AMERICAN PILEDRIVING EQUIPMENT, INC.

FIELD CATALOG

GO DEEP OR GO HOME



APE RULES FOR DRIVING/EXTRACTING PILES

1. NEVER STAND UNDER FOUNDATION EQUIPMEN
--

- 2. START WITH PILES IN GOOD CONDITION.
- 3. PUT ALL CLAMP TEETH IN CONTACT WITH PILE.
- 4. DRIVE IN STEPS EIGHT FEET OR LESS.
- 5. KEEP SHEETS PLUMB.
- 6. COME UP TO SPEED BEFORE DOING WORK.
- 7. NO DANCING AVOID DENSIFICATION.
- 8. DRIVE PAST OBSTACLES AND THEN GO BACK.
- 9. BACKHOE ON SITE TO REMOVE OBSTACLES.
- 10. LEAD WITH THE BALL OF THE SHEET PILE.
- IV. LEAD WITH THE BALL OF THE SHEET PILE.
- 11. PROBE THE PILE IF IT APPEARS STUCK.
- 12. NEVER RUSH THE SHEET PILE FOREMAN.
- 13. SLOW AND PLUMB AND THE JOB WILL GET DONE.
- 14. MELTED INNER LOCKS = PILES OUT OF PLUMB.
- 15. LOW CLAMP PRESSURE MEANS JAW FAILURES.
- 16. WAIT FOR VIBRO TO GET TO FULL SPEED THEN PULL.
- 17. DON'T OVER EXCAVATE LOWER THE RING.
- 18. LOOK AT THE JAWS DURING DRIVING.
- 19. BEWARE OF CRACKED OR BROKEN SHEETS.
- 20. IN SANDY SOILS DRIVE FASTER.
- 21. IN CLAY AMPLITUDE IS EVERYTHING.
- 22. LOW DRIVE PRESSURE MEANS EASY WORK.
- 23. HIGH PRESSURE MEANS FRICTION ON PILES.
- 24. OVER 4500 PSI MEANS BIGGER HAMMER NEEDED.
- 25. NO AMPLITUDE MEANS BIGGER HAMMER NEEDED.
- 23. NO AMI EN ODE MEANO BIOGEN HAMMEN NEEDED
- 26. CAISSONS NEED HEAVY WALL TO AVOID FLEX.
- 27. CHECK CLAMP BOLTS EACH MORNING.
- 28. READ THE MANUAL KNOW YOUR MACHINE.
- 29. ATTACH WHIP LINE TO PILE WHEN PULLING.
- 30. KNOW YOUR LINE PULL.
- 31. EXTRACT STRAIGHT LOOK AT BOOM AND CABLE.
- 32. GIVE BOOM STOPS SOME ROOM.
- 33. STALLED ENGINE MEANS DIRTY FUEL FILTERS.
- 34. NEVER STAND UNDER FOUNDATION EQUIPMENT.



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VIBRATORY DRIVER/EXTRACTORS



VIDRAIURI	EQUATIONS
Amplitude	em * 2 vm
Drive Force In U.S. Tons	em * f ² * 0.0142 1,000,000
Amplitude & Drive Force Variables	em = Eccentric Moment f = Frequency vm = Vibrating Mass (lb)
Pile Weight per Foot	(od - wt) * wt * 10.69
Pile Weight Variables	od = Pile Diameter (in) wt = Pile Wall Thickness (in)

VIRDATORY EQUATIONS

Vibrating Mass equals the total of the vibratory gearbox, inner suppressor, pile and a minimum of 4% for soil bond to pile.



					VIB	RAT	ORY	DRI	VER	/ EXT	RAC	СТО	R				DI 🚺	EE J&M V IBF RIVER/ E XTRAC AGE 44	
	3	6	15	20	50	100	150	150T	200	200T	200-6	200-6T	200- 6T2	200- 6T3	300	400	400P2	600	600B
Eccentric Moment	30 in-lbs (.35 kg-m)	60 in-lbs (.69 kg-m)	600 in-lbs (6.91 kg-m)	900 in-lbs (10.37 kg-m)	1,300 in-lbs (14.98 kg-m)	2,200 in-lbs (25.35 kg-m)	2,200 in-lbs (25.35 kg-m)	2,600 in-lbs (29.96 kg-m)	4,400 in-lbs (50.69 kg-m)	5,200 in-lbs (59.91 kg-m)	6,600 in-lbs (76.04 kg-m)	7,000 in-lbs (80.65 kg-m)	7,400 in-lbs (85.26 kg-m)	7,800 in-lbs (89.87 kg-m)	5,750 _{In-lbs} (66.25 kgm)	11,500 in-lbs (132.49 kg-m)	11,500 in-lbs (132.49 kg-m)	17,200 in-lbs (198.17 kg-m)	17,200 in-lbs (198.17 kg-m)
Drive Force at Rated Frequency	2 tons (18 kN)	4 tons (37 kN)	23 tons (206 kN)	35 tons (310 kN)	50 tons (447 kN)	85 tons (757 kN)	85 tons (757 kN)	101 tons (894 kN)	170 tons (1,513 kN)	201 tons (1,788 kN)	255 tons (2,270 kN)	271 tons (2,408 kN)	286 tons (2,545 kN)	302 tons (2,683 kN)	160 tons (1,424 kN)	298 tons (2,648 kN)	298 tons (2,648 kN)	445 tons (3,960 kN)	445 tons (3,960 kN)
Rated Frequency	0 - 2,200 vpm	0 -2,200 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,400 vpm	0 - 1,350 vpm	0 - 1,350 vpm	0 - 1,350 vpm	0 - 1,350 vpm
Max Line Pull	6 tons (53 kN)	6 tons (53 kN)	28 tons (249 kN)	28 tons (249 kN)	56 tons (498 kN)	45 tons (400 kN)	108 tons (961 kN)	108 tons (961 kN)	133 tons (1,183 kN)	133 tons (1,183 kN)	185 tons (1,646 kN)	185 tons (1,646 kN)	185 tons (1,646 kN)	185 tons (1,646 kN)	150 tons (1,334 kN)	234 tons (2,082 kN)	234 tons (2,082 kN)	351 tons (3,123 kN)	451 tons (4,012 kN)
Max Bare Hammer Weight	450 lb (204 kg)	720 lb (327 kg)	1,580 lb (717 kg)	2,510 lb (1,139 kg)	4,550 lb (2,064 kg)	5,900 lb (2,676 kg)	8,330 lb (3,778 kg)	8,500 lb (3,856 kg)	12,760 lb (5,788 kg)	12,960 lb (5,879 kg)	18,900 lb (8,573 kg)	19,100 lb (8,664 kg)	19,300 lb (8,754 kg)	19,500 lb (8,845 kg)	19,500 lbs (8,845 kg)	31,570 lb (14,320 kg)	31,570 lb (14,320 kg)	48,500 lb (21,999 kg)	54,500 lb (24,721 kg)
	6.00 in (15 cm)				14.63 in (37 cm)	14.50 in (37 cm)	14.25 in (36 cm)	14.25 in (36 cm)	14.75 in (37 cm)	14.00 in (36 cm)	33.00 in (84 cm)	33.00 in (84 cm)	37.00 in (94 cm)	37.00 in (94 cm)					
Length					57.25 in (145 cm)			88.75 in (225 cm)			140.00 in (356 cm)	140.00 in (356 cm)		140.00 in (356 cm)	110.00 in (279 cm)	141.00 in (358 cm)	141.00 in (358 cm)	180.00 in (457 cm)	180.00 in (457 cm)
Height w/o Clamp (Model 3 & 6 Incl. Clamp)							72.38 in (184 cm)		65.50 in (166 cm)	65.6 in (167 cm)	75.00 in (191 cm)	75.00 in (191 cm)		75.00 in (191 cm)	106.00 in (269 cm)	88.50 in (225 cm)	88.50 in (225 cm)	104.50 in (265 cm)	123.50 in (314 cm)

VARIABLE MOMENT VIBRATORY DRIVER/EXTRACTORS

	120VM	170VM	250VM
Eccentric Moment	1,600 in-lbs	2,250 in-lbs	4,500 in-lbs
	(18.43 kg-m)	(25.92 kg-m)	(51.85 kg-m)
Drive Force	95 tons	134 tons	269 tons
	(849 kN)	(1,195 kN)	(2,389 kN)
Frequency (vpm) Maximum	0 - 2,050 vpm	0 - 2,050 vpm	0 - 2,050 vpm
Max Line Pull	81 tons	81 tons	99 tons
	(721 kN)	(721 kN)	(881 kN)
Max Bare Hammer Weight	7,500 lb	8,900 lb	15,400 lb
	(3,402 kg)	(4,037 kg)	(6,985 kg)
Throat Width	14.00 in	14.00 in	14.00 in
	(36 cm)	(36 cm)	(36 cm)
Length	69.00 in	69.00 in	69.00 in
	(175 cm)	(175 cm)	(175 cm)
Height w/o Clamp	77.00 in	77.00 in	102.00 in
	(196 cm)	(196 cm)	(259 cm)

APE Variable Moment Technology lets our driver/extractors shine in jobs with vibration sensitive requirements. APE Variable Moment Technology is teamed with all the special features available with the full line of APE Vibratory Driver/Extractors.

- Gun drilled top plate and manifolds eliminate unnecessary hydraulic hoses.
- O-ring sealed gearbox makes transition to underwater operations easy.
- Vegetable hydraulic oil reduces environmental impact and fines if
- a spill occurs.
- Long term warranty protection





VARIABLE MOMENT | EXCAVATOR MOUNTED





EXCAVATOR MOUNTED VIBRATORY DRIVER/EXTRACTORS

		E-SE	RIES		X-SE	RIES
	15E	20E	50E	100E	33X	64X
Eccentric Moment	600 in-lbs (6.91 kg-m)	900 in-lbs (10.37 kg-m)	1,300 in-lbs (14.98 kg-m)	2,200 in-lbs (25.35 kg-m)	450 in-lbs (5.18 kg-m)	781 in-lbs (9.00 kg-m)
Drive Force	23 tons	35 tons	50 tons	85 tons	17 tons	30 tons
	(206 kN)	(310 kN)	(447 kN)	(757 kN)	(155 kN)	(269 kN)
Max Frequency (vpm)	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm
Max Line Pull	9 tons	18 tons	18 tons	44 tons	10 tons	32 tons
	(80 kN)	(160 kN)	(160 kN)	(391 kN)	(89 kN)	(285 kN)
Max Bare	1,690 lb	2,540 lb	3,940 lb	4,840 lb	1,900 lb	4,650 lb
Hammer Weight	(767 kg)	(1,152 kg)	(1,787 kg)	(2,195 kg)	(862 kg)	(2,109 kg)
Throat Width	9.63 in	12.38 in	14.00 in	14.50 in	12.00 in	13.75 in
	(24 cm)	(31 cm)	(36 cm)	(37 cm)	(30 cm)	(35 cm)
Length	36.50 in	36.50 in	57.25 in	57.00 in	40.00 in	70.00 in
	(93 cm)	(93 cm)	(145 cm)	(145 cm)	(102 cm)	(178 cm)
Height w/o	40.13 in	47.88 in	49.13 in	56.50 in	32.00 in	42.50 in
Clamp	(102 cm)	(122 cm)	(125 cm)	(144 cm)	(81 cm)	(108 cm)

