



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D25-42

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): 5,513

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	22,052	37	51	63	74	83	91	98	104	110	116	120	125	129	132	136	139	142	144	147
59	4.17	22,989	38	53	66	77	86	95	102	109	115	120	125	130	134	138	141	145	148	151	153
58	4.33	23,871	40	55	68	80	90	98	106	113	119	125	130	135	139	143	147	150	153	156	159
57	4.50	24,809	41	57	71	83	93	102	110	118	124	130	135	140	145	149	153	156	159	163	165
56	4.67	25,746	43	59	74	86	97	106	114	122	129	135	140	146	150	154	158	162	166	169	172
55	4.83	26,628	44	61	76	89	100	110	118	126	133	139	145	151	155	160	164	168	171	174	178
54	5.00	27,565	46	64	79	92	103	114	123	131	138	144	150	156	161	165	170	174	177	181	184
53	5.17	28,502	48	66	81	95	107	117	127	135	143	149	155	161	166	171	175	179	183	187	190
52	5.33	29,384	49	68	84	98	110	121	131	139	147	154	160	166	171	176	181	185	189	193	196
51	5.50	30,322	51	70	87	101	114	125	135	144	152	159	165	171	177	182	187	191	195	199	202
50	5.75	31,700	53	73	91	106	119	131	141	150	158	166	173	179	185	190	195	200	204	208	211
49	6.00	33,078	55	76	95	110	124	136	147	157	165	173	180	187	193	198	204	208	213	217	221
48	6.25	34,456	57	80	98	115	129	142	153	163	172	180	188	195	201	207	212	217	222	226	230
47	6.50	35,835	60	83	102	119	134	148	159	170	179	188	195	203	209	215	221	226	230	235	239
46	6.83	37,654	63	87	108	126	141	155	167	178	188	197	205	213	220	226	232	237	242	247	251
45	7.17	39,528	66	91	113	132	148	163	176	187	198	207	216	223	231	237	243	249	254	259	264
44	7.50	41,348	69	95	118	138	155	170	184	196	207	217	226	234	241	248	254	260	266	271	276
43	7.83	43,167	72	100	123	144	162	178	192	204	216	226	235	244	252	259	266	272	278	283	288
42	8.17	45,041	75	104	129	150	169	185	200	213	225	236	246	255	263	270	277	284	290	295	300
41	8.58	47,302	79	109	135	158	177	195	210	224	237	248	258	267	276	284	291	298	304	310	315
40	9.00	49,617	83	115	142	165	186	204	221	235	248	260	271	280	289	298	305	312	319	325	331
39	9.50	52,374	87	121	150	175	196	216	233	248	262	274	286	296	306	314	322	330	337	343	349
38	10.00	55,130	92	127	158	184	207	227	245	261	276	289	301	312	322	331	339	347	354	361	368
37	10.50	57,887	96	134	165	193	217	238	257	274	289	303	316	327	338	347	356	364	372	379	386
36	11.17	61,580	103	142	176	205	231	254	274	292	308	323	336	348	359	369	379	388	396	403	411