

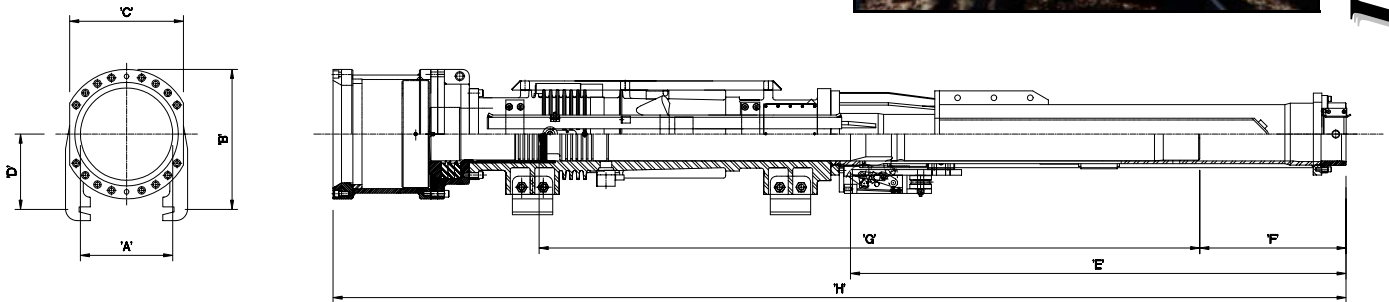
## B-3505 General Specifications

<b>Performance</b>		
Ram Weight X Max. Stroke	46,000 ft•lb	62 kN•m
Impact energy	28,711 ft•lb	38.9 kN•m
Ram weight/mass	4,000 lb	1,800 kg
Maximum ram stroke	11.5 ft	3.5 m
Impact block weight/mass	802 lbs	364 kg
Blows per minute	36-60	36-60
<b>Operating Weight</b>		
Total operating weight/mass	12,000 lb	5,442 kg
Weight of tool box	150 lb	68 kg
Total shipping weight/mass	12,150 lb	5,510 kg
<b>Capacity</b>		
Fuel tank capacity	16 gal (U.S)	62 liters
Fuel consumption	1.4gal/hr.	5.3 liters/hr.
Oil tank capacity	1.9 gal (U.S)	7.3 liters
Oil consumption	0.16 gal/hr.	0.6 liters/hr.



*Impact Hammers B-3505*

## Dimensional Specifications

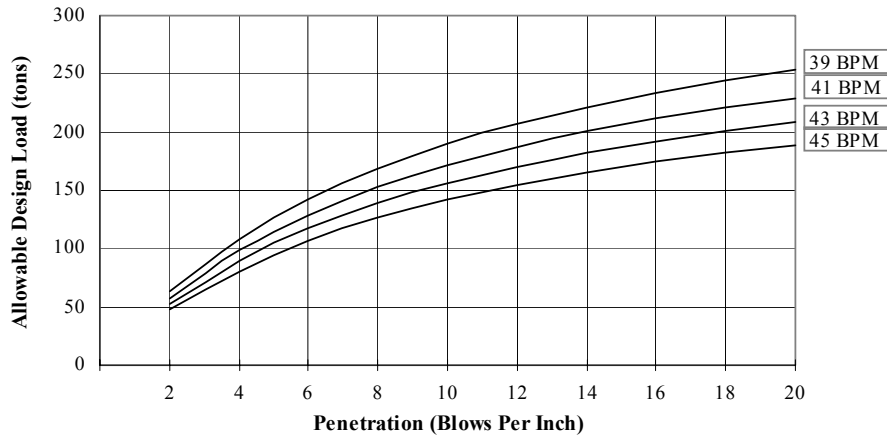


<b>Dimensions</b>		<b>Model-3505</b>						
<b>Units</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
<b>Imperial</b>	21.5 in	27.5in	24in	15in	109 in	32.2 in	145.5 in	222.7 in
<b>Metric</b>	546 mm	699mm	610mm	381mm	2769 mm	818 mm	3696 mm	5657 mm

<b>B-3505 4000 lb Piston</b>					
BPM	Stroke (ft)	Potential Energy (ft.lb)	Velocity (ft/s)	Maximum Impact Force (tons)	Impact Energy (ft.lb)
35	11.8	47,200	22.5	325	33,040
36	11.2	44,800	22.0	318	30,062
37	10.6	42,400	21.5	311	28,711
38	10.0	40,000	21.0	303	27,391
39	9.5	38,000	20.5	296	26,102
40	9.0	36,000	20.0	289	24,844
41	8.6	34,400	19.5	282	23,618
42	8.2	32,800	19.0	274	22,422
43	7.8	31,200	18.5	267	21,257
44	7.5	30,000	18.0	260	20,124
45	7.1	28,400	17.5	253	19,021

Stroke height is a function of soil resistance and may not be attainable in certain driving conditions.  
 Standard Operating Range.

**Pile Capacity (from Engineering News Formula)**



**WEAP Input Data**

Ram			Stroke				
Weight	Length	Diameter	Maximum	Minimum	Efficiency		
4.00 Kips	145.4 in	11.70 in	11.80 ft.	4.00	0.800		
Impact Block Information							
Weight	Length	Diameter	C.o.R	RoundOut			
0.80 Kips	25.87 in	11.81 in	0.900	0.0100			
Diesel Hammer Combustion Chamber Information							
Combustion Chamber Inf.			Combustion		A I Volume		
C-Stroke	Area	Volume	Delay	Duration	ExpCoef	Ignition	Fin.Comb.
21.00 in	109.61 in <sup>2</sup>	188.00 in <sup>3</sup>	.000	.000	1.250	206.8 in <sup>3</sup>	249.0 in <sup>3</sup>
Pressure							
Atmosphere	FS 1	FS 2	FS 3	FS 4	FS 5	Coef. Conf.	
14.7 psi	1400 psi	1300 psi	1200 psi	1100 psi	1000 psi	1.0	
Helmet And Hammer Cushion Properties							
Helmet		Hammer Cushion					
Weight	Material	WEAP Input	CoR	Cushion Area	Thickness		
2.00 Kips	Steel	30000 Ksi	0.70	346 in <sup>2</sup>	6.00 in		