



(800) 248-8498

## Diesel Hammer Energy Output and Pile Bearing Chart APE Model D25 -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:      2,500

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	29.91	302	361	402	434	460	482	501	518	533	547	559	571	581	591	601	609	617	625	633
59	1.27	31.14	311	370	413	445	472	494	514	531	547	561	573	585	596	606	615	624	633	640	648
58	1.32	32.36	320	380	423	456	484	507	526	544	560	574	587	599	610	620	630	639	647	655	663
57	1.37	33.59	328	390	433	467	495	518	539	557	573	587	600	612	624	634	644	653	662	670	678
56	1.42	34.81	336	399	444	478	506	530	551	569	585	600	613	626	637	648	658	667	676	685	692
55	1.47	36.04	344	408	454	489	517	542	563	581	598	613	626	639	651	662	672	681	690	699	707
54	1.52	37.27	352	417	463	499	528	553	574	593	610	625	639	652	664	675	685	695	704	713	721
53	1.58	38.74	362	428	475	511	541	566	588	607	624	640	654	667	679	690	701	711	720	729	737
52	1.62	39.72	368	435	482	519	549	575	597	616	634	650	664	677	689	701	711	721	731	740	748
51	1.68	41.19	377	445	494	531	562	588	610	630	648	664	678	692	704	716	727	737	747	756	764
50	1.75	42.90	387	457	506	545	576	602	625	646	664	680	695	709	721	733	744	755	765	774	783
49	1.83	44.87	399	470	521	560	592	619	642	663	682	698	714	728	741	753	764	775	785	794	803
48	1.91	46.83	410	483	535	575	607	635	659	680	699	716	732	746	759	772	783	794	805	814	823
47	1.98	48.54	420	494	547	587	621	649	673	695	714	731	747	762	776	788	800	811	821	831	841
46	2.08	50.99	434	510	564	605	639	668	693	715	735	753	769	784	798	811	823	834	845	855	865
45	2.19	53.69	448	526	582	624	659	689	715	737	758	776	793	808	822	835	848	859	870	881	891
44	2.29	56.14	461	541	598	641	677	707	734	757	778	796	813	829	844	857	870	882	893	904	914
43	2.39	58.59	474	555	613	658	695	725	752	776	797	816	834	850	865	878	891	904	915	926	936
42	2.49	61.05	487	570	629	674	712	743	770	795	816	836	854	870	885	899	912	925	937	948	958
41	2.62	64.23	502	588	648	695	733	766	794	818	841	861	879	896	911	926	939	952	964	975	986
40	2.74	67.18	517	604	666	713	753	786	814	840	862	883	902	919	935	950	963	976	989	1000	1011
39	2.90	71.10	535	625	688	738	778	812	842	868	891	912	931	949	965	981	995	1008	1021	1033	1044
38	3.05	74.78	552	644	709	760	801	836	866	893	917	938	958	976	993	1009	1023	1037	1050	1062	1074
37	3.20	78.45	569	663	729	781	824	859	890	918	942	964	985	1003	1020	1036	1051	1065	1079	1091	1103
36	3.40	83.36	590	687	756	809	853	890	922	950	975	998	1019	1038	1056	1072	1088	1102	1116	1129	1141