



**(800) 248-8498**

## Diesel Hammer Energy Output and Pile Bearing Chart APE Model D80-42

The energy output is based on the identical Piston/Travel calculations utilized in the *Pile Driving Analyzer* and the *Saximeter*.

The pile bearing chart is based on the Engineering News formula for pile bearing and is provided for the user's convenience only.

$$\text{Pile Bearing (tons)} = 2E / (S + .1) / 2000, \text{ where } E = \text{Hammer energy (ft-lbs)} \text{ and } S = \text{Pile set (inches per blow)}$$

Ram Weight(lbs): 17,640

APE has no preference for these particular formulas and calculations over any other.

Blows per Minute	Stroke (feet)	Energy (ft-lbs)	Pile Set (Blows per inch)																		
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
60	4.00	70,560	118	163	202	235	265	291	314	334	353	370	385	399	412	423	434	444	454	462	470
59	4.17	73,559	123	170	210	245	276	303	327	348	368	385	401	416	429	441	453	463	473	482	490
58	4.33	76,381	127	176	218	255	286	315	339	362	382	400	417	432	446	458	470	481	491	500	509
57	4.50	79,380	132	183	227	265	298	327	353	376	397	416	433	449	463	476	488	500	510	520	529
56	4.67	82,379	137	190	235	275	309	339	366	390	412	432	449	466	481	494	507	519	530	540	549
55	4.83	85,201	142	197	243	284	320	351	379	404	426	446	465	482	497	511	524	536	548	558	568
54	5.00	88,200	147	204	252	294	331	363	392	418	441	462	481	499	515	529	543	555	567	578	588
53	5.17	91,199	152	210	261	304	342	376	405	432	456	478	497	515	532	547	561	574	586	598	608
52	5.33	94,021	157	217	269	313	353	387	418	445	470	492	513	531	548	564	579	592	604	616	627
51	5.50	97,020	162	224	277	323	364	399	431	460	485	508	529	548	566	582	597	611	624	636	647
50	5.75	101,430	169	234	290	338	380	418	451	480	507	531	553	573	592	609	624	639	652	665	676
49	6.00	105,840	176	244	302	353	397	436	470	501	529	554	577	598	617	635	651	666	680	693	706
48	6.25	110,250	184	254	315	368	413	454	490	522	551	578	601	623	643	662	678	694	709	722	735
47	6.50	114,660	191	265	328	382	430	472	510	543	573	601	625	648	669	688	706	722	737	751	764
46	6.83	120,481	201	278	344	402	452	496	535	571	602	631	657	681	703	723	741	759	775	789	803
45	7.17	126,479	211	292	361	422	474	521	562	599	632	663	690	715	738	759	778	796	813	829	843
44	7.50	132,300	221	305	378	441	496	545	588	627	662	693	722	748	772	794	814	833	851	867	882
43	7.83	138,121	230	319	395	460	518	569	614	654	691	723	753	781	806	829	850	870	888	905	921
42	8.17	144,119	240	333	412	480	540	593	641	683	721	755	786	815	841	865	887	907	926	944	961
41	8.58	151,351	252	349	432	505	568	623	673	717	757	793	826	855	883	908	931	953	973	992	1009
40	9.00	158,760	265	366	454	529	595	654	706	752	794	832	866	897	926	953	977	1000	1021	1040	1058
39	9.50	167,580	279	387	479	559	628	690	745	794	838	878	914	947	978	1005	1031	1055	1077	1098	1117
38	10.00	176,400	294	407	504	588	662	726	784	836	882	924	962	997	1029	1058	1086	1111	1134	1156	1176
37	10.50	185,220	309	427	529	617	695	763	823	877	926	970	1010	1047	1080	1111	1140	1166	1191	1214	1235
36	11.17	197,039	328	455	563	657	739	811	876	933	985	1032	1075	1114	1149	1182	1213	1241	1267	1291	1314
35	11.25	198,450	331	458	567	662	744	817	882	940	992	1040	1082	1122	1158	1191	1221	1250	1276	1300	1323