



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D46-42

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): 10,143

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	40,572	68	94	116	135	152	167	180	192	203	213	221	229	237	243	250	255	261	266	270
59	4.17	42,296	70	98	121	141	159	174	188	200	211	222	231	239	247	254	260	266	272	277	282
58	4.33	43,919	73	101	125	146	165	181	195	208	220	230	240	248	256	264	270	277	282	288	293
57	4.50	45,644	76	105	130	152	171	188	203	216	228	239	249	258	266	274	281	287	293	299	304
56	4.67	47,368	79	109	135	158	178	195	211	224	237	248	258	268	276	284	291	298	305	310	316
55	4.83	48,991	82	113	140	163	184	202	218	232	245	257	267	277	286	294	301	308	315	321	327
54	5.00	50,715	85	117	145	169	190	209	225	240	254	266	277	287	296	304	312	319	326	332	338
53	5.17	52,439	87	121	150	175	197	216	233	248	262	275	286	296	306	315	323	330	337	344	350
52	5.33	54,062	90	125	154	180	203	223	240	256	270	283	295	306	315	324	333	340	348	354	360
51	5.50	55,787	93	129	159	186	209	230	248	264	279	292	304	315	325	335	343	351	359	365	372
50	5.75	58,322	97	135	167	194	219	240	259	276	292	305	318	330	340	350	359	367	375	382	389
49	6.00	60,858	101	140	174	203	228	251	270	288	304	319	332	344	355	365	375	383	391	399	406
48	6.25	63,394	106	146	181	211	238	261	282	300	317	332	346	358	370	380	390	399	408	415	423
47	6.50	65,930	110	152	188	220	247	271	293	312	330	345	360	373	385	396	406	415	424	432	440
46	6.83	69,277	115	160	198	231	260	285	308	328	346	363	378	392	404	416	426	436	445	454	462
45	7.17	72,725	121	168	208	242	273	299	323	344	364	381	397	411	424	436	448	458	468	476	485
44	7.50	76,073	127	176	217	254	285	313	338	360	380	398	415	430	444	456	468	479	489	498	507
43	7.83	79,420	132	183	227	265	298	327	353	376	397	416	433	449	463	477	489	500	511	520	529
42	8.17	82,868	138	191	237	276	311	341	368	393	414	434	452	468	483	497	510	522	533	543	552
41	8.58	87,027	145	201	249	290	326	358	387	412	435	456	475	492	508	522	536	548	559	570	580
40	9.00	91,287	152	211	261	304	342	376	406	432	456	478	498	516	533	548	562	575	587	598	609
39	9.50	96,359	161	222	275	321	361	397	428	456	482	505	526	545	562	578	593	607	619	631	642
38	10.00	101,430	169	234	290	338	380	418	451	480	507	531	553	573	592	609	624	639	652	665	676
37	10.50	106,502	178	246	304	355	399	439	473	504	533	558	581	602	621	639	655	671	685	698	710
36	11.17	113,297	189	261	324	378	425	467	504	537	566	593	618	640	661	680	697	713	728	742	755