LOW HEADROOM VIBRATORY DRIVER/EXTRACTORS

	150	200	200-6
Eccentric Moment	2,200 in-lbs	4,400 in-lbs	6,600 in-lbs
	(25.35 kg-m)	(50.69 kg-m)	(76.04 kg-m)
Drive Force	85 tons	170 tons	255 tons
	(756 kN)	(1,513 kN)	(2,270 kN)
Max Frequency (vpm)	0 - 1,650 vpm	0 - 1,650 vpm	0 - 1,650 vpm
Max Line Pull	Consult	Consult	Consult
	Factory	Factory	Factory
Max Bare Hammer Weight	Consult	Consult	Consult
	Factory	Factory	Factory
Throat Width	Consult	Consult	Consult
	Factory	Factory	Factory
Length	Consult	Consult	Consult
	Factory	Factory	Factory
Height w/o Clamp	Consult	Consult	Consult
	Factory	Factory	Factory







LOW HEADROOM & TANDEM DRIVER/EXTRACTORS





TANDEM VIBRATORY DRIVER/EXTRACTORS

	50	100	150	200	400	600					
	Tandem	Tandem	Tandem	Tandem	Tandem	Tandem					
	Low	Low	Low	Low	11' Quad	15' Quad					
	Headroom	Headroom	Headroom	Headroom	Clamp	Clamp					
Eccentric Moment	2,600 in-lbs (29.96 kg-m)	4,400 in-lbs (50.69 kg-m)	4,400 in-lbs (50.69 kg-m)	8,800 in-lbs (101.39 kg-m)	23,000 in-lbs (264.99 kg-m)	34,400 in-lbs (396.33 kg-m)					
Drive	101 tons	170 tons	181 tons	340 tons	595 tons	890 tons					
Force	(949 kN)	(1,513 kN)	(1,606 kN)	(3,026 kN)	(5,294 kN)	(7,918 kN)					
Max	0 - 1,650	0 - 1,650	0 - 1,700	0 - 1,650	0 - 1,350	0 - 1,350					
Frequency	vpm	vpm	vpm	vpm	vpm	vpm					
Pile Clamping Force	Consult Factory	Consult Factory	Consult Factory	Consult Factory	Consult Factory	Consult Factory					
Max Line	112 tons	186 tons	216 tons	266 tons	468 tons	702 tons					
Pull	(996 kN)	(1,655 kN)	(1,922 kN)	(2,366 kN)	(4,164 kN)	(6,245 kN)					
Total Setup	Consult	Consult	Consult	Consult	Consult	Consult					
Weight	Factory	Factory	Factory	Factory	Factory	Factory					
Max	Consult	Consult	Consult	Consult	Consult	Consult					
Pressure	Factory	Factory	Factory	Factory	Factory	Factory					
Length	Consult	Consult	Consult	Consult	Consult	Consult					
	Factory	Factory	Factory	Factory	Factory	Factory					
Width	Consult	Consult	Consult	Consult	Consult	Consult					
	Factory	Factory	Factory	Factory	Factory	Factory					
Height with	Consult	Consult	Consult	Consult	Consult	Consult					
Clamp	Factory	Factory	Factory	Factory	Factory	Factory					
Note: All technica	Note: All technical specifications are subject to change without notice.										





ATTACHMENTS/ACCESSORIES

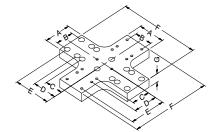
DRIVER/EXTRACTOR ACCESSORIES

Specification	Weight	Α	В	С	D	E	F	G	Н
90 Degree Turn Plate	600 lb (272 kg)	12 in (30.48 cm)	8 in (20.3 cm)	8.25 in (21 cm)	11 in (28 cm)	16.5 in (42 cm)	37 in (94 cm)	3.50 in (8.9 cm)	-
4' Extension	2,500 lb (1,134 kg)	37 in (94 cm)	11 in (28 cm)	8.25 in (21 cm)	4.94 in (12.55 cm)	48 in (122 cm)	12 in (30.5 cm)	8 in (20.3 cm)	-
8' Extension	4,000 lb (1,814 kg)	37 in (94 cm)	11 in (28 cm)	8.25 in (21 cm)	4.94 in (12.55 cm)	96 in (243.8 cm)	12 in (30.5 cm)	8 in (20.3 cm)	-
Caisson Beam to Attachment Adapter	1,200 lb (680 kg)	4.94 in (12.5 cm)	8.00 in (20.3 cm)	8.25 in (21 cm)	11 in (28 cm)	16.5 in (42 cm)	37 in (94 cm)	11.5 in (29.21 cm)	14 in (35.56 cm)

HYBRID EXTENSION
CALLED THE
CALIFORNIA STINGER
FOR TIGHT WORKING
DIMENSIONS.

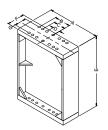


90 DEGREE TURN PLATE.





4' & 8' EXTENSION

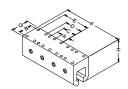




ATTACHMENT
ADAPTERS USED
TO ALLOW THE
EXTRACTION OF A
CASING WITH AN
EXTENDED REBAR
CAGE



CAISSON BEAM TO ATTACHMENT ADAPTER







CLAMPS



MODEL 20, 50 & 150 UNIVERSAL CLAMPS																					
	Weight	Piston Dia.	Piston Stroke	Cyl. Force	Clamp Force	A	В	С	D		E	F	G	н	ı	J	К	L	М	N	Р
20	790 lb (358 kg)	5 in (127 mm)	2.25 in (57 mm)	88 kips (391 kN)	177 kips (787 kN)	29.63 in (752 mm)	10 in (254 mm)	28.63 in (727 mm)	11.75 in (298 mm)		8.56 in (217 mm)	4.62 in (117 mm)	2.12 in (54 mm)	6 in (152 mm)	13.5 in (343 mm)	4.62 in (117 mm)	2.75 in (70 mm)	8.25 in (209 mm)	4 in (101 mm)	7 in (178 mm)	5 in (127 mm)
50	1,350 lb (612 kg)	8 in (203 mm)	2.25 in (57 mm)	226 kips (1005 kN)	452 kips (2010 kN)	44 in (1,117 mm)	12 in (304 mm)	35 in (889 mm)	12.25 in (311 mm)		10.25 (260 mm)	7.19 in (182 mm)	1.44 in (38 mm)	14 in (356 mm)	22.38 in (568 mm)	5 in (127 mm)	11in (279 mm)	8.25 in (209 mm)	4 in (101 mm)	15.17 in (385 mm)	5 in (127 mm)
150	1,540 lb (698 kg)	8 in (203 mm)	2.25 in (57 mm)	226 kips (1005 kN)	452 kips (2010 kN)	44 in (1117 mm)	12 in (304 mm)	35 in (889 mm)	12.88 in (327 mm)		10.25 (260 mm)	7 in (178 mm)	1.44 in (41 mm)	14 in (356 mm)	27.75 in (705 mm)	5 in (127 mm)	11 in (279 mm)	8.25 in (209 mm)	4 in (101 mm)	15 in (383 mm)	5 in (127 mm)



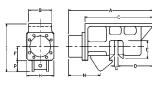
MODEL 20



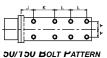
MODEL 50

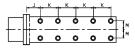


MODEL 150









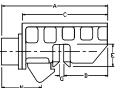
200/400 BOLT PATTERN

MODEL 200 & 400 UNIVERSAL CLAMPS Weight Piston Dia. Piston Stroke Clamp Force Cyl. Force В C D E G н K M Ν Α 2,200 lb 8 in 2.25 in 452 kips 8.25 in 226 kips 50 in 11.75 in 41 in 18.25 in 9 in 7 in 1.69 in 15 in 29.88 in 5.75 in 4 in 21 in 5 in 200 (1,005 (2010 (178 (381 (998 (203)(57 (270)(298)(1,041)(463)(228)(44 (759)(146)(209 (101.6)(533)(127)mm) mm) kN) kN) mm) kg) mm) 7,200 lb 15 in 2.85 in 800 kips ,600 kips 72.4 in 15.75 in 60 in 30.8 in 15.8 in 11 in 2.86 in 22 in 46 in 5.75 in 4 in 9.2 in 6.44 in Consult (3266 (381)(72.4)(3,559)(7,118)(1,839)(400 (1,524)(782.3)(401.3 (279.4)(72.6)(558.8)(1,168)(146 (101.6)(233.7)(163.6)Factory kg) mm) mm) kN) kN) mm) mm)



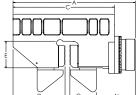
MODEL 200 WWW.APEVIBRO.COM











MODEL 400



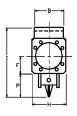
CLAMPS

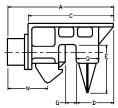
MODEL 50 & 150 DUNCE CLAMPS

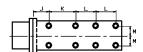
	Weight	Piston Dia.	Piston Stroke	Cyl. Force	Clamp Force	A	В	С	D	E	F	G	н	1	J	K	L	М	N	Р	Q
50	1,350 lb (612 kg)	8 in (20.3 cm)	2.25 in (5.7 cm)	226 kips (1,005 kN)		44 in (111.7 cm)	12 in (30.4 cm)	35 in (88.9 cm)	12.25 in (31.1 cm)	10.25 in (26.0 cm)	7 in (17.8 cm)	1.75 in (44.5 cm)	14 in (356 cm)	22.75 in (57.7 cm)	5 in (12.7 cm)	11 in (27.9 cm)	8.25 in (20.9 cm)	4 in (10.1 cm)	15 in (38.3 cm)	5 in (12.7 cm)	11.5 in (29.2 cm)
150	1,540 lb (698 kg)	8 in (20.3 cm)	2.25 in (5.7 cm)	226 kips (1,005 kN)		44 in (111.7 cm)	12 in (30.4 cm)	35 in (88.9 cm)	12.88 in (32.7 cm)	10.25 (26.0 cm)	7 in (17.8 cm)	1.75 in (44.5 cm)	14 in (35.6 cm)	27.75 in (70.5 cm)	5 in (12.7 cm)	11 in (27.9 cm)	8.25 in (20.9 cm)	4 in (10.1 cm)	15 in (38.3 cm)	5 in (12.7 cm)	11.5 in (29.2 cm)





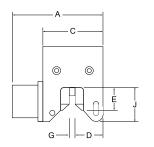


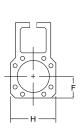


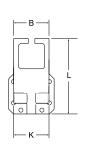


MODEL 100 & 200 CAISSON CLAMPS

L																	
		Weight	Piston Dia.	Piston Stroke	Cyl. Force	Clamp Force	Α	В	С	D	Е	F	G	н	J	K	L
	100	1,110 lb (498 kg)	8 in (203 mm)	2.25 in (57 mm)	226 kips (1,005 kN)	452 kips (2,010 kN)	25.63 in (651 mm)	11 in (279 mm)	18.63 in (473 mm)		6.63 in (168 mm)	6.25 in (159 mm)	1.5 in (38 mm)	14 in (355 mm)	10.88 in (276 mm)		23.38 in (594 mm)
	200	1,320 lb (598.7 kg)	8 in (203 mm)	2.25 in (57 mm)	226 kips (1,005 kN)	452 kips (2,010 kN)	28.56 in (725 kN)	11 in (279 mm)		10.81 in (274 mm)		7.25 in (184 mm)	1.5 in (38 mm)	14 in (355 mm)	10.88 in (276 mm)		23.25 in (590 mm)





