



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D19-42

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): 4,190

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	16,760	28	39	48	56	63	69	74	79	84	88	91	95	98	101	103	106	108	110	112
59	4.17	17,472	29	40	50	58	66	72	78	83	87	92	95	99	102	105	108	110	112	114	116
58	4.33	18,143	30	42	52	60	68	75	81	86	91	95	99	103	106	109	112	114	117	119	121
57	4.50	18,855	31	44	54	63	71	78	84	89	94	99	103	107	110	113	116	119	121	124	126
56	4.67	19,567	33	45	56	65	73	81	87	93	98	102	107	111	114	117	120	123	126	128	130
55	4.83	20,238	34	47	58	67	76	83	90	96	101	106	110	114	118	121	125	127	130	133	135
54	5.00	20,950	35	48	60	70	79	86	93	99	105	110	114	118	122	126	129	132	135	137	140
53	5.17	21,662	36	50	62	72	81	89	96	103	108	113	118	122	126	130	133	136	139	142	144
52	5.33	22,333	37	52	64	74	84	92	99	106	112	117	122	126	130	134	137	141	144	146	149
51	5.50	23,045	38	53	66	77	86	95	102	109	115	121	126	130	134	138	142	145	148	151	154
50	5.75	24,093	40	56	69	80	90	99	107	114	120	126	131	136	141	145	148	152	155	158	161
49	6.00	25,140	42	58	72	84	94	104	112	119	126	132	137	142	147	151	155	158	162	165	168
48	6.25	26,188	44	60	75	87	98	108	116	124	131	137	143	148	153	157	161	165	168	172	175
47	6.50	27,235	45	63	78	91	102	112	121	129	136	143	149	154	159	163	168	171	175	178	182
46	6.83	28,618	48	66	82	95	107	118	127	136	143	150	156	162	167	172	176	180	184	187	191
45	7.17	30,042	50	69	86	100	113	124	134	142	150	157	164	170	175	180	185	189	193	197	200
44	7.50	31,425	52	73	90	105	118	129	140	149	157	165	171	178	183	189	193	198	202	206	210
43	7.83	32,808	55	76	94	109	123	135	146	155	164	172	179	185	191	197	202	207	211	215	219
42	8.17	34,232	57	79	98	114	128	141	152	162	171	179	187	193	200	205	211	216	220	224	228
41	8.58	35,950	60	83	103	120	135	148	160	170	180	188	196	203	210	216	221	226	231	236	240
40	9.00	37,710	63	87	108	126	141	155	168	179	189	198	206	213	220	226	232	237	242	247	251
39	9.50	39,805	66	92	114	133	149	164	177	189	199	209	217	225	232	239	245	251	256	261	265
38	10.00	41,900	70	97	120	140	157	173	186	198	210	219	229	237	244	251	258	264	269	275	279
37	10.50	43,995	73	102	126	147	165	181	196	208	220	230	240	249	257	264	271	277	283	288	293
36	11.17	46,802	78	108	134	156	176	193	208	222	234	245	255	265	273	281	288	295	301	307	312