



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D16-42

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): 3,528

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	14,112	24	33	40	47	53	58	63	67	71	74	77	80	82	85	87	89	91	92	94
59	4.17	14,712	25	34	42	49	55	61	65	70	74	77	80	83	86	88	91	93	95	96	98
58	4.33	15,276	25	35	44	51	57	63	68	72	76	80	83	86	89	92	94	96	98	100	102
57	4.50	15,876	26	37	45	53	60	65	71	75	79	83	87	90	93	95	98	100	102	104	106
56	4.67	16,476	27	38	47	55	62	68	73	78	82	86	90	93	96	99	101	104	106	108	110
55	4.83	17,040	28	39	49	57	64	70	76	81	85	89	93	96	99	102	105	107	110	112	114
54	5.00	17,640	29	41	50	59	66	73	78	84	88	92	96	100	103	106	109	111	113	116	118
53	5.17	18,240	30	42	52	61	68	75	81	86	91	96	99	103	106	109	112	115	117	120	122
52	5.33	18,804	31	43	54	63	71	77	84	89	94	98	103	106	110	113	116	118	121	123	125
51	5.50	19,404	32	45	55	65	73	80	86	92	97	102	106	110	113	116	119	122	125	127	129
50	5.75	20,286	34	47	58	68	76	84	90	96	101	106	111	115	118	122	125	128	130	133	135
49	6.00	21,168	35	49	60	71	79	87	94	100	106	111	115	120	123	127	130	133	136	139	141
48	6.25	22,050	37	51	63	74	83	91	98	104	110	116	120	125	129	132	136	139	142	144	147
47	6.50	22,932	38	53	66	76	86	94	102	109	115	120	125	130	134	138	141	144	147	150	153
46	6.83	24,096	40	56	69	80	90	99	107	114	120	126	131	136	141	145	148	152	155	158	161
45	7.17	25,296	42	58	72	84	95	104	112	120	126	133	138	143	148	152	156	159	163	166	169
44	7.50	26,460	44	61	76	88	99	109	118	125	132	139	144	150	154	159	163	167	170	173	176
43	7.83	27,624	46	64	79	92	104	114	123	131	138	145	151	156	161	166	170	174	178	181	184
42	8.17	28,824	48	67	82	96	108	119	128	137	144	151	157	163	168	173	177	181	185	189	192
41	8.58	30,270	50	70	86	101	114	125	135	143	151	159	165	171	177	182	186	191	195	198	202
40	9.00	31,752	53	73	91	106	119	131	141	150	159	166	173	179	185	191	195	200	204	208	212
39	9.50	33,516	56	77	96	112	126	138	149	159	168	176	183	189	196	201	206	211	215	220	223
38	10.00	35,280	59	81	101	118	132	145	157	167	176	185	192	199	206	212	217	222	227	231	235
37	10.50	37,044	62	85	106	123	139	153	165	175	185	194	202	209	216	222	228	233	238	243	247
36	11.17	39,408	66	91	113	131	148	162	175	187	197	206	215	223	230	236	243	248	253	258	263