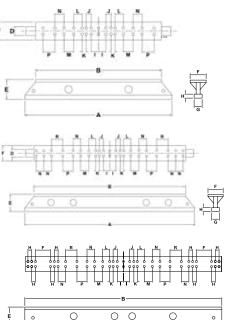


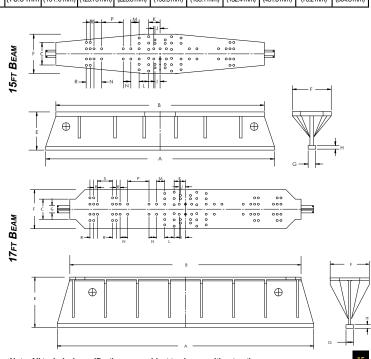




CAISSON BEAMS

STANDARD CAISSON BEAMS																					
	•	Max Dia. Caisson	Weight	Α	В	С	D	Е	F	G		Н	- 1	J	K	L	М	N	Р	R	S
	5 ft	33.15 in (0.84 m)	1,000 lb (454 kg)	60 in (1.52 m)	60 in (1.52 m)	8 in (20.3 cm)	5.9 in (15 cm)	13.41 in (34 cm)	12 in (30.5 cm)	-		2.905 in (73.8 mm)	4.94 in (125 mm)	3.31 in (84 mm)	2.75 in (70 mm)	5.5 in (140 mm)	6.5 in (165 mm)	6 in (152 mm)	8 in (203 mm)	-	
	8 ft	69.15 in (1.75 m)	1,500 lb (680 kg)	96 in (2.44 m)	73.5 in (1.87 m)	8 in (20.3 cm)	5.9 in (15 cm)	13.41 in (34 cm)	12 in (30.5 cm)	-		2.905 in (73.8 mm)	4.94 in (125 mm)	3.31 in (84 mm)	2.75 in (70 mm)	5.5 in (140 mm)	6.5 in (165 mm)	6 in (152 mm)	8 in (203 mm)	-	
•	11 ft	106.00 in (2.69 m)	3,030 lb (1,374 kg)	132 in (3.35 m)	120 in (3.04 m)	8 in (20.3 cm)	5.9 in (15 cm)	13.41 in (34 cm)	12 in (30.5 cm)	-			4.94 in (125 mm)		2.75 in (70 mm)	5.5 in (140 mm)	6.5 in (165 mm)	6 in (152 mm)	8 in (203 mm)	9 in (229 mm)	
	13 ft	129.5 in (3.29 m)	3,593 lb (1,630 kg)	156 in (3.96 m)	156 in (3.96 m)			18 in (45.7 cm)	13.5 in (34.3 cm)	5.9 in (150 mm)		2.905 in (73.8 mm)			2.75 in (70 mm)	5.5 in (140 mm)	6.5 in (165 mm)	6 in (152 mm)	8 in (203 mm)	9 in (229 mm)	
,	15 ft	153.5 in (3.9 m)	8889 lb (4032 kg)	180 in (4.57 m)	164 in (4.165 m)	18 in (45.72 cm)	18 in (45.72 cm)	30.04 in (76.30 cm)	31 in (78.74 cm)	5.9 in (150 mm)		2.91 in (73.9 mm	4.00 in (101.6 mm)	4.94 in (125.73 mm)	9 in (228.6 mm)	7.5 in (190.5 mm)	6.5 in (165.1 mm)	6 in (152.4 mm)	17 in (431.8 mm)	3 in (76.2 mm)	
	17 ft		8368.7 lb (3800.5 kg)		184 in (4.674 m)	16 in (40.64 cm)	16 in (40.64 cm)	40 in (101.6 cm)	31 in (78.74 cm)	5.9 in (150 mm)		2.91 in (73.9 mm	4.00 in (101.6 mm)	4.94 in (125.73 mm)	9 in (228.6 mm)	7.5 in (190.5 mm)	6.5 in (165.1 mm)	6 in (152.4 mm)	17 in (431.8 mm)	3 in (76.2 mm)	12 in (304.8 mm)



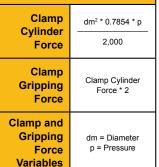


SFT & BFT BEAM

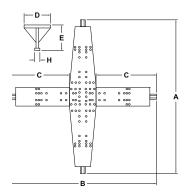
11FT BEAM

13FT BEAM

CLAMP EQUATIONS







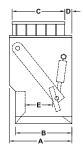
QUAD BEAM

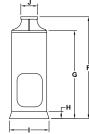
	Weight	Α	В	С	D	E	F	Н
11 ft	9,500 lb (4,309 kg)	134 in (340 cm)	136 in (345 cm)	53 in (134.6 cm)	31 in (78.7 cm)	21 in (53.3 cm)	30 in (76.2 cm)	6 in (152 mm)
15 ft	13,000 lb (5,896 kg)	180 in (457.2 cm)	184 in (467.3 cm)	75 in (190.5 mm)	31 in (78.7 cm)	30 in (76.2 cm)	41 in (104 cm)	6 in (152 mm)
17 ft	15,000 lb (6,803 kg)	206 in (523.2 cm)	208 in (528.3 cm)	89 in (226 cm)	31 in (78.7 cm)	40 in (101.6 cm)	41 in (104 cm)	6 in (152 mm)

QUAD BEAM|WOOD/CONCRETE CLAMP











WOOD & CONCRETE PILE CLAMP

	Weight	Piston Dia.	Cyl. Force	Clamp Force	A	В	С	D	Е	F	G	Н	-	J	К	L	М
20	5,338 lb (2,421 kg)			270 kips (1200 kN)			44 in (117.8 cm)	-	20 in (51 cm)	71.3 in (181 cm)	61.5 in (156.2 cm)	6.0 in (15.2 cm)	31.3 in (79.5 cm)	14 in (35.6 cm)	4 in (10.2 cm)	8.25 in (21 cm)	4 in (10.2 cm)
25	7,877 lb (3,573 kg)			270 kips (1200 kN)				9.13 in (23.2 cm)		84.25 in (214 cm)	74 in (188 cm)		34.94 in (88.75 cm)	14 in (35.6 cm)	8.44 in (21.4 cm)	8.25 in (21 cm)	4 in (10.2 cm)
30	7,000 lb (3,175 kg)			270 kips (1200 kN)		52 in (132 cm)	44 in (117.8 cm)	10 in (25.4 cm)	30.5 in (76.2 mm)	83 in (21.1 cm)	68 in (172.7 cm)		44.38 in (112.73 cm)	14 in (35.6 cm)	14 in (35.6 cm)	8.25 in (21 cm)	4 in (10.2 cm)



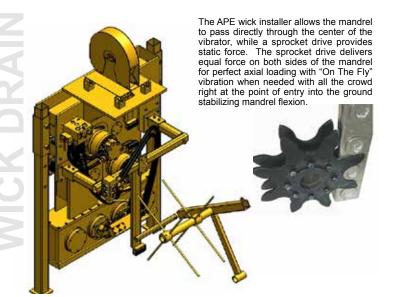
WICK DRAIN











BOTTON	IDRIVE™ '	WICK DR	AIN
	28	100	200
Static (Crowd) Force	28 US tons	27.8 US tons	27.8 US tons
	(247 kN)	(247 kN)	(247 kN)
Dynamic Force @ 1650	-	23.7 US tons	56 US tons
vpm		(211 kN)	(498 kN)
Combined Static/	-	51.5 US tons	83.8 US tons
Dynamic Force		(458 kN)	(746 kN)
Operating Frequency	-	0 - 1,650 vpm	0-1, 650 vpm
Suspended Weight	5,623 lb	8,500 lb	10,780 lb
	(2,550.55 kg)	(3,855 kg)	(4,889 kg)
Maximum Pressure	5,500 psi	5,500 psi	5,500 psi
	(380 bars)	(380 bars)	(380 bars)
Length	70.94 in	84 in	84 in
	(180 cm)	(213 cm)	(213 cm)
Width	47 in	47 in	47 in
	(119 cm)	(119 cm)	(119 cm)
Height	91.5 in	109 in	120 in
	(232.4 cm)	(276.8 cm)	(304.8 cm)

TOP DRIVE AUGER

5	TOP DRIVE AUGERS SEE J&M TOP DRIVE AUGERS PAGE 48												
	Туре	20BB	50	50BB		75	75BB	80BB					
	Torque ft-lbs (kg-m)	4,844 per 1000 psi (669.71 per 69 bar)	8,103 per 1,000 psi (1,065 per 69 bar)	9,688 per 1,000 psi (1,339.41 per 69 bar)		11,516 per 1,000 psi (1,592.14 per 69 bar)	12,150 per 1,000 psi (1,679.8 per 69 bar)	14,572 per 1000 psi (2,014.65 per 69 bar)					
Low	Max Pressure	5,500 psi (379.21 bar)	4,500 psi (310.26 bar)	5,800 psi (399.9 bar)		4,640 psi (319.92 bar)	5,800 psi (399.9 bar)	5,500 psi (379.21 bar)					
Speed High	Rotation Speed	40 rpm	38 rpm	36 rpm		30 rpm	30 rpm	30 rpm					
Torque	Max Flow gpm (lpm)		100 @ 2.64 gal/rev (379 @ 9.99 lit/rev)			120 @ 3.96 gal/rev (454 @14.99 lit/rev)	120 @ 4.17 gal/rev (454 @ 15.79 lit/rev)	125 @ 5 gal/rev (473 @ 18.93 lit/rev)					
>	Max Horse Power	212 hp (158.09 kW)	263 hp (196.12 kW)	406 hp (302.75 kW)		325 hp (242.35 kW)	508 hp (378.72 kW)	401 hp (299.03 kW)					
	Torque ft-lbs (kg-m)	2,422 per 1000 psi (334.85 per 69 bar)	4,025 per 1,000 psi (532 per 69 bar)	4,844 per 1,000 psi (669.71 per 69 bar)		5,758 per 1,000 psi (796 per 69 bar)	6,075 per 1,000 psi (839.9 per 69 bar)	7,266 per 1000 psi (1,004.56 per 69 bar)					
High	Max Pressure	5,500 psi (379.21 bar)	4,000 psi (275.79 bar)	4,570 psi (315.09 bar)		3,000 psi (206.84 bar)	5,800 psi (400 bar)	4,500 psi (310.26 bar)					
Speed	Rotation Speed	80 rpm	58 rpm	72 rpm		61 rpm	60 rpm	61 rpm					
Torque	Max Flow gpm (lpm)	66 @ 0.55 gal/rev (250 @ 2.08 lit/rev)	77 @ 1.32 gal/rev (291 @ 5 lit/rev)	120 @ 1.66 gal/rev (454 @ 6.28 lit/rev)		120 @ 1.98 gal/rev (454 @ 7.5 lit/rev)	120 @ 2.09 gal/rev (454 @ 7.91 lit/rev)	125 @ 2.5 gal / rev 473 @ 9.46 lit / rev					
	Max Horse Power	212 hp (158.09 kW)	180 hp (134.23 kW)	320 hp (238.62 kW)		210 hp (156.6 kW)	406 hp (302.75 kW)	328 hp (244.59 kW)					
	Crowd Force	77,000 lb (34,926.61 kg)	150,000 lb (68,038.86 kg)	150,000 lb (68,038.86 kg)		150,000 lb (68,038.86 kg)	150,000 lb (68,038.86 kg)	150,000 lbs (68,038.86 kg)					
Su	spended Weight	4,310 lb (1,954.98 kg)	4,300 lb (1,950.45 kg)	5,700 lb (2,585.48 kg)		3,130 lb (1,419.74 kg)	3,130 lb (1,419.74 kg)	4,630 lbs (2,100.13 kg)					
	Length	25 in (63.5 cm)	25 in (63.5 cm)	25 in (63.5 cm)		25 in (63.5 cm)	25 in (63.5 cm)	25 in (63.5 cm)					
Width	of Lead Section	26 in (66.04 cm)	26 in (66.04 cm)	26 in (66.04 cm)		26 in (66.04 cm)	26 in (66.04 cm)	26 in (66.04 cm)					
Shippi	ng Width Overall	48 in (121.92 cm)	48 in (121.92 cm)	48 in (121.92 cm)		48 in (121.92 cm)	48 in (121.92 cm)	48 in (121.92 cm)					
	Height	61.5 in (156.21 cm)	61.5 in (156.21 cm)	61.5 in (156.21 cm)		61.5 in (156.21 cm)	61.5 in (156.21 cm)	61.5 in (156.21 cm)					
ID	of Output Shaft	3 in (7.62 cm)	3 in (7.62 cm)	3 in (7.62 cm)		3 in (7.62 cm)	3 in (7.62 cm)	3 in (7.62 cm)					
II	O of Rotary Joint	3 in (7.62 cm)	3 in (7.62 cm)	3 in (7.62 cm)		3 in (7.62 cm)	3 in (7.62 cm)	3 in (7.62 cm)					
AP	l Adapters (type)	3 inch, 4 inch	3 inch, 4 inch	3 inch, 4 inch		3 inch, 4 inch	3 inch, 4 inch	3 inch, 4 inch					
Lead	Adapters (type)	8 x 26, 8 x 32 Custom Available	8 x 26, 8 x 32 Custom Available	8 x 26, 8 x 32 Custom Available		8 x 26, 8 x 32 Custom Available	8 x 26, 8 x 32 Custom Available	8 x 26, 8 x 32 Cus- tom Available					



MOTOR HAS

HIGHEST
VOLUMETRIC AND
MECHANICAL
EFFICIENCIES
WITH ITS OUTSIDE
RADIAL PISTON
DESIGN.
OVERSIZED
SHAFT BEARINGS
AND LOCKNUT
RETENTION OFFERS
THE HIGHEST
VERTICAL AND
RADIAL LOADS IN
THE INDUSTRY.











