



(800) 248-8498

## Diesel Hammer Energy Output and Pile Bearing Chart APE Model D250 -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:      25,000

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	299.10	1231	1415	1545	1647	1729	1799	1860	1913	1961	2004	2043	2080	2113	2145	2174	2201	2227	2252	2275
59	1.27	311.36	1259	1446	1579	1683	1767	1838	1900	1954	2003	2047	2087	2124	2159	2191	2221	2249	2275	2300	2324
58	1.32	323.62	1286	1477	1613	1718	1804	1876	1939	1995	2045	2090	2131	2168	2203	2236	2266	2295	2322	2347	2372
57	1.37	335.88	1312	1507	1645	1752	1840	1914	1978	2035	2085	2131	2173	2211	2247	2280	2311	2340	2368	2394	2418
56	1.42	348.14	1338	1537	1677	1786	1876	1951	2016	2074	2125	2172	2215	2254	2290	2324	2355	2385	2413	2439	2464
55	1.47	360.39	1364	1566	1709	1820	1911	1987	2054	2112	2165	2212	2255	2295	2332	2366	2399	2429	2457	2484	2510
54	1.52	372.65	1389	1594	1740	1853	1945	2023	2090	2150	2203	2252	2296	2336	2374	2409	2441	2472	2501	2528	2554
53	1.58	387.36	1419	1628	1776	1891	1985	2065	2134	2195	2249	2298	2343	2384	2423	2458	2491	2523	2552	2580	2607
52	1.62	397.17	1438	1650	1800	1917	2012	2092	2162	2224	2279	2329	2374	2416	2455	2491	2524	2556	2586	2614	2641
51	1.68	411.88	1467	1682	1835	1954	2051	2133	2204	2267	2323	2374	2420	2463	2502	2539	2573	2605	2636	2664	2692
50	1.75	429.04	1500	1720	1876	1997	2096	2180	2252	2316	2373	2425	2472	2516	2556	2594	2629	2662	2693	2722	2750
49	1.83	448.65	1536	1761	1921	2045	2146	2232	2306	2371	2430	2483	2531	2576	2617	2655	2691	2725	2756	2786	2815
48	1.91	468.27	1572	1802	1966	2092	2196	2283	2359	2426	2485	2539	2589	2634	2676	2715	2752	2786	2819	2849	2878
47	1.98	485.43	1603	1837	2004	2132	2238	2327	2404	2472	2533	2588	2638	2684	2727	2767	2804	2839	2872	2903	2933
46	2.08	509.95	1646	1886	2057	2189	2297	2388	2467	2537	2599	2655	2707	2754	2798	2839	2877	2913	2947	2979	3009
45	2.19	536.91	1693	1939	2114	2249	2360	2454	2535	2606	2670	2728	2781	2830	2875	2916	2956	2993	3027	3060	3091
44	2.29	561.43	1734	1986	2164	2303	2416	2512	2595	2668	2733	2793	2847	2896	2942	2985	3025	3063	3098	3132	3164
43	2.39	585.95	1774	2031	2214	2355	2471	2569	2654	2728	2795	2856	2911	2962	3009	3052	3093	3132	3168	3202	3235
42	2.49	610.46	1813	2076	2262	2407	2525	2625	2711	2787	2856	2917	2974	3026	3074	3118	3160	3199	3236	3271	3305
41	2.62	642.34	1863	2133	2324	2472	2593	2696	2784	2863	2933	2996	3054	3107	3156	3202	3245	3285	3323	3359	3393
40	2.74	671.76	1908	2184	2379	2531	2655	2759	2850	2930	3002	3067	3126	3180	3230	3277	3321	3362	3401	3438	3473
39	2.90	710.98	1967	2250	2451	2607	2735	2843	2936	3018	3092	3158	3219	3275	3327	3375	3420	3463	3503	3540	3576
38	3.05	747.76	2020	2311	2517	2677	2808	2918	3014	3099	3174	3242	3305	3362	3415	3465	3511	3554	3595	3634	3671
37	3.20	784.53	2073	2370	2581	2745	2879	2992	3090	3177	3254	3324	3388	3447	3501	3552	3599	3644	3686	3726	3763
36	3.40	833.57	2140	2447	2665	2834	2972	3088	3189	3279	3358	3430	3496	3557	3613	3665	3714	3760	3803	3844	3883