



**(800) 248-8498**

## Diesel Hammer Energy Output and Pile Bearing Chart APE Model D50-42

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): 11,025

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)																		
			<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>
60	4.00	44,100	74	102	126	147	165	182	196	209	221	231	241	249	257	265	271	278	284	289	294
59	4.17	45,974	77	106	131	153	172	189	204	218	230	241	251	260	268	276	283	289	296	301	306
58	4.33	47,738	80	110	136	159	179	197	212	226	239	250	260	270	278	286	294	301	307	313	318
57	4.50	49,613	83	114	142	165	186	204	221	235	248	260	271	280	289	298	305	312	319	325	331
56	4.67	51,487	86	119	147	172	193	212	229	244	257	270	281	291	300	309	317	324	331	337	343
55	4.83	53,251	89	123	152	178	200	219	237	252	266	279	290	301	311	320	328	335	342	349	355
54	5.00	55,125	92	127	158	184	207	227	245	261	276	289	301	312	322	331	339	347	354	361	368
53	5.17	56,999	95	132	163	190	214	235	253	270	285	299	311	322	332	342	351	359	366	373	380
52	5.33	58,763	98	136	168	196	220	242	261	278	294	308	321	332	343	353	362	370	378	385	392
51	5.50	60,638	101	140	173	202	227	250	270	287	303	318	331	343	354	364	373	382	390	397	404
50	5.75	63,394	106	146	181	211	238	261	282	300	317	332	346	358	370	380	390	399	408	415	423
49	6.00	66,150	110	153	189	221	248	272	294	313	331	347	361	374	386	397	407	417	425	433	441
48	6.25	68,906	115	159	197	230	258	284	306	326	345	361	376	389	402	413	424	434	443	451	459
47	6.50	71,663	119	165	205	239	269	295	319	339	358	375	391	405	418	430	441	451	461	470	478
46	6.83	75,301	126	174	215	251	282	310	335	357	377	394	411	426	439	452	463	474	484	493	502
45	7.17	79,049	132	182	226	263	296	325	351	374	395	414	431	447	461	474	486	498	508	518	527
44	7.50	82,688	138	191	236	276	310	340	368	392	413	433	451	467	482	496	509	521	532	542	551
43	7.83	86,326	144	199	247	288	324	355	384	409	432	452	471	488	504	518	531	544	555	566	576
42	8.17	90,074	150	208	257	300	338	371	400	427	450	472	491	509	525	540	554	567	579	590	600
41	8.58	94,595	158	218	270	315	355	390	420	448	473	495	516	535	552	568	582	596	608	620	631
40	9.00	99,225	165	229	284	331	372	409	441	470	496	520	541	561	579	595	611	625	638	650	662
39	9.50	104,738	175	242	299	349	393	431	466	496	524	549	571	592	611	628	645	659	673	686	698
38	10.00	110,250	184	254	315	368	413	454	490	522	551	578	601	623	643	662	678	694	709	722	735
37	10.50	115,763	193	267	331	386	434	477	515	548	579	606	631	654	675	695	712	729	744	758	772
36	11.17	123,149	205	284	352	410	462	507	547	583	616	645	672	696	718	739	758	775	792	807	821