PE	HD DRIVERS

	'F TE	1
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	HD DRIVERS												
	Туре	HD20	HD50L	HD70	HD80		HD150	HD200	HD280				
	Torque ft-lbs (kg-m)	3,040 per 1,000 psi (420 per 69 bar)	7,700 per 1,000 psi (1,065 per 69 bar)	12,122 per 1,000 psi (1,676 per 69 bar)	14,528 per 1,000 psi (2,009 per 69 bar)		26,727 per 1,000 psi (3,695 per 69 bar)	40,029 per 1,000 psi (5,534 per 69 bar)	53,330 per 1,000 psi (7,373 per 69 bar)				
Low	Max Pressure	4,500 psi (310 bar)	4,500 psi (310 bar)	4,640 psi (320 bar)	5,075 psi (350 bar)		5,000 psi (345 bar)	5,000 psi (345 bar)	5,000 psi (345 bar)				
Speed	Rotation Speed	50 rpm	38 rpm	30 rpm	29 rpm		27 rpm	18 rpm	13.5 rpm				
High Torque	Max Flow gpm (lpm)	55 @ 1.11 gal/rev (208 @ 4.20 lit/rev)	100 @ 2.65 gal/rev (379 @ 10 lit/rev)	120 @ 3.96 gal/rev (454 @ 14.99 lit/rev)	145 @ 4.99 gal/rev (549 @ 18.89 lit/rev)		250 @ 9.31 gal/rev (946 @ 35.24 lit/rev)	250 @ 13.94 gal/rev (946 @ 52.77 lit/rev)	250 @ 18.57 gal/rev (946 @ 70.30 lit/rev)				
	Max Horse Power	144 hp (107 kW)	180 hp (196 kW)	325 hp (242 kW)	429 hp (320 kW)		700 hp (522 kW)	700 hp (522 kW)	700 hp (522 kW)				
	Torque ft-lbs (kg-m)	4,638 per 1,000 psi (641 per 69 bar)	N/A	5,758 per 1,000 psi (796 per 69 bar)	7,267 per 1,000 psi (1005 per 69 bar)		N/A	N/A	N/A				
High	Max Pressure	3,000 psi (207 bar)	N/A	3,000 psi (207 bar)	5,075 psi (350 bar)		N/A	N/A	N/A				
Speed	Rotation Speed	99 rpm	N/A	61 rpm	58 rpm		N/A	N/A	N/A				
Low Torque	Max Flow gpm (lpm)	55 @ 0.55 gal/rev (208 @ 2.61 lit/rev)	N/A	120 @ 1.66 gal/rev (454 @ 6.28 lit/rev)	145 @ 2.46 gal/rev (549 @ 9.31 lit/rev)		N/A	N/A	N/A				
	Max Horse Power	96 hp (72 kW)	N/A	210 hp (157 kW)	429 hp (320 kW)		N/A	N/A	N/A				
٧	Veight (w/Clamp) *= No Clamp	2,500 lb (1,134 kg)	3,800 lb* (1,723 kg*)	8,640 lb (3,919 kg)	8,440 lb (3,828 kg)		11,850 lb (5,374 kg)	14,500 lb (6,576 kg)	19,400 lb (8,798 kg)				
	Depth		25 in (635 mm)	24 in (610 mm)	24 in (610 mm)		24 in (610 mm)	29.5 in (749 mm)	29.5 in (749 mm)				
	Width		53 in (1,499 mm)	61 in (1,549 mm)	61 in (1,549 mm)		61 in (1,549 mm)	70 in (1,778 mm)	70 in (1,778 mm)				
	Height		59 in* (2,133 mm)	99 in (2,515 mm)	97 in (2,464 mm)		109 in (2,769 mm)	120 in (3,048 mm)	132 in (3,353 mm)				
Minimum Excavator Capacity		28,000 lb (12,701 kg)	44,000 lb (19,958 kg)	56,440 lb (25,601 kg)	56,440 lb (25,601 kg)		117,500 lb (53,297 kg)	156,000 lb (70,760 kg)	156,000 lb (70,760 kg)				



Example Listed



CAT 320D

CAT 312D



CAT 320E

CAT 320E



CAT 374D

CAT 349E

CAT 374D





HYDRAULIC IMPACT HAMMERS (HIH)





SEE J&M HIH ...

	MPACI	HAMINIERS (HIH)				PAGE 46					
Туре		Low He	adroom		Standard					Offshore	
	4-2	5-2	6-2	7-3	8-3	6-4	8-4	10-4	15-4	40-4	60-4
Ram Weight	8,000 lb (3,628.74 kg)	10,000 lb (4,535.92 kg)	12,000 lb (5,443.11 kg)	14,000 lb (6,350.29 kg)	16,000 lb (7,257.48 kg)	12,000 lb (5,443.11 kg)	16,000 lb (7,257.48 kg)	20,000 lb (9,071.85 kg)	30,000 lb (13,607.77 kg)	80,000 lb (36,287.39 kg)	120,000 lb (54,431.08 kg)
Rated Energy	16,000 ft-lbs (21.69 kNm)	20,000 ft-lbs (27.12 kNm)	24,000 ft-lbs (32.54 kNm)	42,000 ft-lbs (56.94 kNm)	48,000 ft-lbs (65.08 kNm)	48,000 ft-lbs (65.08 kNm)	64,000 ft-lbs (86.77 kNm)	80,000 ft-lbs (108.47 kNm)	120,000 ft-lbs (162.7 kNm)	320,000 ft-lbs (433.86 kNm)	480,000 ft-lbs (650.79 kNm)
Stroke at Rated Energy	24 in (60.96 cm)	24 in (60.96 cm)	24 in (60.96 cm)	36 in (91.44 cm)	36 in (91.44 cm)	48 in (121.92 cm)	48 in (121.92 cm)	48 in (121.92 cm)	48 in (121.92 cm)	48 in (121.92 cm)	48 in (121.92 cm)
Blows Per Minute	45-75 min-max	45-75 min-max	45-75 min-max	30-65 min-max	30-65 min-max	30-65 min-max	30-65 min-max	30-65 min-max	30-65 min-max	30-65 min-max	30-65 min-max
Weight w/o Insert	13,700 lb (6,214.22 kg)	15,200 lb (6,894.6 kg)	17,200 lb (7,801.79 kg)	20,500 lb (9,298.64 kg)	22,500 lb (10,205.83 kg)	19,500 lb (8,845.05 kg)	23,800 lb (10,795.5 kg)	27,800 lb (12,609.87 kg)	42,000 lb (19,050.88 kg)	Varies with pile size	Varies with pile size
Height	105 in (266.7 cm)	105 in (266.7 cm)	105 in (266.7 cm)	126 in (320.04 cm)	126 in (320.04 cm)	144 in (365.76 cm)	144 in (365.76 cm)	144 in (365.76 cm)	175 in (444.5 cm)	390 in (990.6 cm)	472 in (1,198.88 cm
Standard Lead Size	8"x26"	8"x32"	Offshore	Offshore							

HYDDAILLIC IMDACT HAMMEDS (HILL)

