

ICE 80S DIESEL PILE HAMMER BEARING CHART

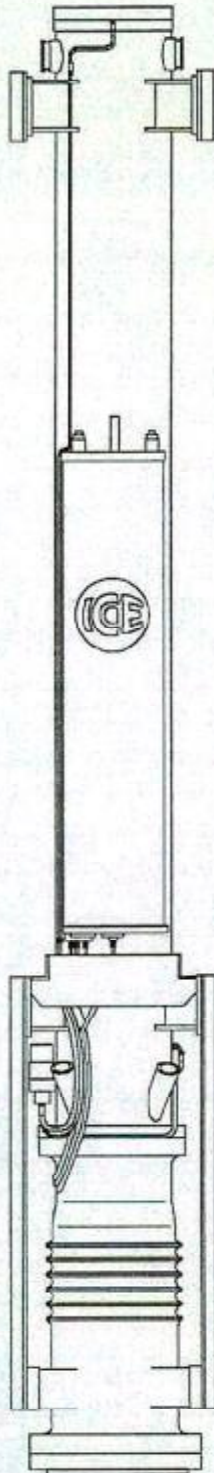
This chart is based on the Engineering News formula for pile bearing and is provided as a convenience only for those applications where this formula is specified. ICE has no preference for this particular formula over any other.

$$\text{Pile bearing (tons)} = 2E/(S + 0.1)/2000 \quad \text{where } E = \text{Hammer energy (ft-lbs)} \text{ and } S = \text{Pile set (inches per blow)}$$

Blows per Minute	Ram Stroke (feet)	Hammer Energy (ft-lbs)	Pile Set (Blows per inch)																		
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
38	10.00	80,000	133	185	229	267	300	329	356	379	400	419	436	452	467	480	492	504	514	524	533
39	9.36	74,880	125	173	214	250	281	308	333	355	374	392	408	423	437	449	461	471	481	491	499
40	8.83	70,640	118	163	202	235	265	291	314	335	353	370	385	399	412	424	435	445	454	463	471
41	8.39	67,120	112	155	192	224	252	276	298	318	336	352	366	379	392	403	413	423	431	440	447
42	7.97	63,760	106	147	182	213	239	263	283	302	319	334	348	360	372	383	392	401	410	418	425
43	7.57	60,560	101	140	173	202	227	249	269	287	303	317	330	342	353	363	373	381	389	397	404
44	7.20	57,600	96	133	165	192	216	237	256	273	288	302	314	326	336	346	354	363	370	377	384
45	6.84	54,720	91	126	156	182	205	225	243	259	274	287	298	309	319	328	337	345	352	359	365
46	6.54	52,320	87	121	149	174	196	215	233	248	262	274	285	296	305	314	322	329	336	343	349
47	6.23	49,840	83	115	142	166	187	205	222	236	249	261	272	282	291	299	307	314	320	327	332
48	5.91	47,280	79	109	135	158	177	195	210	224	236	248	258	267	276	284	291	298	304	310	315
49	5.63	45,040	75	104	129	150	169	185	200	213	225	236	246	255	263	270	277	284	290	295	300
50	5.33	42,640	71	98	122	142	160	176	190	202	213	223	233	241	249	256	262	268	274	279	284
51	5.07	40,560	68	94	116	135	152	167	180	192	203	212	221	229	237	243	250	255	261	266	270
52	4.80	38,400	64	89	110	128	144	158	171	182	192	201	209	217	224	230	236	242	247	252	256
53	4.52	36,160	60	83	103	121	136	149	161	171	181	189	197	204	211	217	223	228	232	237	241
54	4.24	33,920	57	78	97	113	127	140	151	161	170	178	185	192	198	204	209	214	218	222	226
55	3.93	31,440	52	73	90	105	118	129	140	149	157	165	171	178	183	189	193	198	202	206	210

CAUTION: Driving at ten blows per inch (set of 0.1 inch per blow) is considered practical refusal. Driving in excess of ten blows per inch for more than six inches of driving or driving in excess of 20 blows per inch at all is considered improper use and will void the hammer warranty.

ICE MODEL 80S DIESEL PILE HAMMER



WORKING SPECIFICATIONS

Rated energy.....	80,000 ft-lbs (11064 kg-m)
Minimum energy.....	32,000 ft-lbs (4426 kg-m)
Stroke at rated energy.....	10' (305 cm)
Maximum obtainable stroke.....	12'-5" (378 cm)
Speed (blows per minute).....	38-55
Bearing based on EN formula.....	400 tons (363 tons)

WEIGHTS

Bare hammer.....	15,400 lbs (6985 kg)
Ram.....	8,000 lbs (3629 kg)
Anvil.....	1,220 lbs (553 kg)
Typ. wt. (w/ 14" concrete cap in 26" leads)....	17,500 lbs (7938 kg)

CAPACITIES (adequate for normal day)

Diesel fuel tank.....	18 gal (68 l)
Lube oil tank.....	8 gal (30 l)

DIMENSIONS OF HAMMER

Width (side to side).....	26" (660 mm)
Depth.....	37 1/2" (953 mm)
Centerline to front.....	17" (432 mm)
Centerline to rear.....	20 1/2" (521 mm)
Length (hammer only).....	18'-11" (577 cm)
Operating length (top of ram to top of pile).....	29'-4" (894 cm)

DIMENSIONS OF LEADS

Face width of guide rails.....	8" (200 mm)
Distance between guide rails.....	26 1/2" (670 mm)