(800) 248-8498

Hammer Energy Output and Pile Bearing Chart

APE Model 4-2 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.

Pile Bearing (tons) = ((1.75*SQRT "E" LOG10*10N)-100) /2

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

Ram Weight(lbs): 8,000

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

Stroke	Energy	Pile Set (Blows per inch)																		
(feet)	(ft-lbs)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0.25	2,000	1	8	13	16	20	22	24	26	28	30	31	33	34	35	36	37	38	39	40
0.50	4,000	22	32	39	44	48	52	55	58	61	63	65	67	69	70	72	73	75	76	77
0.75	6,000	38	50	59	65	71	75	79	82	86	88	91	93	95	97	99	101	103	104	106
1.00	8,000	52	66	75	83	89	94	99	103	107	110	113	115	118	120	122	125	127	128	130
1.25	10,000	64	79	90	99	106	111	117	121	125	129	132	135	138	140	143	145	147	149	151
1.50	12,000	75	92	104	113	120	127	132	137	142	146	149	153	156	159	161	164	166	168	171
1.75	14,000	85	103	116	126	134	141	147	152	157	161	165	169	172	175	178	181	183	186	188
2.00	16,000	94	113	127	138	147	154	161	166	171	176	180	184	188	191	194	197	200	202	205

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