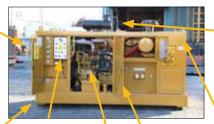
REMOTE CONTROL PENDANT UNIT SEALED FOR **PROTECTION AGAINST** WEATHER

SOLID

WELDED

TUBULAR

FRAME



WEATHER SEALED STAINLESS STEEL **HYDRAULIC GAUGES AND**

CONTROL PANEL

Models WITH CAT TIER II, III or IV **ENGINES**

LIFT OFF HINGES FOR EASY DOOR REMOVAL IN THE FIELD

CENTRAL LIFTING EYE RATED FOR 15,000 LB FOR MODELS 275 TO 475 AND 24,000 FOR Модеца 575 то 1050

RESERVE HYDRAULIC FLUID TANK FOR REPLENISHING MAIN TANK ON DEMAND



POWER UNITS







CUSTOM BALL VALVES FOR SERVICE



COMPLETE TOOL SET MOUNTED IN DOOR PANEL



AIRCRAFT QUALITY WIRING WITH SEALED QUICK DISCONNECTS



TANK TRANSFER VALVE FOR REPLENISHING HYDRAULIC FLUID

				POWE	R U	NITS					SEE J&M UNITS I	Power Page 45
	10	50	127	275		375	475	595	765	800	1050	1200
Engine Type	Yanmar	Caterpillar C2.2	Caterpillar C4.4 Tier IV	Caterpillar C7 Tier III		Caterpillar C9 Tier III	Caterpillar C13 Tier III	Caterpillar C15 Tier III	Caterpillar C18 Tier II	Caterpillar C18 Tier IV	Caterpillar C27 Tier II	Caterpillar C32 Tier II
Rated Horse Power	10 HP (7 kW)	50 HP (37 kW)	127 HP (95 kW)	275 HP (205 kW)		375 HP (280 kW)	475 HP (354 kW)	595 HP (444 kW)	765 HP (570 kW)	760 HP (567 kW)	1050 HP (783 kW)	1,200 HP (895 kW)
Rated Drive Pressure	0 - 3,500 psi (241 bar)	0 - 2,500 psi (172 bar)	0 - 2,500 psi (172 bar)	0 - 4,800 psi (331 bar)		0 -4,800 psi (331 bar)	0 -4,800 psi (331 bar)	0 -4,800 psi (331 bar)	0 -4,800 psi (331 bar)	0 -4,800 psi (331 bar)	0 -4,800 psi (331 bar)	0 - 4,800 psi (331 bar)
Drive Flow	6 gpm (22 lpm)	32 gpm (121 lpm)	60 gpm (227 lpm)	85 gpm (322 lpm)		120 gpm (454 lpm)	147 gpm (556 lpm)	188 gpm (712 lpm)	220 gpm (833 lpm)	220 gpm (833 lpm)	278 gpm (1,052 lpm)	294 gpm (1,113 lpm)
Clamp Pressure	3,500 psi (241 bar)	Consult Factory	N/A	4,800 psi (331 bar)		4,800 psi (331 bar)	4,800 psi (331 bar)	4,800 psi (331 bar)	4,800 psi (331 bar)	4,800 psi (331 bar)	4,800 psi (331 bar)	4,800 psi (331 bar)
Clamp Flow	6 gpm (23 lpm)	Consult Factory	N/A	10 gpm (38 lpm)		10 gpm (38 lpm)	10 gpm (38 lpm)	10 gpm (38 lpm)	10 gpm (38 lpm)	10 gpm (38 lpm)	10 gpm (38 lpm)	10 gpm (38 lpm)
Engine Speed	3,000 rpm	3,000 rpm	2,200 rpm	2,100 rpm		2,100 rpm	2,100 rpm	2,100 rpm	2,100 rpm	1,800 rpm	2,100 rpm	2,100 rpm
Weight	275 lb (125 kg)	1,500 lbs (680 kg)	4,750 lb (2,155 kg)	11,000 lb (4,990 kg)		12,600 lb (5,715 kg)	13,800 lb (6,260 kg)	19,000 lb (8,618 kg)	19,000 lb (8,618 kg)	25,000 lbs (11,340 kg)	22,500 lb (10,206 kg)	23,000 lb (10,433 kg)
Length	24 in (61 cm)	68 in (173 cm)	99 in (251 cm)	117 in (296 cm)		137 in (348 cm)	128 in (324 cm)	152 in (385 cm)	152 in (385 cm)	186 in (472 cm)	186 in (472 cm)	186 in (472 cm)
Width	32 in (80 cm)	40 in (102 cm)	45 in (114 cm)	59 in (149 cm)		77 in (196 cm)	74 in (187 cm)	82 in (208 cm)	82 in (208 cm)	96 in (244 cm)	87 in (221 cm)	87 in (221 cm)
Height	42 in (107 cm)	50 in (127 cm)	66 in (168 cm)	84 in (212 cm)		84 in (213 cm)	92 in (234 cm)	94 in (239 cm)	94 in (239 cm)	90 in (229 cm)	103 in (261 cm)	103 in (262 cm)
Hydraulic Reservoir	20 gal (575 L)	55 gal (208 L)	140 gal (530 L)	Consult Factory		300 gal (1,135 L)	305 gal (1,155 L)	Consult Factory	450 gal (1,703 L)	660 gal (2,498 L)	485 gal (1,835 L)	760 gal (2,877 L)
Fuel Capacity	1.50 gal (5.68 L)	24 gal (91 L)	75 gal (284 L)	Consult Factory		140 gal (530 L)	117 gal (443 L)	Consult Factory	150 gal (568 L)	178 gal (674 L)	175 gal (662 L)	180 gal (681 L)







SINGLE ACTING DIESEL HAMMERS

	Maximum	Minimum	Ram	Hammer
	Energy	Energy	Weight	Weight
D8-42	19,845 ft-lbs	9,724 ft-lbs	1,764 lb	4,540 lb
	(27.79 kNm)	(13.13 kNm)	(0.8 tonnes)	(2,059 kg)
D12-42	29,768 ft-lbs	14,884 ft-lbs	2,646 lb	6,890 lb
	(40.19 kNm)	(20.09 kNm)	(1.2 tonnes)	(3,125 kg)
D16-52	39,690 ft-lbs	19,845 ft-lbs	3,528	8,000 lb
	(53.58 kNm)	(26.79 kNm)	(1.6 tonnes)	(3,629 kg)
D19-52	47,132 ft-lbs	23,566 ft-lbs	4,189 lb	8,400 lb
	(63.63 kNm)	(31.81 kNm)	(1.9 tonnes)	(3,810 kg)
D25-52	62,016 ft-lbs	31,008 ft-lbs	5,512 lb	12,569 lb
	(83.72 kNm)	(41.86 kNm)	(2.5 tonnes)	(5,700 kg)
D30-52	74,419 ft-lbs	37,209 ft-lbs	6,615 lb	13,571 lb
	(100.47 kNm)	(50.23 kNm)	(3 tonnes)	(6,156 kg)
D36-26	89,303 ft-lbs	44,651 ft-lbs	7,938 lb	17,150 lb
	(120.56 kNm)	(60.28 kNm)	(3.6 tonnes)	(7,779 kg)
D36-52	89,303 ft-lbs	43,758 ft-lbs	7,938 lb	22,795 lb
	(120.56 kNm)	(59.07 kNm)	(3.6 tonnes)	(10,339 kg)
D46-52	114,109 ft-lbs	55,913 ft-lbs	10,143 lb	25,000 lb
	(154.05 kNm)	(75.48 kNm)	(4.6 tonnes)	(11,340 kg)
D50-52	124,031 ft-lbs	60,775 ft-lbs	11,025 lb	25,882 lb
	(167.44 kNm)	(82.05 kNm)	(5 tonnes)	(11,740 kg)
D62-52	153,799 ft-lbs	76,899 ft-lbs	13,671 lb	29,100 lb
	(207.63 kNm)	(103.81 kNm)	(6.2 tonnes)	(13,200 kg)
D70-52	173,644 ft-lbs	86,822 ft-lbs	15,435 lb	30,864 lb
	(234.42 kNm)	(117.21 kNm)	(7 tonnes)	(14,000 kg)
D80-42	198,450 ft-lbs	127,008 ft-lbs	17,640 lb	38,434 lb
	(267.91 kNm)	(171.46 kNm)	(8 tonnes)	(17,433 kg)
D100-42	248,063 ft-lbs	158,760 ft-lbs	22,050 lb	47,000 lb
	(334.88 kNm)	(214.33 kNm)	(10 tonnes)	(21,319 kg)
D125-42	310,078 ft-lbs	198,450 ft-lbs	27,563 lb	62,000 lb
	(418.61 kNm)	(267.91 kNm)	(12.5 tonnes)	(28,123 kg)



SINGLE ACTING DIESEL HAMMER



SINGLE ACTING DIESEL HAMMERS - CON'T

	Maximum	Minimum	Ram	Hammer
	Energy	Energy	Weight	Weight
D128-42	317,520 ft-lbs	203,213 ft-lbs	28,224 lb	68,000 lb
	(428.65 kNm)	(275.34 kNm)	(12.8 tonnes)	(30,844 kg)
D138-42	342,326 ft-lbs	219,089 ft-lbs	30,429 lb	70,295 lb
	(462.14 kNm)	(295.77 kNm)	(13.8 tonnes)	(31,885 kg)
D160-42	396,900 ft-lbs	242,109 ft-lbs	35,280 lb	85,000 lb
	(535.82 kNm)	(326.85 kNm)	(16 tonnes)	(38,555 kg)
D180-42	446,513 ft-lbs	272,373 ft-lbs	39,690 lb	92,000 lb
	(602.79 kNm)	(367.70 kNm)	(18 tonnes)	(41,730 kg)
D220-42	545,738 ft-lbs	332,900 ft-lbs	48,510 lb	102,820 lb
	(736.75 kNm)	(449.41 kNm)	(22 tonnes)	(46,638 kg)
D225-42	558,141 ft-lbs	340,466 ft-lbs	49,613 lb	112,820 lb
	(753.49 kNm)	(459.63 kNm)	(22.5 tonnes)	(51,174 kg)
D250-42	620,156 ft-lbs	378,295 ft-lbs	55,125 lb	113,340 lb
	(837.21 kNm)	(510.70 kNm)	(25 tonnes)	(51,410 kg)
D260-42	644,963 ft-lbs	393,427 ft-lbs	57,330 lb	118,830 lb
	(870.70 kNm)	(531.13 kNm)	(26 tonnes)	(53,900 kg)
D300-42	744,188 ft-lbs	453,954 ft-lbs	66,150 lb	139,663 lb
	(1,004.65 kNm)	(612.84 kNm)	(30 tonnes)	(63,350 kg)







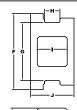


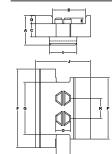
INSERTS

SHEET PILE INSERT DCS-1

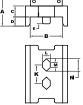
SHEET PILE INSERT DCS-5























PIPE INSERTS

Wt#

730 lb

(331 kg)

1,770 lb

(802 kg)

2,340 lb

(1,061 kg)

16" PIPE INSERT

16"

24"

30"

(406 mm)

(610 mm)

(762 mm)

В

17.1 in

(434

mm)

20 in

(507

mm)

18.5 in

(470

mm)

Α

17 in

(432

mm)

17 in

(431

mm)

17 in

(431

mm)

С

3 in

(16

mm)

3 in

(16

mm)

2.5 in

(64

mm)

24" PIPE INSERT

D

7.87 in

(200

mm)

15 in

(381

mm)

11 in

(279)

mm)

Е

9.85 in

(250)

mm)

17 in

(431

mm)

18 in

(457

mm)

F

11.9 in

(302)

mm)

18.75 in

(476

mm)

25 in

(635

mm)

G

13.85 ir

(352

mm)

22.5 in

(577

mm)

31.9 in

(813

mm)

30" PIPE INSERT

н

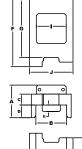
26 in

(660

mm)









SHE	SHEET PILE INSERTS																	
	Wt#	Α	В	C	D	E	F	G		Н	- 1	J	K	L	М	N	0	Р
DCS-1	1,700 lb (771 kg)		17 in (432 mm)	6 in (152 mm)	5 in (127 mm)	3.75 (95 mm)	31.5 in (800 mm)	25.5 in (648 mm)		8.5 in (219 mm)	16.5 in (419 mm)	22 in) (559 mm)	10 in (254 in)	4 in (102 mm)	2.9 in (76 mm)	6.8 in (172 mm)	-	-
DCS-5	3,080 lb (1,397 kg)		19.75 in (502 mm)	6 in (203 mm)	5 in (127 mm)	3.5 in (89 mm)	42 in (1,067 mm)	32 in (813 mm)		8.5 in (216 mm)	16.7 in (425 mm)	25.5 in (648 mm)	12.25 in (312 mm)	-	-	-	7.75 in (197 mm)	37.5 in (952 mm)
DCS-7	4,050 (1,837 kg)	18 in (457 mm)	20.25 in (514 mm)	8 in (203 mm)	5 in (127 mm)	3.5 in (89 mm)	48 in (1,220 mm)	32 in (813 mm)		8.5 in (216 mm)	16.7 in (425 mm)	33.5 in (850 mm)	12.35 in (314 mm)	-	-	-	-	37.5 in (952 mm)



INSERTS



H-PILE INSERTS														
	Wt#	Α	В	С		D	E	F	G	Н	- 1	J	K	٦
12" (305 mm) Round	1,060 lb (481 kg)	17 in (432 mm)	20 in (508 mm)	5 in (127 mm)		3 in (76 mm)	12 in (305 mm)	17 in (432 mm)	17.7 in (449 mm)	26.5 in (675 mm)	-	-	-	-
14" (356 mm) Round	1,220 lb (553 kg)	25 in (635 mm)	20 in (508 mm)	5 in (127 mm)		3 in (76 mm)	12 in (305 mm)	21 in (533 mm)		26.6 in (676 mm)	-	1	-	-
12" & 14" (305 & 356 mm) Waffle	850 lb (386 kg)	17 in (432 mm)	11 in (279 mm)	5 in (127 mm)		3 in (76 mm)	3 in (76 mm)	20 in (508 mm)	15 in (381 mm)	20 in (508 mm)	12.65 in (321 mm)	3.75 in (95 mm)	6.75 in (171 mm)	1.25 in (32 mm)
16" & 18" (406 & 457 mm) Waffle	2,140 lb (971 kg)	17 in (432 mm)	17 in (432 mm)	5 in (127 mm)		6 in (152 mm)	6 in (152 mm)	26 in (660 mm)	19 in (482 mm)	26 in (660 mm)	19 in (482 mm)	2.5 in (64 mm)	13 in (330 mm)	2.5 in (64 mm)

