



**(800) 248-8498**

## Diesel Hammer Energy Output and Pile Bearing Chart APE Model D100-42

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): 22,050

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	88,200	147	204	252	294	331	363	392	418	441	462	481	499	515	529	543	555	567	578	588
59	4.17	91,949	153	212	263	306	345	379	409	436	460	482	502	520	536	552	566	579	591	602	613
58	4.33	95,477	159	220	273	318	358	393	424	452	477	500	521	540	557	573	588	601	614	626	637
57	4.50	99,225	165	229	284	331	372	409	441	470	496	520	541	561	579	595	611	625	638	650	662
56	4.67	102,974	172	238	294	343	386	424	458	488	515	539	562	582	601	618	634	648	662	675	686
55	4.83	106,502	178	246	304	355	399	439	473	504	533	558	581	602	621	639	655	671	685	698	710
54	5.00	110,250	184	254	315	368	413	454	490	522	551	578	601	623	643	662	678	694	709	722	735
53	5.17	113,999	190	263	326	380	427	469	507	540	570	597	622	644	665	684	702	718	733	747	760
52	5.33	117,527	196	271	336	392	441	484	522	557	588	616	641	664	686	705	723	740	756	770	784
51	5.50	121,275	202	280	347	404	455	499	539	574	606	635	662	685	707	728	746	764	780	795	809
50	5.75	126,788	211	293	362	423	475	522	564	601	634	664	692	717	740	761	780	798	815	831	845
49	6.00	132,300	221	305	378	441	496	545	588	627	662	693	722	748	772	794	814	833	851	867	882
48	6.25	137,813	230	318	394	459	517	567	613	653	689	722	752	779	804	827	848	868	886	903	919
47	6.50	143,325	239	331	410	478	537	590	637	679	717	751	782	810	836	860	882	902	921	939	956
46	6.83	150,602	251	348	430	502	565	620	669	713	753	789	821	851	879	904	927	948	968	987	1004
45	7.17	158,099	263	365	452	527	593	651	703	749	790	828	862	894	922	949	973	995	1016	1036	1054
44	7.50	165,375	276	382	473	551	620	681	735	783	827	866	902	935	965	992	1018	1041	1063	1083	1103
43	7.83	172,652	288	398	493	576	647	711	767	818	863	904	942	976	1007	1036	1062	1087	1110	1131	1151
42	8.17	180,149	300	416	515	600	676	742	801	853	901	944	983	1018	1051	1081	1109	1134	1158	1180	1201
41	8.58	189,189	315	437	541	631	709	779	841	896	946	991	1032	1069	1104	1135	1164	1191	1216	1240	1261
40	9.00	198,450	331	458	567	662	744	817	882	940	992	1040	1082	1122	1158	1191	1221	1250	1276	1300	1323
39	9.50	209,475	349	483	599	698	786	863	931	992	1047	1097	1143	1184	1222	1257	1289	1319	1347	1372	1397
38	10.00	220,500	368	509	630	735	827	908	980	1044	1103	1155	1203	1246	1286	1323	1357	1388	1418	1445	1470
37	10.50	231,525	386	534	662	772	868	953	1029	1097	1158	1213	1263	1309	1351	1389	1425	1458	1488	1517	1544
36	11.17	246,299	410	568	704	821	924	1014	1095	1167	1231	1290	1343	1392	1437	1478	1516	1551	1583	1614	1642
35	11.25	248,063	413	572	709	827	930	1021	1103	1175	1240	1299	1353	1402	1447	1488	1527	1562	1595	1625	1654