FOUNDATION ASSOCIATES ENGINEERING PTE LTD

ISO 9001 REGISTERED
MGMT. SYS. RvA C 074
bizSAFE 1
CE

FOUNDATION ASSOCIATES ENGINEERING PTE LTD

Foundation Associates Engineering is also known as FAE with the Industry of Piling & Foundation Equipment.

In FAE, we do not just sell you a piece of equipment; we provide you a full solution to meet your stringent piling & foundation work requirement. We have many technical personal with past on- site operation experience of more than 20 years, into bore piling, diaphragm wall, compaction and etc, amongst other ground engineering work.

We provide soil condition and geo- technical strata analysis to suggest you the correct equipment with the correct accessories for your immediate application.

In FAE, we value our relationship between you, our friend, the end user as a WIN-WIN partner. Ultimately, FAE would want to forge Ahead with you towards a successful project that you have undertaken.

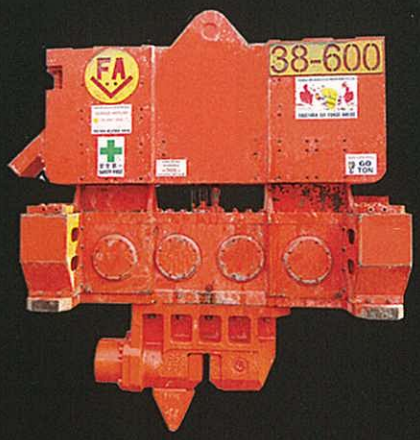
We serve you with our fullest conviction and commitment in providing you with the best value for money investiment.