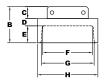


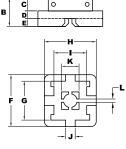


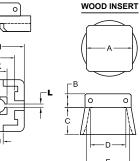






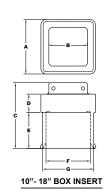


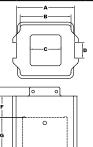




WOOD INSERTS												
	Wt#	Α	В	С	D	E						
17" (432 mm)	893 lb	20 in	5 in	11.25 in	15.5 in	17 in						
	(446 kg)	(508 mm)	(127 mm)	(286 mm)	(394 mm)	(432 mm)						
19" (483 mm)	1,175 lb	19 in	5 in	18 in	16 in	19 in						
	(533 kg)	(484 mm)	(127 mm)	(457 mm)	(406 mm)	(482 mm)						

	BOX INSERTS											
		Wt#	Α	В	С	D	E	F	G	н		
(254)	10" mm)	1,480 lb (671 kg)	20 in (508 mm)	17 in (432mm)	27 in (685 mm)	6 in (152 mm)	16 in (406 mm)	11.5 in (293 mm)	14.5 in (369 mm)	-		
(305)	12" mm)	1,610 lb (730 kg)	20 in (508 mm)	17 in (432 mm)	27 in (685 mm)	6 in (152 mm)	16 in (406 mm)		16.5 in (419 mm)	-		
(356)	14" mm)	1,560 lb (708 kg)	20 in (508 mm)	17 in (432 mm)	27 in (686 mm)	6 in (152 mm)	16 in (406 mm)	15 in (381 mm)	20 in (508 mm)	-		
(406)	16" mm)	1,810 lb (821 kg)	22 in (359 mm)	17 in (432 mm)	27 in (686 mm)	6 in (152 mm)	16 in (406 mm)	17 in (432 mm)	20 in (508 mm)	-		
(457)	18" mm)	2,360 lb (1,070 kg)	24 in (610 mm)	17 in (432 mm)	29 in (736 mm)	8 in (203 mm)	16 in (406 mm)	19 in (482 mm)	22 in (559 mm)	-		
(508)	20" mm)	2,840 lb (1,288 kg)	26 in (660 mm)	24 in (610 mm)	17 in (432 mm)	8.5 in (216 mm)	29 in (736 mm)	8 in (203 mm)	16 in (406 mm)	21.5 in (546 mm)		







20" BOX INSERT

DRIVE CAP BASES

DIXIVE	'	-	LJ						
	Wt#	Α	В	С	D	Е	F	G	Н
20" - 4"	750 lb	8.5 in	20 in	18.25 in	11.5 in	4 in	4 in	20 in	17.5 in
(508 - 102 mm)	(340 kg)	(216	(508	(464	(292	(102	(101.6	(508	(445
(000 102 11111)	(= -=3/	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
26" - 6"	1.270 lb	8.5 in	26 in	23 in	14.5 in	4.5 in	4 in	21 in	17.5 in
(660 - 152 mm)	(576 kg)	(216	(660	(584	(367	(114	(101.6	(533	(445
(000 102 11111)	()	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
26" - 9"	1,350 lb	8.5 in	26 in	23 in	17.5 in	4.5 in	4 in	21 in	17.5 in
(660 - 229 mm)	(612 kg)	(216	(660	(584	(443	(114	(101.6	(533	(445
(000 - 223 11111)		mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
32" - 6"	2,270 lb	8.5 in	32 in	25.5 in	16.5 in	4.5 in	6 in	24 in	17.5 in
(813 - 152 mm)	(1,030	(216	(813	(648	(419	(114	(153	(612	(445
(010 102 11111)	kg)	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
32" - 9"	2,420 lb	8.5 in	32 in	25.5 in	19.5 in	4.5 in	6 in	24 in	17.5 in
(813 - 229 mm)	(1,097	(216	(813	(648	(495	(114	(153	(612	(445
(010 220 11111)	kg)	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
37" - 6"	3,020 lb	8.5 in	37 in	25.5 in	18.5 in	4.5 in	8 in	24 in	17.5 in
(940 - 152 mm)	(1,370	(216	(940	(648	(470	(114	(203	(612	(445
(040 102 11111)	kg)	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
37" - 9"	2,790 lb	8.5 in	37 in	25.5 in	19.5 in	4.5 in	6 in	24 in	17.5 in
(940 - 229 mm)	(1,266	(216	(940	(648	(495	(114	(153	(612	(445
(040 220 11111)	kg)	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
43" - 6"	3,400 lb	8.5 in	43 in	25.5 in	18.5 in	4.5 in	8 in	24 in	17.5 in
(1,092 - 152 mm)	(1,542	(216	(1092	(648	(470	(114	(203	(612	(445
(1,002 102 11111)	kg)	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)
43" - 9"	4,070 lb	8.5 in	43 in	30.5 in	21.5 in	4.5 in	8 in	24 in	17.5 in
(1,092 - 229 mm)	(1,846	(216	(1092	(775	(545	(114	(203	(612	(445
(1,032 - 229 11111)	kg)	mm)	mm)	mm)	mm)	mm)	mm)	mm)	mm)







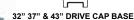
20" DRIVE CAP BASE



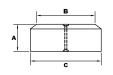


26" DRIVE CAP BASE





STRIKER PLATES | DRIVE CAP BASES | HELMETS

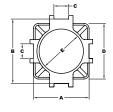




STRI	STRIKER PLATES										
	Wt#	A	В	С							
17.75"	440 lb	6 in	14 in	17.75 in							
(450 mm)	(199 kg)	(152 mm)	(356 mm)	(451 mm)							
22.5"	650 lb	6 in	18 in	22.5 in							
(572 mm)	(295 kg)	(152 mm)	(457 mm)	(572 mm)							
25"	1,036 lb	8 in	19 in	25.0 in							
(635 mm)	(470 kg)	(203 mm)	(485 mm)	(635 mm)							
30"	2,400 lb	12 in	29 in	30 in							
(762 mm)	(1,089 kg)	(305 mm)	(737 mm)	(762 mm)							

ONE PIECE BOX HELMETS

	Wt#	Α	В	С	D	E	F	G	Н	-1
24" (610 mm)	5,818 lb (2,639 kg)	32 in (813 mm)	37 in (940 mm)	8.5 in (216 mm)	(813	25.5 in (648 mm)	35 in (889 mm)	12 in (305 mm)	19 in (483 mm)	25.5 in (645 mm)
30" (762 mm)	6,195 lb (2,810 kg)	37 in (940 mm)	43 in (1092 mm)		(914	25.5 in (648 mm)	(1,067		24 in (610 mm)	31.5 in (800 mm)









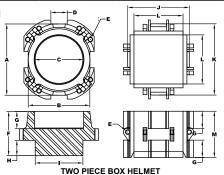


TWO PIECE & PIPE HELMETS

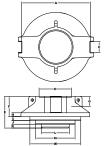
TWO PIECE BOX HELMETS

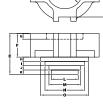
5	Wt#	Α	В	С	D	Е	F	G	Н	- 1	J	К	L	М
24" (610 mm)	8,770 lb (3,978 kg)	37 in (940 mm)	32 in (813 mm)	25.5 in (648 mm)	8.5 in (216 mm)	2 in (51 mm)	23 in (584 mm)	9 in (229 mm)	8 in (203 mm)	24.75 in (629 mm)	32 in (813 mm)	37 in (940 mm)	25.5 in (648 mm)	36 in (914 mm)
30" (7 <mark>62 mm</mark>)	10,850 lb (4,921 kg)	43 in (1092 mm)	42.5 in (1080 mm)	30.5 in (775 mm)	8.5 in (216 mm)	2 in (51 mm)	23 in (584 mm)	9 in (229 mm)	8 in (203 mm)	30.75 in (781 mm)	37 in (940 mm)	43 in (1092 mm)	31.5 in (800 mm)	36 in (914 mm)
36" (914 mm)	14,700 lb (6,667 kg)	54 in (1372 mm)	43 in (1092 mm)	30.5 in (775 mm)	8.5 in (216 mm)	2 in (51 mm)	23 in (584 mm)	9 in (229 mm)	8 in (203 mm)	36.75 in (933 mm)	43 in (1092 mm)	54 in (1372 mm)	37.5 in (953 mm)	36 in (914 mm)

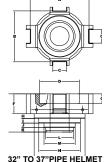












54" PIPE HELMET

37" TO 43" PIPE HELMET

32" TO 37"PIPE HEL MET

PIPE HELMETS

												(
	Wt#	Α	В	С	D	E		F	G	Н	- 1	J	K	٦	М	N	0
32/37" - 25.5" (813/940 - 648 mm)	3,400 lb (1,542 kg)	17 in (432 mm)	37 in (940 mm)	8.5 in (216 mm)	25.5 in (648 mm)	24 in (610 mm)		12.5 in (318 mm)	6 in (152 mm)	3 in (76 mm)	2.9 in (73 mm)	2.9 in (73 mm)	2.75 in (70 mm)	17.5 in (445 mm)	19.6 in (499 mm)	26.1 in (663 mm)	32 in (813 mm)
37/43" - 25.5" (940/1092 - 648 mm)	6,660 lb (3,021 kg)	43 in (1,092 mm)	37 in (940 mm)	8.5 in (216 mm)	25.5 in (648 mm)	28.5 in (723 mm)		16.5 in (419 mm)	6 in (152 mm)	3 in (76 mm)	3 in (76 mm)	3 in (76 mm)	3 in (76 mm)	18.75 in (476 mm)	22 in (559 mm)	27.5 in (699 mm)	33.5 ir (851 mm)
37/43" - 30.5" (940/1092 - 775 mm)	6,560 lb (2,976 kg)	43 in (1,092 mm)	37 in (940 mm)	8.5 in (216 mm)	30.5 in (775 mm)	28.5 in (724 mm)		16.5 in (419 mm)	6 in (152 mm)	3 in (76 mm)	3 in (76 mm)	3 in (76 mm)	3 in (76 mm)	18.75 in (476 mm)	22 in (559 mm)	27.5 in (699 mm)	33.5 ir (851 mm)
54" - 25.5" (1,372 - 648 mm)	8,910 lb (4,041 kg)	54 in (1,372 mm)	-	8.5 in (216 mm)	25.5 in (648 mm)	25 in (635 mm)		16 in (406 mm)	8 in (203 mm)	-	3 in (76 mm)	3 in (76 mm)	3 in (76 mm)	22 in (558 mm)	31 in (788 mm)	40 in (1,016 mm)	-
54" - 30.5" (1,372 - 775 mm)	8,810 lb (3,996 kg)	54 in (1,371 mm)	-	8.5 in (216 mm)	30.5 in (775 mm)	25 in (635 mm)		16 in (406 mm)	8 in (203 mm)	-	3 in (76 mm)	3 in (76 mm)	3 in (76 mm)	22 in (558 mm)	31 in (788 mm)	40 in (1,016 mm)	-

LEADS

FR	ONT RI	DING L	EADS	
	ST-75	ST-100	ST-150	ST-190
А	28.5 in	28.5 in	28.5 in	37 in
	(72.4 cm)	(72.4 cm)	(72.4 cm)	(93.98 cm)
В	3 in	3 in	5 in	5 in
	(7.62 cm)	(7.62 cm)	(12.7 cm)	(12.7 cm)
C	36 in	36 in	36 in	45 in
	(91.44 cm)	(91.44 cm)	(91.44 cm)	(114.3 cm)
Average Weight	75 lb	100 lb	150 lb	190 lb
	(34.01 kg)	(45.35 kg)	(68.02 kg)	(86.16 kg)



