



DAWSON
CONSTRUCTION PLANT LTD

Dawson Construction Plant Ltd
Chesney Wold,
Bleak Hall,
Milton Keynes,
MK6 1NE, England
Tel: +44 (0)1908 240300
Fax: +44(0)1908 240222

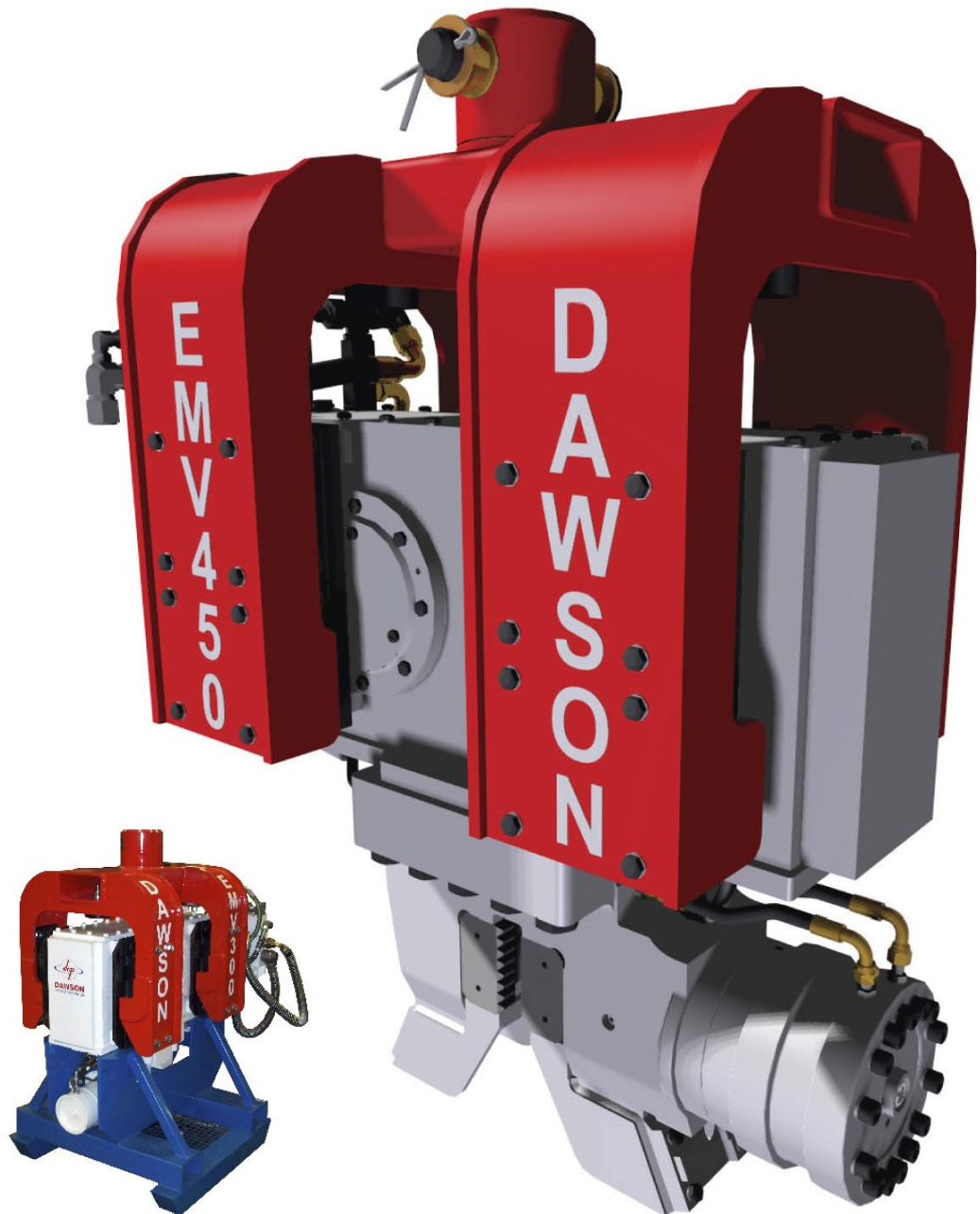
EXCAVATOR MOUNTED VIBRATORS

INNOVATIVE
PILING
EQUIPMENT

HYDRAULIC PILING HAMMERS	EXCAVATOR MOUNTED VIBRATORS	EXCAVATOR MOUNTED DRILL	QUIET, VIBRATION-LESS PUSH-PULL PILING	PILE EXTRACTION
SHEET PILE GUIDE FRAMES	SHEET PILE CAPPING SYSTEMS	CFA CLEANERS	PILE POINTS & SPLICERS	HANDLING / LIFTING