Together we forge ahead

FAV HYDRAULIC VIBRATORY HAMMER

FAV HYDRAULIC VIBRO HAMMER

FAV 30-400



FAV 38-600

FAV 44-2000

FAV 60-800

FAV 150-1200

FAV 250-1200

FAV 400PP

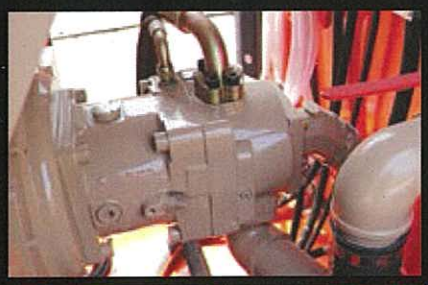
FAV 600PP

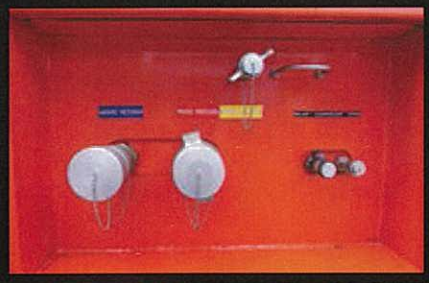
FAV 900PP

FAV 1200PP

All technical data are purely indicative and subject to change without notice

FAV HYDRAULIC VIBRO HAMMER





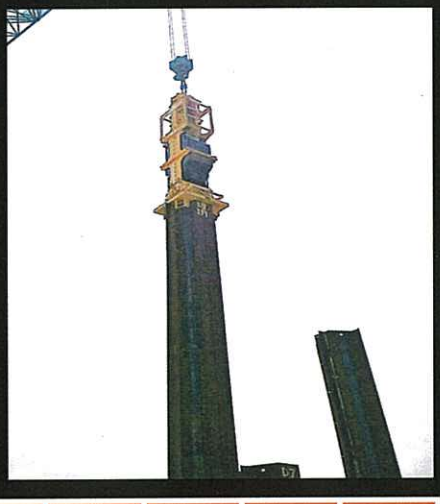

Vibratory Model		FAV 20-250	FAV 418	FAV 30-400	FAV 38-600	FAV 817	FAV 44-2000	FAV 60-800	FAV 82-800	FAV 120-1200	FAV 150-1200	FAV 250-1200
Eccentric moment	kgm	16	27	30	38	51	51	60	82	120	150	230
Frequency	vpm	1,800	1,800	1,800	1,800	1,700	2,000	1,800	1,700	1,600	1,400	1,400
Centrifugal force	kN	570	962	1,069	1,354	1,621	2,244	2,464	2,606	3,379	3,234	5,390
Amplitude (free hanging)	mm	20	19	19	30	30	25.4	30	30	32	40	45
Max line pull for extracting	kN	300	400	400	710	454	710	710	890	1,600	2,082	3,123
Total Weight (no clamps & hoses)	kg	2,566	4,300	4,300	6,500	6,015	5,650	7,397	7,200	13,776	16,500	22,500
Non-vibrating weight	kg	960	1,534	1,534	1,815	1,815	1,658	1,815	2,065	6,277	9,200	11,500
Height (without clamp)	mm	1,420	2,010	2,010	2,150	2,560	1,830	2,490	2,900	2,560	2,650	2,650
Length (inclu. hose chute)	mm	1,650	2,550	2,550	3,000	2,680	2,430	3,250	2,680	3,580	3,050	4,600
Width	mm	623	330	330	750	560	560	535	560	1,002	660	900
Throat width	mm	623	320	320	330	310	380	330	360	817.4	660	900
Hydraulic hose length	m	30	30	30	45	45	45	45	45	45	45	45
Hydraulic hose weight (w/o oil)	kg	385	385	385	770	770	770	770	770	1,020	1,020	1,020

Powerpack Model	FAV 375PP	FAV 400PP	FAV 600PP	FAV 900PP	FAV 1200PP
Engine	John Deere 6135	John Deere 6135	John Deere 6135	Cat C18 ACERT	Cat C27 ACERT
Max. Drive Flow	390 litres / min	435 litres / min	630 litres / min	870 litres / min	1,280 litres / min
Max. Drive Pressure	340 bar	340 bar	340 bar	320 bar	340 bar
Power	375 HP	400 HP	600 HP	765 HP	1,050 HP
Operating Speed	1,950 rpm	1,950 rpm	1,950 rpm	2,000 rpm	2,000 rpm

All technical data are purely indicative and subject to change without notice

FAV HYDRAULIC IMPACT HAMMER

FAV HYDRAULIC IMPACT HAMMER



Performance DATA	Ram Mass	Max Impact Energy	Blow Rate Max Stroke	Max Stroke	Min Stroke	Hammer weight	Hammer to leader face	Max working Pressure	Hydraulic Flow required	Hammer Length	Hammer Width	Hammer Depth
Model	KG	kNm	BPM	MM	MM	KG	MM	BAR	LPM	MM	MM	MM
HH 5	5,000	60	46	1,200	100	7,350	555	230	225	5,747	1,000	860
HH 7	7,000	84	41	1,200	100	9,350	555	250	225	6,317	1,000	860
HH 9	9,000	108	38	1,200	100	11,350	555	280	215	6,317	1,000	1,250
HH 11	11,000	132	29	1,200	100	13,350	555	300	190	6,887	1,000	1,250
HH 14	14,000	168	32	1,200	100	22,000	700	260	370	8,000	1,240	1,300
HH 16	16,000	192	32	1,200	100	24,000	700	270	370	8,200	1,240	1,300
HH 18	18,000	216	32	1,200	100	26,000	700	280	400	8,500	1,240	1,300
HH 20	20,000	240	30	1,200	100	28,000	700	290	415	8,700	1,240	1,300
HH 22	22,000	264	29	1,200	100	30,000	700	300	415	8,900	1,240	1,300
HH 26	26,000	312	28	1,000	200	34,000	750	300	600	10,000	1,240	1,300
HH 30	30,000	360	26	1,000	200	38,000	750	320	600	10,000	1,240	1,300

