



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D19 -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: 1,900

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	22.73	247	298	334	362	385	404	421	435	449	460	471	481	491	499	507	515	522	529	535
59	1.27	23.66	255	307	343	372	395	415	432	447	460	472	483	494	503	512	520	528	535	542	549
58	1.32	24.60	262	315	353	382	405	425	443	458	472	484	495	506	515	524	533	541	548	555	562
57	1.37	25.53	270	323	362	391	415	436	453	469	483	496	507	518	527	537	545	553	561	568	575
56	1.42	26.46	277	332	370	400	425	446	464	480	494	507	519	529	539	549	557	565	573	580	587
55	1.47	27.39	284	340	379	410	435	456	474	490	505	518	530	541	551	560	569	578	585	593	600
54	1.52	28.32	291	347	388	419	444	466	484	501	515	529	541	552	562	572	581	589	597	605	612
53	1.58	29.44	299	357	398	429	455	477	496	513	528	542	554	565	576	586	595	603	612	619	627
52	1.62	30.18	304	363	404	436	463	485	504	521	536	550	562	574	585	595	604	613	621	629	636
51	1.68	31.30	312	372	414	447	473	496	516	533	548	562	575	587	598	608	617	626	635	643	650
50	1.75	32.61	321	382	425	459	486	509	529	547	562	577	590	602	613	623	633	642	650	658	666
49	1.83	34.10	332	394	438	472	500	523	544	562	578	592	606	618	629	640	650	659	668	676	684
48	1.91	35.59	341	405	450	485	513	537	558	577	593	608	622	634	646	657	667	676	685	694	702
47	1.98	36.89	350	415	460	496	525	549	571	589	606	621	635	648	660	671	681	691	700	708	717
46	2.08	38.76	362	428	475	511	541	566	588	607	625	640	654	667	679	691	701	711	720	729	738
45	2.19	40.81	375	443	491	528	559	584	607	626	644	660	675	688	700	712	723	733	743	752	760
44	2.29	42.67	386	455	505	543	574	600	623	644	662	678	693	706	719	731	742	752	762	771	780
43	2.39	44.53	397	468	518	557	589	616	640	660	679	695	710	724	737	750	761	771	781	791	800
42	2.49	46.40	408	480	532	571	604	632	655	676	695	712	728	742	755	768	779	790	800	810	819
41	2.62	48.82	422	496	549	589	623	651	676	697	716	734	750	765	778	791	803	814	824	834	843
40	2.74	51.05	434	510	564	606	640	669	694	716	736	753	770	785	799	811	824	835	846	856	865
39	2.90	54.03	450	528	584	627	662	692	717	740	760	779	796	811	825	839	851	863	874	884	894
38	3.05	56.83	465	545	602	646	682	713	739	762	783	802	819	835	850	863	876	888	899	910	920
37	3.20	59.62	479	561	620	665	702	733	760	784	805	824	842	858	873	887	900	913	924	935	945
36	3.40	63.35	498	583	643	689	727	759	787	812	834	854	872	889	904	918	932	945	956	968	978