Principal Advantages

- Compact, robust and reliable
- no electrics!
- Simple and fast attachment
to excavator
- Minimal height to maximise
pile length
- Slim design to drive single
sheet piles
- High power to weight ratio
- Universal joint suspension for
easy alignment of piles
- Extremely low vibration
transmitted to the excavator
- Environmentally friendly - low
noise/localised directional
vibration
- Automatic hydraulic clamp
operation
- Flexibility in application
- Flow regulator prevents
excessive oil supply to vibrator



Dawson excavator mounted vibrators have been designed specifically to work in place of an excavator boom, coupled with the self-weight of the pile and the vibrator, provides sufficient force to push the pile into the ground. Naturally, the process works in reverse for pile extraction. The equipment offers a highly productive and cost effective piling rig based around a standard, readily available excavator!

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EXCAVATOR MOUNTED VIBRATORS

SPECIFICATION	UNITS	Vibro Model				
		EMV70	EMV220	EMV300A	EMV450	EMV550
STATIC MOMENT	in.lbs	60	263	400	606	674
	kgm	0.7	3.24	4.6	6.9	8.3
FREQUENCY	vpm	3,000	3,000	2,400	2,460	2,500
CENTRIFUGAL FORCE	lbs	15,730	50,236	67,420	100,000	125,592
	kN	70	220	300	450	550
AMPLITUDE - PEAK TO PEAK	ins	0.134	0.45	0.58	0.5	0.51
	mm	3.4	12	14.7	12	13
MINIMUM REQUIRED FLOW RATE	gpm	8	24	35	52	68
	l/min	30	90	130	195	256
MAXIMUM ALLOWABLE FLOW RATE	gpm	32	67	67	94	107
	l/min	120	250	250	350	400
MINIMUM HYDRAULIC PRESSURE	psi	3,480	4,060	4,060	3,915	4,060
	bar	240	280	280	270	280
MAXIMUM HYDRAULIC PRESSURE	psi	5,076	5,076	5,076	5,076	5,076
	bar	350	350	350	350	350
MINIMUM HYDRAULIC MOTOR POWER	hp	16	80	80	118	160
	kW	12	42	60	88	120
DYNAMIC MASS	lbs	900	814	1,380	2,240	2,576
	kg	410	370	625	1,008	1,150
TOTAL MASS	lbs	1,150	1,155	2,123	2,834	3,360
	kg	520	525	965	1,275	1,500
MAXIMUM PILE MASS	lbs	1,760	1,760	1,760	2,240	3,136
	kg	800	800	800	1,000	1,400
MAXIMUM PUSH/PULL LOADING	lbs	6,171	16,500	33,600	33,600	33,600
	kg	2,800	7,500	15,000	15,000	15,000
TYPICAL EXCAVATOR WEIGHT	Ton	5.5 to 17	7.5 to 24	13 to 39	27 to 50	33 to 60
	Tonne	5 to 15	7 to 22	12 to 35	25 to 45	30 to 55
CLAMP FORCE	Tonne	30	26.5	36	54	66
DIMENSIONS mm (inch)	A	360 (14.2)	445 (17.5)	615 (24)	615 (24)	646 (25.4)
	B	25 (1)	40 (1.5)	25 (1)	32 (1.25)	50 (2)
	C	250 (10)	150 (5.9)	250 (10)	230 (9)	370 (14.5)
	D	455 (18)	431 (17)	582 (23)	640 (25)	708 (27.9)
	E	340 (13.4)	431 (17)	429 (17)	510 (20)	555 (22)
	F	672 (26.5)	850 (33.5)	927 (36.5)	945 (37)	1137 (45)
	G	942 (37)	1120 (44)	1200 (47.25)	1250 (49)	1477 (58)
	H	150 (6)	130 (5.1)	150 (6)	175 (6.9)	190 (7.5)



Specifications of EMV Product Range

