



**(800) 248-8498**

## Hammer Energy Output and Pile Bearing Chart APE Model 6-2 Hydraulic Impact Hammer

The energy output is based on the identical Piston/Travel calculations utilized in the *FHWA Gates Formula*.

The pile bearing chart is based on the FHWA Gates Formula for pile bearing and is provided for the user's convenience only.

$$\text{Pile Bearing (tons)} = ((1.75 * \text{SQRT "E" LOG}_{10} * 10N) - 100) / 2$$

*E = Developed Energy and N = Number of Blows Per Inch*

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

Ram Weight(lbs): 12,000

Stroke (inches)	Stroke	Energy	Pile Set (Blows per inch)																		
	(feet)	(ft-lbs)	<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>
3	0.25	3,000	12	21	27	31	35	38	41	44	46	48	50	51	53	54	56	57	58	59	60
6	0.50	6,000	38	50	59	65	71	75	79	82	86	88	91	93	95	97	99	101	103	104	106
9	0.75	9,000	58	73	83	91	98	103	108	112	116	119	123	125	128	131	133	135	137	139	141
12	1.00	12,000	75	92	104	113	120	127	132	137	142	146	149	153	156	159	161	164	166	168	171
15	1.25	15,000	89	108	122	132	141	148	154	159	164	169	173	177	180	183	186	189	192	194	197
18	1.50	18,000	103	123	138	149	159	167	173	179	185	190	194	198	202	205	209	212	215	218	220
21	1.75	21,000	115	137	153	165	175	184	191	198	204	209	214	218	222	226	229	233	236	239	242
24	2.00	24,000	126	150	167	180	191	200	208	215	221	227	232	237	241	245	249	252	256	259	262

**Refusal for APE Hydraulic Impact Hammers is 10 blows per inch Maximum**