



**(800) 248-8498**

## Diesel Hammer Energy Output and Pile Bearing Chart APE Model D12-42

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.

Pile Bearing (tons) =  $2E/(S+.1)/2000$ , where E = Hammer energy (ft-lbs) and S = Pile set (inches per blow)

Ram Weight(lbs): 2,646

APE has no preference for these particular formulas and calculations over any other.

Blows per <u>Minute</u>	Stroke <u>(feet)</u>	Energy <u>(ft-lbs)</u>	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	10,584	18	24	30	35	40	44	47	50	53	55	58	60	62	64	65	67	68	69	71
59	4.17	11,034	18	25	32	37	41	45	49	52	55	58	60	62	64	66	68	69	71	72	74
58	4.33	11,457	19	26	33	38	43	47	51	54	57	60	62	65	67	69	71	72	74	75	76
57	4.50	11,907	20	27	34	40	45	49	53	56	60	62	65	67	69	71	73	75	77	78	79
56	4.67	12,357	21	29	35	41	46	51	55	59	62	65	67	70	72	74	76	78	79	81	82
55	4.83	12,780	21	29	37	43	48	53	57	61	64	67	70	72	75	77	79	80	82	84	85
54	5.00	13,230	22	31	38	44	50	54	59	63	66	69	72	75	77	79	81	83	85	87	88
53	5.17	13,680	23	32	39	46	51	56	61	65	68	72	75	77	80	82	84	86	88	90	91
52	5.33	14,103	24	33	40	47	53	58	63	67	71	74	77	80	82	85	87	89	91	92	94
51	5.50	14,553	24	34	42	49	55	60	65	69	73	76	79	82	85	87	90	92	94	95	97
50	5.75	15,215	25	35	43	51	57	63	68	72	76	80	83	86	89	91	94	96	98	100	101
49	6.00	15,876	26	37	45	53	60	65	71	75	79	83	87	90	93	95	98	100	102	104	106
48	6.25	16,538	28	38	47	55	62	68	74	78	83	87	90	93	96	99	102	104	106	108	110
47	6.50	17,199	29	40	49	57	64	71	76	81	86	90	94	97	100	103	106	108	111	113	115
46	6.83	18,072	30	42	52	60	68	74	80	86	90	95	99	102	105	108	111	114	116	118	120
45	7.17	18,972	32	44	54	63	71	78	84	90	95	99	103	107	111	114	117	119	122	124	126
44	7.50	19,845	33	46	57	66	74	82	88	94	99	104	108	112	116	119	122	125	128	130	132
43	7.83	20,718	35	48	59	69	78	85	92	98	104	109	113	117	121	124	127	130	133	136	138
42	8.17	21,618	36	50	62	72	81	89	96	102	108	113	118	122	126	130	133	136	139	142	144
41	8.58	22,703	38	52	65	76	85	93	101	108	114	119	124	128	132	136	140	143	146	149	151
40	9.00	23,814	40	55	68	79	89	98	106	113	119	125	130	135	139	143	147	150	153	156	159
39	9.50	25,137	42	58	72	84	94	104	112	119	126	132	137	142	147	151	155	158	162	165	168
38	10.00	26,460	44	61	76	88	99	109	118	125	132	139	144	150	154	159	163	167	170	173	176
37	10.50	27,783	46	64	79	93	104	114	123	132	139	146	152	157	162	167	171	175	179	182	185
36	11.17	29,556	49	68	84	99	111	122	131	140	148	155	161	167	172	177	182	186	190	194	197
35	11.25	29,768	50	69	85	99	112	123	132	141	149	156	162	168	174	179	183	187	191	195	198