All technical data are purely indicative and subject to change without notice

FAV HYDRAULIC VIBROFLOT

FAV HYDRAULIC VIBROFLOT

Vibroflot model	VF 170	VF 230	VF 330	VF 410
Eccentric force (kN)	259 328 (max)	310 405 (max)	291 401 (max)	488 603 (max)
Frequency (rpm)	3,200 3,600 (max)	2,800 3,200 (max)	2,300 2,700 (max)	1,800 2,000 (max)
Amplitude (mm)	12	15	18	26
Diameter of vibroflot (mm)	305	325	325	410
Length of the vibroflot (mm)	2,600	2,800	2,800	3,500
Powerpack model	**FAV 250 powerpack**	**FAV 300 powerpack**	**FAV 350 powerpack**	**FAV 400 powerpack**
Horsepower (Hp)	250	300	350	400
Operating speed	1,800	1,800	1,900	1,900
Max Dive Flow(Litres/min)	315	380	420	480

* We are able to customise the specifications of the vibroflot to cater to your needs and demands in this competitive industry. Please approach our staffs for more details.

All technical data are purely indicative and subject to change without notice

FAR HYDRAULIC BORE PILE RIG

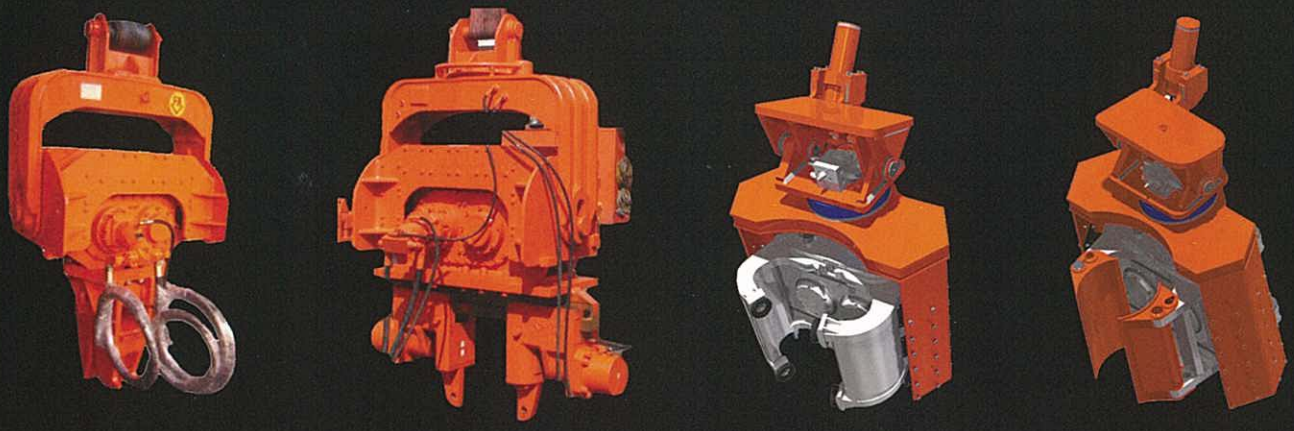
FAR HYDRAULIC BORE PILE RIG

Model				FAR80	FAR160	FAR200	FAR250	FAR270	FAR330
Kelly drilling	Max nominal torque		kNm	80	160	200	245	269	360
	Max pile diameter		mm	1,000	1,200	1,500	2,000	2,000	2,500
	Max pile diameter with casing		mm	\	1,000	1,300	1,700	1,700	2,000
	Max drilling depth		m	30	55	60	73	73	\
Optional Kelly bars	Friction kelly bar		mm(ø)	ø299-4*8.5m	ø377-5*12.5m	ø406-5*13m	ø420-5*15m	ø420-5*15m	80m
	Mechanical locking kelly bar			ø299-5*8.5m	ø377-4*12.5m	ø406-4*13m	ø420-4*15m	ø420-5*15m	64m
Base				CAT318D	CAT323D	CAT329D	CAT336DDL	CAT336DDL	CAT349D
Undercarriage	Overall length		mm	3,170	4,900	4,900	5,900	5,900	5,910/6,850
	Track shoe width		mm	600	800	800	800	800	800
	Overall width with extended side frames		mm	2,700	4,300	4,300	4,300	4,300	4,400
	Overall width with retracted side frames		mm	2,700	3,000	3,000	3,000	3,000	3,000
	Max travelling speed		km/h	2.8	5.7	5.3	5	5	5.2
Diesel engine	Model		type	CAT3054CA	CAT C6.4	CAT C7	CAT C9	CAT C9	CAT C13
	Rated power		kw(hp)	88(120hp)	110(147hp)	187(242hp)	261(350hp)	261(350hp)	328(429hp)
Hydraulic pumps	Main pumps		mpa	34.3	35	35	35	35	35
	Auxiliary pumps		mpa	4.2	4	4	4	4	4
Mast	Mast tilting forward		°	3	5	5	5	5	5
	Tilt sideway		°	±3	±5	±5	±5	±5	±5
	Mast tilting backwards		°	3	15	15	15	15	15
Main winch	1st Layer nominal line pull		kN	90	160	200	256	270	360
	1st Layer nominal rope speed		m/min	72	70	70	70	70	70
	Rope diameter		mm	20	26	28	28	32	36
Service winch	1st Layer nominal line pull		kN	20	60	76	115	115	115
	1st Layer nominal rope speed		m/min	40	60	70	70	70	70
