

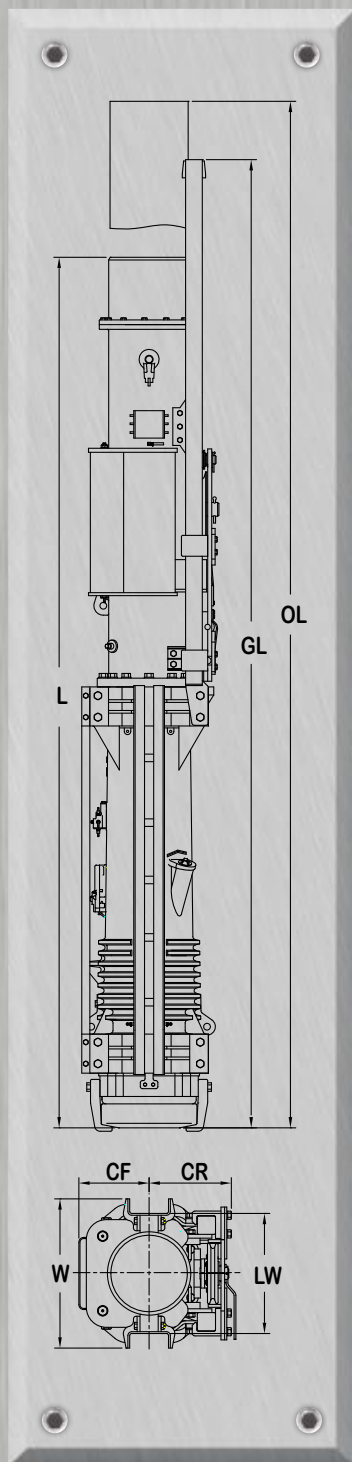
ICE[®] MODEL I-160^{v2}

SINGLE-ACTING DIESEL PILE HAMMER



Simple, reliable design
Automatic lubrication
Optional variable fuel control
Optional hydraulic trip

Equipped with ICE[®] Box leads guides
Uses standard ICE[®] drive caps
Swinging, fixed and sliding leads available
Spotters available for precise pile positioning



Working Specifications

Ram weight	35,275 lbs	16 000 kg
Rated energy (fuel setting 4)	396,840 ft-lbs	580 040 Nm
Stroke at rated energy (fuel setting 4)	11.25 feet	3 400 mm
Energy at fuel setting 3	358,750 ft-lbs	486 410 Nm
Energy at fuel setting 2	312,460 ft-lbs	423 650 Nm
Energy at fuel setting 1	289,300 ft-lbs	392 260 Nm
Energy at maximum stroke	579,330 ft-lbs	785 470 Nm
Maximum geometric stroke	16.42 feet	5 000 mm
Blows per minute	35-45	

Weights

Bare hammer with trip	76,700 lbs	34 800 kg
Hammer with box lead guides	79,700 lbs	36 150 kg
Drive cap base	DCB-3HD	
Drive cap base weight	2,340 lbs	1 061 kg
Striker plate	1,410 lbs	640 kg
Cushion material	192 lbs	87 kg
Pile insert	DCC-24	
Pile insert weight	1,775 lbs	805 kg
Operating weight with drive cap above	85,417 lbs	38 743 kg

Capacities

Fuel tank	79.3 gal	300 l
Lube oil tank	19.9 gal	75.5 l

Dimensions

Hammer length (L)	24.8 ft	7 555 mm
Length with trip guides (GL)	25.5 ft	7 755 mm
Length at max stroke (OL)	30.4 ft	9 260 mm
Overall width (W)	53.1 in	1 350 mm
Standard box leads width (LW)	46.0 in	1 168 mm
Overall depth (CR + CF)	57.2 in	1 452 mm
Centerline to rear (CR)	30.8 in	782 mm
Centerline to front (CF)	26.4 in	670 mm

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INTERNATIONAL CONSTRUCTION EQUIPMENT, INC.

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ICE® MODEL I-160^{v2}

SINGLE-ACTING DIESEL PILE HAMMER

BEARING CHART



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Blows per Minute	Ram Stroke	Hammer 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
35	11.5	405,268	675	773	842	896	940	978	1,010	1,039	1,064	1,087	1,108	1,128	1,145	1,162	1,178	1,192	1,206	1,219	1,232
36	10.8	382,496	654	749	817	869	912	948	980	1,008	1,032	1,055	1,075	1,094	1,111	1,128	1,143	1,157	1,170	1,183	1,195
37	10.2	361,544	635	727	793	844	886	921	951	978	1,002	1,024	1,044	1,062	1,079	1,095	1,110	1,123	1,137	1,149	1,161
38	9.7	342,225	616	706	770	820	860	894	924	950	974	995	1,014	1,032	1,049	1,064	1,078	1,092	1,104	1,116	1,128
39	9.2	324,373	598	686	748	797	836	869	898	924	947	967	986	1,003	1,020	1,034	1,048	1,062	1,074	1,086	1,097
40	8.7	307,842	582	667	728	775	813	846	874	899	921	941	959	976	992	1,006	1,020	1,033	1,045	1,056	1,067
41	8.3	292,507	566	649	708	754	791	823	851	875	896	916	934	950	966	980	993	1,006	1,017	1,028	1,039
42	7.9	278,254	551	632	689	734	771	802	828	852	873	892	910	926	941	954	967	979	991	1,002	1,012
43	7.5	264,983	536	615	672	715	751	781	807	830	851	869	887	902	917	930	943	955	966	976	986
44	7.2	252,608	522	600	655	697	732	761	787	809	830	848	864	880	894	907	919	931	942	952	962
45	6.8	241,047	509	585	638	680	714	743	768	790	809	827	843	858	872	885	897	908	919	929	939

Constant improvement and engineering progress make it necessary that ICE®, Inc reserve the right to make specification changes without notice. Please consult ICE® for the latest available information.

This chart is based on the FHWA-modified version of the Gates 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.

$$R_u = \frac{1}{2} [1.75 \sqrt{E} \log(10 N) - 100]$$

Where:

R_u = Ultimate pile bearing (tons)

E = Rated hammer energy in ft-lbs, or (ram weight × stroke) if lower fuel setting

N = Blow count per 1 in

CAUTION: Driving at ten blows per inch 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.

NOTE: The FHWA recommends using a factor for safety of 3.5 with the Gates formula.