



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D8-42

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): 1,764

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	7,056	12	16	20	24	26	29	31	33	35	37	38	40	41	42	43	44	45	46	47
59	4.17	7,356	12	17	21	25	28	30	33	35	37	39	40	42	43	44	45	46	47	48	49
58	4.33	7,638	13	18	22	25	29	31	34	36	38	40	42	43	45	46	47	48	49	50	51
57	4.50	7,938	13	18	23	26	30	33	35	38	40	42	43	45	46	48	49	50	51	52	53
56	4.67	8,238	14	19	24	27	31	34	37	39	41	43	45	47	48	49	51	52	53	54	55
55	4.83	8,520	14	20	24	28	32	35	38	40	43	45	46	48	50	51	52	54	55	56	57
54	5.00	8,820	15	20	25	29	33	36	39	42	44	46	48	50	51	53	54	56	57	58	59
53	5.17	9,120	15	21	26	30	34	38	41	43	46	48	50	52	53	55	56	57	59	60	61
52	5.33	9,402	16	22	27	31	35	39	42	45	47	49	51	53	55	56	58	59	60	62	63
51	5.50	9,702	16	22	28	32	36	40	43	46	49	51	53	55	57	58	60	61	62	64	65
50	5.75	10,143	17	23	29	34	38	42	45	48	51	53	55	57	59	61	62	64	65	66	68
49	6.00	10,584	18	24	30	35	40	44	47	50	53	55	58	60	62	64	65	67	68	69	71
48	6.25	11,025	18	25	32	37	41	45	49	52	55	58	60	62	64	66	68	69	71	72	74
47	6.50	11,466	19	26	33	38	43	47	51	54	57	60	63	65	67	69	71	72	74	75	76
46	6.83	12,048	20	28	34	40	45	50	54	57	60	63	66	68	70	72	74	76	77	79	80
45	7.17	12,648	21	29	36	42	47	52	56	60	63	66	69	71	74	76	78	80	81	83	84
44	7.50	13,230	22	31	38	44	50	54	59	63	66	69	72	75	77	79	81	83	85	87	88
43	7.83	13,812	23	32	39	46	52	57	61	65	69	72	75	78	81	83	85	87	89	90	92
42	8.17	14,412	24	33	41	48	54	59	64	68	72	75	79	81	84	86	89	91	93	94	96
41	8.58	15,135	25	35	43	50	57	62	67	72	76	79	83	86	88	91	93	95	97	99	101
40	9.00	15,876	26	37	45	53	60	65	71	75	79	83	87	90	93	95	98	100	102	104	106
39	9.50	16,758	28	39	48	56	63	69	74	79	84	88	91	95	98	101	103	106	108	110	112
38	10.00	17,640	29	41	50	59	66	73	78	84	88	92	96	100	103	106	109	111	113	116	118
37	10.50	18,522	31	43	53	62	69	76	82	88	93	97	101	105	108	111	114	117	119	121	123
36	11.17	19,704	33	45	56	66	74	81	88	93	99	103	107	111	115	118	121	124	127	129	131
35	11.25	19,845	33	46	57	66	74	82	88	94	99	104	108	112	116	119	122	125	128	130	132