	Rope diameter		mm	13	14	20	20	20	20
Rotary head	Max spin off speed		rpm	50	90	110	120	110	110
	Maximum drilling speed rpm		rpm	8-30	7-30	7-30	7-28	7-28	5-25
Crowd system	Crowd cylinder (Standard)	Crowd force (pull down/pull up)	kN	90/120	150/160	160/180	200/265	\	320/360
		Pull down stroke	mm	3,200	4,250	4,500	5,330	\	6,000
		Dimension	mm(ø)	\	125/90	125/90	160/110	\	160/110
	Winch crowd (optional)	Crowd force (pull down/pull up)	kN	\	\	\	\	265/265	\
		Pull down stroke	mm	\	\	\	\	14,000	\
Weight & dimensions	Transport width		mm	2,700	3,000	3,000	3,000	3,000	3,000
	Transport height		mm	3,355	3,133	3,121	3,380	3,380	34,400
	Transport length		mm	11,270	12,956	14,358	15,000	15,000	17,800
	Weight (with standard kelly bar)		ton		43	63	73	75	96
	Operating height		mm	12,450	18,557	20,233	21,160	21,160	25,106
	Operating width		mm	2,700	4,300	4,300	4,300	4,300	4,400
	Min working radius		mm	\	3,125	3,570	3,810	3,810	5,110

All technical data are purely indicative and subject to change without notice

BENTONITE EQUIPMENT

EXCAVATOR MOUNT HYDRAULIC VIBRATORY HAMMER



Excavator Mount Hydraulic Vibratory Hammer is a machine widely used to drive and extract piles. With proper installation, the power and hydraulic pressure of the excavator can propel the vibratory hammer. The advantages of the FAV excavator mounted vibratory hammer are its small size and simple operation. It caters for different working environment for example; space restriction, drainage maintenance and marshland works. With the powerful functions and mobile characteristics, this excavator mount hydraulic vibratory hammer can perform well under extreme conditions. The unique design also allows it to work very close to the construction sites with minimum effect to the environment and space constrain. In addition, it's low noise pollution and non- exhaust gas characteristics, using all well known parts to ensure reliability, FAV excavator mount hydraulic vibratory hammer is the best option for contractors.

Item		SFV 250	SFV 300	SFV 350	SFV 450
Frequency (Max)	rpm	3,000	3,200	3,500	3,500
Weight	kg	1,500	2,200	2,800	3,500
Operating Pressure	bar	280	320	325	350
Vibratory Force	tons	20.5	35.6	45	60
Max. Pile Length	m	9	13	16	18
Suitable Carrier	tons	18 - 25	30 - 40	40 - 50	40 - 65

All technical data are purely indicative and subject to change without notice

OTHERS EQUIPMENTS

GROUT MIXER PLANT / CRAWLER DRILL

www.fnapl.com

Together We Forge Ahead

FOUNDATION ASSOCIATES ENGINEERING PTE LTD
5 Tuas Ave 1, Singapore 639490
Tel: (65) 6863 1633
Fax: (65) 6863 1455
Email: fnapl@singnet.com.sg