



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D30-42

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): 6,615

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	26,460	44	61	76	88	99	109	118	125	132	139	144	150	154	159	163	167	170	173	176
59	4.17	27,585	46	64	79	92	103	114	123	131	138	144	150	156	161	166	170	174	177	181	184
58	4.33	28,643	48	66	82	95	107	118	127	136	143	150	156	162	167	172	176	180	184	188	191
57	4.50	29,768	50	69	85	99	112	123	132	141	149	156	162	168	174	179	183	187	191	195	198
56	4.67	30,892	51	71	88	103	116	127	137	146	154	162	169	175	180	185	190	195	199	202	206
55	4.83	31,950	53	74	91	107	120	132	142	151	160	167	174	181	186	192	197	201	205	209	213
54	5.00	33,075	55	76	95	110	124	136	147	157	165	173	180	187	193	198	204	208	213	217	221
53	5.17	34,200	57	79	98	114	128	141	152	162	171	179	187	193	199	205	210	215	220	224	228
52	5.33	35,258	59	81	101	118	132	145	157	167	176	185	192	199	206	212	217	222	227	231	235
51	5.50	36,383	61	84	104	121	136	150	162	172	182	191	198	206	212	218	224	229	234	238	243
50	5.75	38,036	63	88	109	127	143	157	169	180	190	199	207	215	222	228	234	239	245	249	254
49	6.00	39,690	66	92	113	132	149	163	176	188	198	208	216	224	232	238	244	250	255	260	265
48	6.25	41,344	69	95	118	138	155	170	184	196	207	217	226	234	241	248	254	260	266	271	276
47	6.50	42,998	72	99	123	143	161	177	191	204	215	225	235	243	251	258	265	271	276	282	287
46	6.83	45,180	75	104	129	151	169	186	201	214	226	237	246	255	264	271	278	284	290	296	301
45	7.17	47,430	79	109	136	158	178	195	211	225	237	248	259	268	277	285	292	299	305	311	316
44	7.50	49,613	83	114	142	165	186	204	221	235	248	260	271	280	289	298	305	312	319	325	331
43	7.83	51,795	86	120	148	173	194	213	230	245	259	271	283	293	302	311	319	326	333	339	345
42	8.17	54,045	90	125	154	180	203	223	240	256	270	283	295	305	315	324	333	340	347	354	360
41	8.58	56,757	95	131	162	189	213	234	252	269	284	297	310	321	331	341	349	357	365	372	378
40	9.00	59,535	99	137	170	198	223	245	265	282	298	312	325	337	347	357	366	375	383	390	397
39	9.50	62,843	105	145	180	209	236	259	279	298	314	329	343	355	367	377	387	396	404	412	419
38	10.00	66,150	110	153	189	221	248	272	294	313	331	347	361	374	386	397	407	417	425	433	441
37	10.50	69,458	116	160	198	232	260	286	309	329	347	364	379	393	405	417	427	437	447	455	463
36	11.17	73,890	123	171	211	246	277	304	328	350	369	387	403	418	431	443	455	465	475	484	493
35	11.25	74,419	124	172	213	248	279	306	331	353	372	390	406	421	434	447	458	469	478	488	496