BOTTOM STABER

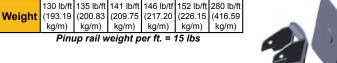


HEADBLOCK 2 OR 3 LINE

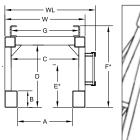


PILE GATE

18



BOOM PT. CONNECTOR



BOX LEADS

21.50

in 8.00

in

27.50

in

30.00

in

15.29

22.10

in

34.00

in

39.25

in

27.50

in

33.50

in 38.50

in

kg/m)

Α

В

C

D

E*

G

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WL

26.50

8.00

32.50

30.00

15.29

22.10

34.00

39.25

32.50

38.50

43.50

8 x 21 8 x 26 8 x 32 8 x 37 8 x 43 10 x 54

37.50

8.00

43.50

42.00

20.22

29.29

46.00

51.25

43.50

49.50

54.50

43.50

8.00

49.50

46.00

21.87

31.69

in

50.00

in

55.25

in

49.50

55.50

60.50

54.50

10.00

62.50

in

48.00

28.00

N/A

54.00

in

N/A

N/A

74.50

79.50

32.50

8.00

38.50

34.00

16.94

24.50

in

38.00

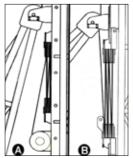
43.25

in

38.50

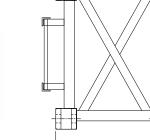
44.50

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TELESCOPING LEADS SYSTEMS



OFFSHORE LEADS

L	ead Size	Min pile size	Max pile size	Overall length	Overall width
	43"	16 in (40.6 cm)	38 in (96.5 cm)	39 ft (11.8 m)	61 in (155 cm)
	54"	18 in (45.7 cm)	48 in (122 cm)	39 ft (11.8 m)	72 in (183 cm)
	78"	32 in (81.3 cm)	72 in (182.9 cm)	39 ft (11.8 m)	90 in (228.6 cm)

Offshore leaders for up to 12 ft (3.65 m) piles are available

APE offshore leaders are designed to give the operator the best available control during the driving of both vertical and batter (raked) piles. Pin on offshore bells allow the greatest versatility for a standard lead section, Drive helmets and pin on drive bells are available for both pipe and concrete piles.







OFFSHORE LEADS | OFFSHORE BELLS

BOTTOM DRIVE SYSTEMS PIN ON OFFSHORE BELLS

Standard leader size	Minimum pile size	Maximum pile size	Overall length	
8 x 32 in	16 in	42 in	6 ft	
20.3 x 81.3 cm	(40.6 cm)	(106.7 cm)	(1.8 m)	
8 x 37 in	60 in	122 in	8 ft	
20.3 x 94 cm	(152.4 cm)	(310 cm)	(2.44 m)	
8 x 43 in	32 in	72 in	8 ft	
20.3 x 109.2 cm	(81.3 cm)	(182.8 cm)	(11.8 m)	
10 x 54 in	36 in	122 in	12 ft	
20.3 x 137.2 cm	(81.3 cm)	(310 cm)	(3.66 m)	

APE Bottom Drives and pin on offshore bells are designed reduce the overall weight of a driving helmet by utilizing a mid or top section of standard lead. Bottom drive bells can be made for multiple pile diameters greatly increasing its versatility.





Bottom Drives for up to 12' (3.65 m) piles available including extended boots for batter/raked piles.

SPOTTERS | J&M EQUIPMENT



J&M Foundation Equipment

J&M Foundation Equipment is a wholly owned subsidiary of American Piledriving Equipment, Inc.

30 years of excellence, and always J&M. Though we have designed and manufactured LBF, ICE & HMC brand equipment, the engineering expertise, and the invaluable experience gained, has always resided at J&M. Building our future on this foundation, and a commitment to customer satisfaction, the J&M name will always mean advanced design, extreme reliability and cost effective value. Couple this with a huge parts inventory, in house engineering, machining and fabrication; and no job is too special, no delivery is too stringent, and down time is not an option.

Vibratory Pile Driver/Extractors Power Units Hydraulic Impact Hammers Top Drive Earth Augers Robovib Accessories and Attachments

J&M's proven concept of modularity provides exceptional flexibility for both customer operations and the J&M rental fleet. By designing our power units to operate various types of foundation equipment, maximum utilization, availability and value are achieved. A typical J&M power unit can operate a vibratory driver, a hydraulic impact hammer, an auger, a pile crusher and a submersible pump, without modification or special controls.

SPOTTERS

\ \(\)		APE 100B	APE 150B	J&M 225	J&M 368
7	Hydraulic Extension	10 ft	20 ft	20 ft	30 ft
	Manual Extension	10 ft	0 ft	0 ft	0 ft
	Extend Force	18,000 lb	28,000 lb	31,500 lb	60,000 lb
	Retract Force	19,000 lb	32,000 lb	23,500 lb	62,000 lb
	Collapsed Length*	17 ft	17 ft	21.5 ft	26 ft
	L/R Travel Extended	6 ft	35 ft	41.5 ft	52 ft
	L/R Force Extended	7,200 lb	12,000 lb	28,000 lb	28,000 lb
	L/R Travel Retracted	6 ft	15 ft	20 ft	23 ft
	L/R Force Retracted	7,200 lb	25,900 lb	64,000 lb	64,000 lb
	Maximum Width	8 ft	8 ft	9 ft	10 ft
	Operating Pressure	2,500 psi	2,500 psi	2,500 psi	2,500 psi
	Weight	7,000 lb	8,500 lb	10,000 lb	31,100 lb
	Power Lead Rotation	Optional	Optional	Optional	Optional
	* Distance	from rear pi	vot to back o	f leads	







TON CELLS

VIBRATORY DRIVER/EXTRACTORS

DRI	VER/E	EXTR/	ACTO	RS	
	23-51	815	28-35	44-50	66-80
Eccentric Moment	230	4,000	2,800	4,400	6,600
	in-lbs	in-lbs	in-lbs	in-lbs	in-lbs
Drive Force at Rated Frequency	8.4 tons	128 tons	80 tons	160 tons	240 tons
	(747 kN)	(1138 kN)	(711 kN)	(1423 kN)	(2135 kN)
Rated Frequency	1,600 vpm	1,600 vpm	1,600 vpm	1,600 vpm	1,560 vpm
Amplitude	0.58 in	1 in	1.17 in	1.17 in	1.23 in
	(1.5 cm)	(2.5 cm)	(3 cm)	(3 cm)	(3.1 cm)
Max Extraction Pull	13 tons	40 tons	75 tons	80 tons	80 tons
	(115.6 kN)	(356 kN)	(667 kN)	(711.7 kN)	711.7 kN)
Max Bare	1,520 lb	4,230 lb	9,180 lb	12,400 lb	15,330 lb
Hammer Weight	(690 kg)	(6359 kg)	(4164 kg)	(5625 kg)	(6940 kg)
Length	26 in	96 in	92 in	97 in	97 in
	(66 cm)	(244 cm)	(233.7 cm)	(246.4 cm)	(246.4 cm)
Width	16 in	28 in	22 in	22 in	22 in
	(40.6 cm)	(40.6 cm)	(56 cm)	(56 cm)	(56 cm)
Throat Width	10.5 in	12 in	15 in	14.25 in	14.25 in
	(26.7 cm)	(30.5 cm)	(38 cm)	(36.2 cm)	(36.2 cm)
Height w/o clamp	42 in	95 in	70.25 in	83 in	100 in
	(106.4 cm)	(242 cm)	(178.5 cm)	(211 cm)	(254 cm)
Power Unit Model	51	580	375	580	700







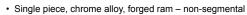


J&M POWER UNITS									
	J&M								
	33	51	127	200	230	310	315	375	595
Engine Type	Cat. C1.5 Teir IV	Cat. C2.2	Cat. C4.4 Tier IV	Cat. C6.6 Tier III	Cat. C6.6 Tier III	Cat. C9 Tier III	Cat. C9 Tier III	Cat. C9 Tier III	Cat. C15 Tier III
Rated Horse Power	33 HP (25 kW)	51 HP (38 kW)	127 HP (95 kW)	200 HP (149 kW)	230 HP (172 kW)	375 HP (280 kW)	375 HP (280 kW)	375 HP (280 kW)	595 HP (444 kW)
Rated Drive Pressure	0-2,500 psi (172 bar)	0-2,500 psi (172 bar)	0-2,500 psi (172 bar)	0-2,500 psi (172 bar)	0-4,500 psi (310 bar)	0-3,500 psi (241 bar)	0-5,000 psi (345 bar)	0-5,500 psi (379 bar)	0-4,500 psi (310 bar)
Drive Flow	20 gpm	32 gpm	60 gpm	100 gpm	70 gpm	135 gpm	87 gpm	87 gpm	155 gpm
	(76	(121	(227	(379	(265	(511	(329	(329	(587
	lpm)								
Clamp Pressure	Consult Factory	Consult Factory	Consult Factory	2,500 psi (172 bar)	4,500 psi (310 bar)	Consult Factory	Consult Factory	4,500 psi (310 bar)	4,800 psi (331 bar)
Clamp	Consult	Consult	Consult	10 gpm	10 gpm	Consult	Consult	5 gpm	7 gpm
Flow	Factory	Factory	Factory	(38 lpm)	(38 lpm)	Factory	Factory	(20 lpm)	(25 lpm)
Engine	3,000	3,000	2,200	2,200	2,200	2,200	2,200	2,200	2,100
Speed	rpm								
Weight	1,500	3,000	4,750	9,600	9,600	9,100	9,600	10,485	16,500
	lb								
	(680	(1,361	(2,155	(4,354	(4,354	(4,128	(4,354	(4,756	(7,484
	kg)								
Length	40 in	68 in	99 in	126 in	126 in	137 in	137 in	126 in	158 in
	(102	(173	(251	(320	(320	(348	(348	(320	(401
	cm)								
Width	36 in	40 in	45 in	60 in	73 in				
	(92	(102	(114	(152	(152	(152	(152	(152	(185
	cm)								
Height	55 in	50 in	66 in	80 in	80 in	75 in	75 in	80 in	95 in
	(139	(127	(168	(203	(203	(191	(191	(203	(241
	cm)								
Hydraulic Reservoir	30 gal (114 L)	55 gal (208 L)	140 gal (530 L)					280 gal (1,060 L)	
Fuel Capacity	12 gal	24 gal	75 gal	130 gal	130 gal	110 gal	110 gal	130 gal	150 gal
	(45 L)	(91 L)	(284 L)	(492 L)	(492 L)	(416 L)	(416 L)	(492 L)	(568 L)



HYDRAULIC IMPACT HAMMERS





- 100% hydraulic, infinitely variable, stroke control system
- Elastomeric cylinder to ram, anti-shock, connection
- · No threaded fasteners permitted on ram forging.
- Forged, alloy steel, striker block & standard drive caps
- Proven and ultra-rugged, 4-column, tensioned cable frame
- Troverrand ditta-rugged, 4-column, tensioned ca
- · Piston style accumulators.
- Hard-chromed columns and self-lubricating ram bearings
- Optional wireless energy readout downloadable
- · Compatible with other hydraulic sources
- · No wires, no sensors, no computers, no problem





