961	2000	2035	2068	2099	2127	2154	2180	2204	2226
48	1.91	299.69	1232	1416	1547	1648	1731	1801	1862	1915	1963	2006	2046	2082	2116	2147	2176	2204	2230	2254	2277
47	1.98	310.67	1257	1444	1577	1681	1765	1836	1898	1952	2001	2045	2085	2122	2156	2188	2218	2246	2272	2297	2321
46	2.08	326.37	1292	1484	1620	1726	1812	1885	1948	2004	2054	2099	2140	2178	2213	2246	2276	2305	2332	2358	2382
45	2.19	343.63	1329	1526	1666	1774	1863	1937	2002	2060	2111	2157	2199	2238	2274	2308	2339	2369	2396	2423	2448
44	2.29	359.32	1362	1563	1706	1817	1907	1984	2050	2109	2161	2209	2252	2292	2328	2363	2395	2425	2453	2480	2506
43	2.39	375.01	1394	1600	1746	1859	1951	2030	2097	2157	2211	2259	2303	2344	2382	2417	2449	2480	2509	2537	2563
42	2.49	390.70	1425	1635	1784	1900	1994	2074	2143	2205	2259	2308	2354	2395	2433	2469	2503	2534	2564	2592	2618
41	2.62	411.09	1465	1681	1834	1952	2049	2131	2202	2265	2321	2371	2418	2460	2499	2536	2570	2603	2633	2662	2689
40	2.74	429.92	1501	1722	1878	1999	2098	2182	2255	2319	2376	2428	2475	2519	2559	2596	2631	2664	2696	2725	2753
39	2.90	455.03	1548	1775	1936	2060	2162	2249	2323	2389	2448	2501	2550	2595	2636	2675	2711	2745	2777	2807	2836
38	3.05	478.56	1591	1823	1988	2116	2221	2309	2386	2453	2514	2568	2618	2664	2707	2746	2783	2818	2851	2882	2911
37	3.20	502.10	1633	1871	2040	2171	2278	2368	2447	2516	2578	2634	2685	2732	2776	2816	2854	2890	2923	2955	2985
36	3.40	533.48	1687	1932	2106	2242	2352	2445	2526	2597	2661	2719	2772	2820	2865	2907	2946	2983	3017	3050	3081