



(800) 248-8498

Diesel Hammer Energy Output and Pile Bearing Chart APE Model D150-42

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): 33,075

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	132,300	221	305	378	441	496	545	588	627	662	693	722	748	772	794	814	833	851	867	882
59	4.17	137,923	230	318	394	460	517	568	613	653	690	722	752	780	805	828	849	868	887	904	919
58	4.33	143,215	239	330	409	477	537	590	637	678	716	750	781	809	835	859	881	902	921	938	955
57	4.50	148,838	248	343	425	496	558	613	662	705	744	780	812	841	868	893	916	937	957	975	992
56	4.67	154,460	257	356	441	515	579	636	686	732	772	809	843	873	901	927	951	973	993	1012	1030
55	4.83	159,752	266	369	456	533	599	658	710	757	799	837	871	903	932	959	983	1006	1027	1047	1065
54	5.00	165,375	276	382	473	551	620	681	735	783	827	866	902	935	965	992	1018	1041	1063	1083	1103
53	5.17	170,998	285	395	489	570	641	704	760	810	855	896	933	967	997	1026	1052	1077	1099	1120	1140
52	5.33	176,290	294	407	504	588	661	726	784	835	881	923	962	996	1028	1058	1085	1110	1133	1155	1175
51	5.50	181,913	303	420	520	606	682	749	809	862	910	953	992	1028	1061	1091	1119	1145	1169	1192	1213
50	5.75	190,181	317	439	543	634	713	783	845	901	951	996	1037	1075	1109	1141	1170	1197	1223	1246	1268
49	6.00	198,450	331	458	567	662	744	817	882	940	992	1040	1082	1122	1158	1191	1221	1250	1276	1300	1323
48	6.25	206,719	345	477	591	689	775	851	919	979	1034	1083	1128	1168	1206	1240	1272	1302	1329	1354	1378
47	6.50	214,988	358	496	614	717	806	885	956	1018	1075	1126	1173	1215	1254	1290	1323	1354	1382	1409	1433
46	6.83	225,902	377	521	645	753	847	930	1004	1070	1130	1183	1232	1277	1318	1355	1390	1422	1452	1480	1506
45	7.17	237,148	395	547	678	790	889	976	1054	1123	1186	1242	1294	1340	1383	1423	1459	1493	1525	1554	1581
44	7.50	248,063	413	572	709	827	930	1021	1103	1175	1240	1299	1353	1402	1447	1488	1527	1562	1595	1625	1654
43	7.83	258,977	432	598	740	863	971	1066	1151	1227	1295	1357	1413	1464	1511	1554	1594	1631	1665	1697	1727
42	8.17	270,223	450	624	772	901	1013	1113	1201	1280	1351	1415	1474	1527	1576	1621	1663	1701	1737	1770	1801
41	8.58	283,784	473	655	811	946	1064	1169	1261	1344	1419	1486	1548	1604	1655	1703	1746	1787	1824	1859	1892
40	9.00	297,675	496	687	851	992	1116	1226	1323	1410	1488	1559	1624	1683	1736	1786	1832	1874	1914	1950	1985