J&M HYDRAULIC IMPACT HAMMERS (HIH) 115 160 220 Ram Weight 11,500 lb 16.000 lb 22.000 lb **Maximum Stroke** 4 ft 4 ft 4 ft Minimum Stroke 1 ft 1 ft 1 ft **Hammer Weight (bare)** 17.000 lb 28.600 lb 35.000 lb Hyd. Hose Length 100 ft 100 ft 100 ft Hyd. Hose Weight 850 lb 1340 lb 1340 lb Depth 36 in 46 in 48 in Width 26 in 32 in 32 in Height (bare) 19'-9" 20'-3" 20'-3" **Model # Power Unit** 175 230 375



TOP-DRIVE AUGERS



- Single speed, two speed or Autotorque
- · Pre-drill, tie backs, cast in place, soil-nails, mini-piles
- · Bolted flange, Hex or API flighting connections
- · Oversize roller bearings on output shaft for crowd
- Easy shaft seal replacement in field
- · Heavy duty final drive gears practically indestructible
- · Lifting bale with or without sheave
- Roller or angle lead guides for 20", 26", 32"
- · Compatible with other hydraulic sources
- · Autotorque has ultra low speed for grouting & DHH
- 3", 4", 5" through hole in output shaft
- · Rotary joint and plumbing for grout and fluid injection
- Grout hose connection via Victaulic[™] connectors

	J&M TOP D	RIVE AUGERS	5	
		35AT	55AT	100K
	Torque (ft-lbs/kg-m)	5,430 ft-lbs per 1,000 psi (750 kgm per 69 bar)	10,547 ft-lbs per 1,000 psi (1,458 kgm per 69 bar)	24,400 ft-lbs per 1,000 psi (3,373.42 kgm per 69 bar)
Low	Max Pressure	5,500 psi (379.21 bar)	5,500 psi (379.21 bar)	4,500 psi (310.26 bar)
Speed High	Rotation Speed	47 rpm	24 rpm	23 rpm
Torque	Max Flow (gpm/lpm)	85 gpm @ 1.8 gal/rev (322 lpm @ 6.81 lit/rev)	85 gpm @ 3.5 gal/rev (322 lpm @ 13.2 lit/rev)	196 gpm @ 8.5 gal/rev (742 lpm @ 32.18 lit/rev)
	Max Horse Power	273 hp (204 kW)	273 hp (204 kW)	500 hp (372.85 kW)
	Torque (ft-lbs/kg-m)	3,473 ft-lbs per 1,000 psi (480 kgm per 69 bar)	3,555 ft-lbs per 1,000 psi (491 kgm per 69 bar)	12,200 ft-lbs per 1,000 psi (1,686.71 kgm per 69 bar)
High	Max Pressure	5,500 psi (379.21 bar)	5,500 psi (379.21 bar)	4,500 psi (310.26 bar)
Speed	Rotation Speed	73 rpm	72 rpm	46 rpm
Torque	Max Flow (gpm/lpm)	85 gpm @ 1.2 gal/rev (322 lpm @ 4.5 lit/rev)	85 gpm @ 1.2 gal/rev (322 lpm @ 4.5 lit/rev)	196 gpm @ 4.3 gal/rev (742 lpm @ 16.28 lit/rev)
	Max Horse Power	223 hp (166 kW)	223 hp (166 kW)	500 hp (372.85 kW)
	Crowd Force	35,000 lbs (15,875.73 kg)	80,000 lbs (36,290 kg)	80,000 lbs (36,287.39 kg)
	Suspended Weight	3,500 lb (1,588 kg)	5,000 lb (2,268 kg)	9,500 lbs (4,309.13 kg)
	Depth	38 in (96.52 cm)	38 in (96.52 cm)	62 in (157.48 cm)
Wid	Ith of Lead Section	26 in (66 cm)	26 in (66 cm)	37 in (93.98 cm)
Ship	ping Width Overall	31.32 in (79.5 cm)	30.50 in (77.5 cm)	79 in (200.66 cm)
	Height	52 in (132 cm)	52 in (132 cm)	127 in (322.58 cm)
9	ID of Output Shaft	3 in (7.6 cm)	3 in (7.6 cm)	7.38 in (18.75 cm)
	Rotary Swivel ID	3 in (7.6 cm)	3 in (7.6 cm)	3 in (76 mm)
Δ	API Adapters (type)	API 3 inch, API 4 inch	API 3 inch, API 4 inch	200 mm Male Hex
Le	ad Adapters (type)	8 x 26, 8 x 32	8 x 26, 8 x 32	U-37, ST-150, ST-190

RoboVib

These excavator-mounted vibros allow a single operator to unload H and I beams and sheet piles, raise them to the vertical, position them precisely, and drive them to grade -- all with NO extra equipment needed, and with superior speed and power.

- The ROBOVIB eccentrics are located within the fixed side grip arm. Centerline of dynamic force is much closer to the gripping jaws, reducing off center force input to pile.
- Vertical distance between side grip iaws is increased to better resists offcenter force
- ROBOVIB eccentric moment is 22% greater than competitive units, producing significantly larger driving amplitude.
- Each clamp has an individual actuating cylinder. No poorly guided, trouble prone, dual purpose cylinders as in competitive units
- Side grip cylinders are directly mounted to arms and are hydraulically synchronized.
- Proven tilt and rotate mechanism is designed for digging duty, and has sealed lubrication for bearings and worm gear. Cast housing and integral rotation motor maintain perfect alignment for worm gear and massive rotation bearing. Dual tilt cylinders are

- telescopic, providing lower profile and equal left and right tilt torque.
- ROBOVIB +/- 40 deg tilt is 33% more than the competition, allowing additional reach when loading or unloading
- Rectangular clamp jaws on side grips provide more clamping area than round jaws.
- Bottom clamp uses precision-guided slider per accepted vibratory hammer practice. Clamp cylinder is directly aligned with the fixed law - no offset.
- Most components contained within welded steel frame for protection and exceptional strength.
- No solenoid valves or wiring mounted on ROBOVIB. Valves and wiring are remotely mounted on excavator boom to avoid vibration damage.
- Both the side grip and the bottom clamp laws are identical to minimize inventory. Additionally, all ROBOVIB iaws have the J&M exclusive "Kryponite" coating for exceptional wear life.

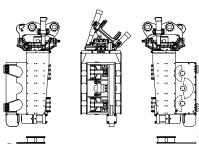




ROBOVIB

- Three eccentrics are vertically stacked to minimize distance between driving force and pile center.
- Commonly available elastomers isolate vibration from excavator. Extra elastomer mounting positions are provided so spring rate may be optimized for tough pile extraction applications.
- Lockable adjusting nuts eliminate clearance in side grip arms to reduce vibration wear, and insure long life
- Commercial, high pressure gear motor is interchangeable to exactly match excavator hydraulic flow to ROBO-VIB. No flow controls or restrictions to cause damaging heat buildup in excavator hydraulic system.
- Gun-drilled hydraulic distribution manifold is integral to suspension yoke to minimize plumbing, and perfectly align hydraulic swivel.
- Replaceable offset bushings at the excavator connection allow pin diameter and center distance changes to accommodate various brands and sizes of excavators.
- Minimum width, fixed side clamp arm allows driving of H-piles as small as 10".











Powered by excavator hydraulics and fully articulated, RoboVib drives piles up to 40' long, much more economically and with greater safety than conventional cranehandled methods. Efficient, built for long life and heavy duty, and able to drive piles from the side or from the top. RoboVib answers the need for a reliable excavatormounted vibratory driver.

Note: All technical specifications are subject to change without noti

J&M LOW HEAD ROOM VIBRATORY DRIVER/EXTRACTORS

	216S	416S	448
Eccentric Moment	1,100 in-lb	2,200 in-lb	4,400 in-lb
Height with Clamp	45 in	59 in	68 in
Width	90 in	114 in	140 in
Depth	17 in	18 in	21 in
Throat Depth	14 in	13 in	18 in
Weight with Clamp	3,400 lb	4,700 lb	9,300 lb
Line Pull	10 tons	14 tons	28 tons







VIBROS | ACCESSORIES | CRUSHER



218 Pile Crusher

- · 200 ton crushing force
- Extra heavy duty construction NO CASTING
- · Heat treated, alloy, steel blades
- Replaceable, abrasion resistant, blade guides
- NFPA standard, repairable, hydraulic cylinders
 - Machined manifolds replace vulnerable plumbing
- Low hydraulic operating pressure for long life
- Special cylinder rod seals exclude dirt and abrasives
- Chain suspension contains pile
- Universal blades Crush 12" thru 18" square piles
- Spacer stroke adjustment insures consistency
- Powered with J&M Model 175 power unit, or equal



J&M VIBRATORY DRIVER/EXTRACTOR ACCESSORIES

	Type	Clamps	Pressure	Weight		LxWxD	Compatibility
10'	Clamp Extension	126,127,55		2300 lb		120"x37"x14"	28-35, 44-50, 66-80
40'	Clamp Extension	126,127,196,55		16400 lb		480"x37"x17"	28-35, 44-50, 66-80
90°	Turning Plate	126,127		1100 lb		4"x37"x37"	28-35, 44-50, 66-80
Dbl	Diverting Valve		5000 psi	80 lb		6"x7"x12"	Vibro, Auger, HIH
Dbl	Diverting Sol. Valve		5000 psi	250 lb		16"x12"x6	Vibro, Auger, HIH
Dbl	Inline Cross Relief		5000 psi	30 lb		6"x6"x14"	Vibro, Auger, HIH

BEAMS | CLAMPS | DRILL MAST

Model 3030 Drill Mast

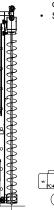


- 30 feet of linear auger travel
- 30" maximum flighting diameter 30,000 ft. lb. allowable auger torque
- 30,000 lb of extraction force via top mounted winch
- · 15.000 lb of crowd force via rear mounted winch
- · Uses J&M Model 3060 auger drive or equal
- · Fore and aft mast angle adjusted by excavator cylinder

- · Left & right mast angle adjustment ± 10° · Optional 3" grout swivel
- · All drilling functions controlled by existing joy sticks · No modifications to excavator hydraulic
- system or controls · Locking valves prevent cylinder drift
- · Pressure control & diverting valves on mast









J&M CAISSON BEAMS

Range

14.13"Ø -

36"Ø

14.13"Ø -

84"Ø

14.13"Ø -

136"Ø

Clamp

80

80

80

Compat-

ibility

216

416B, 28-35,

44-50

416B. 44-50.

66-80

3'

11



Weight

725 lb

(329 kg)

1,400 lb

(635 kg)

6.725 lb

(3,050 kg)

LxWxD

63"

9"x110"x6"

19"x150"x17"

J&M VIBRATORY HYDRAULIC CLAMPS

		Type	Range	Max Force	Weight	LxWxD	Compat- ibility
	126	Sheeting	0 - 1.50"	126 Ton	2,400 lb (1,089 kg)	38"x46"x12"	28-35, 44-50, 416B
	196	Sheeting	0 - 2.00"	196 Ton	2,940 lb (1,334 kg)	38"x57"x12"	66-80
	80	Caisson	16"Ø - 132"Ø	80 Ton	990 lb (449 kg)	22"x28"x11"	44-50, 28-35, 416B
	122	Caisson	22"Ø - 120"Ø	126 Ton	1,700 lb (771 kg)	25"x58"x14"	66-80
	C102	Wood	6"Ø - 15"Ø	45 Ton	3,300 lb (1,497 kg)	40"x50"x32"	216
	55	Wood/ Pipe/ Concrete	8"Ø - 19"Ø/20"	53 Ton	5,000 lb (2,268 kg)	79"x43"x27"	28-35, 44-50, 416B

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IOTES	APE STONE	NOTE
		FIX
		1-100
	C/ 1 (240)	
		_ Y /

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