



SPI PILING
A E YATES GROUP

Specifications

ABI TM 14/17 Telescopic Leader Rig

Rig Weight	56.7 Tonnes (with MRZV 18 VV Vibratory Hammer)
Carrier	SR35T-C
Width of Track (Retracted)	3.0 Metres (Transport Mode)
Width of Track (Extended)	4.0 Metres
Transport Height (from underside of tracks)	3.4 Metres
Length of Tracks	5.1 Metres
Tail Swing	3.71 Metres

Working Limits

Maximum Pile Length (with MRZV 18VV Vibratory Hammer)	17.0 Metres
Maximum Auger Length (with MDBA 3000 Auger Drive Attachment)	17.2 Metres
Maximum Driven Pile Length (with HPH 2400 Impact Hammer Attachment)	15.0 Metres
Maximum Winch Capacity	5.0 Tonnes
Maximum Pile Weight (Using pitching chain)	3.0 Tonnes



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Optional Attachments

- ☐ HPH 2400 2.0 Tonne Hydraulic Impact Hammer (5.9 Tonne)
- ☐ MDBA 3000 3.0 Tonnes / Metres Auger Drive (2.1 Tonnes)
- ☐ MDBA 6000 6.0 Tonnes / Metres Auger Drive (2.0 Tonnes)
- ☐ HPU / HPZ Hydropress

Suitable Applications

- ☐ Driving / Extracting Sheet Piles up to 17 Metres in length (as singles or in pairs)
- ☐ Pre-Augering
- ☐ Impact Driving
- ☐ Driving Steel Bearing / Tubular Piles / H-Piles

**FOR FURTHER INFORMATION OR TO HIRE ANY OF OUR
EQUIPMENT PLEASE CALL
0845 450 7475**

STEEL PILING CONTRACTOR OF CHOICE

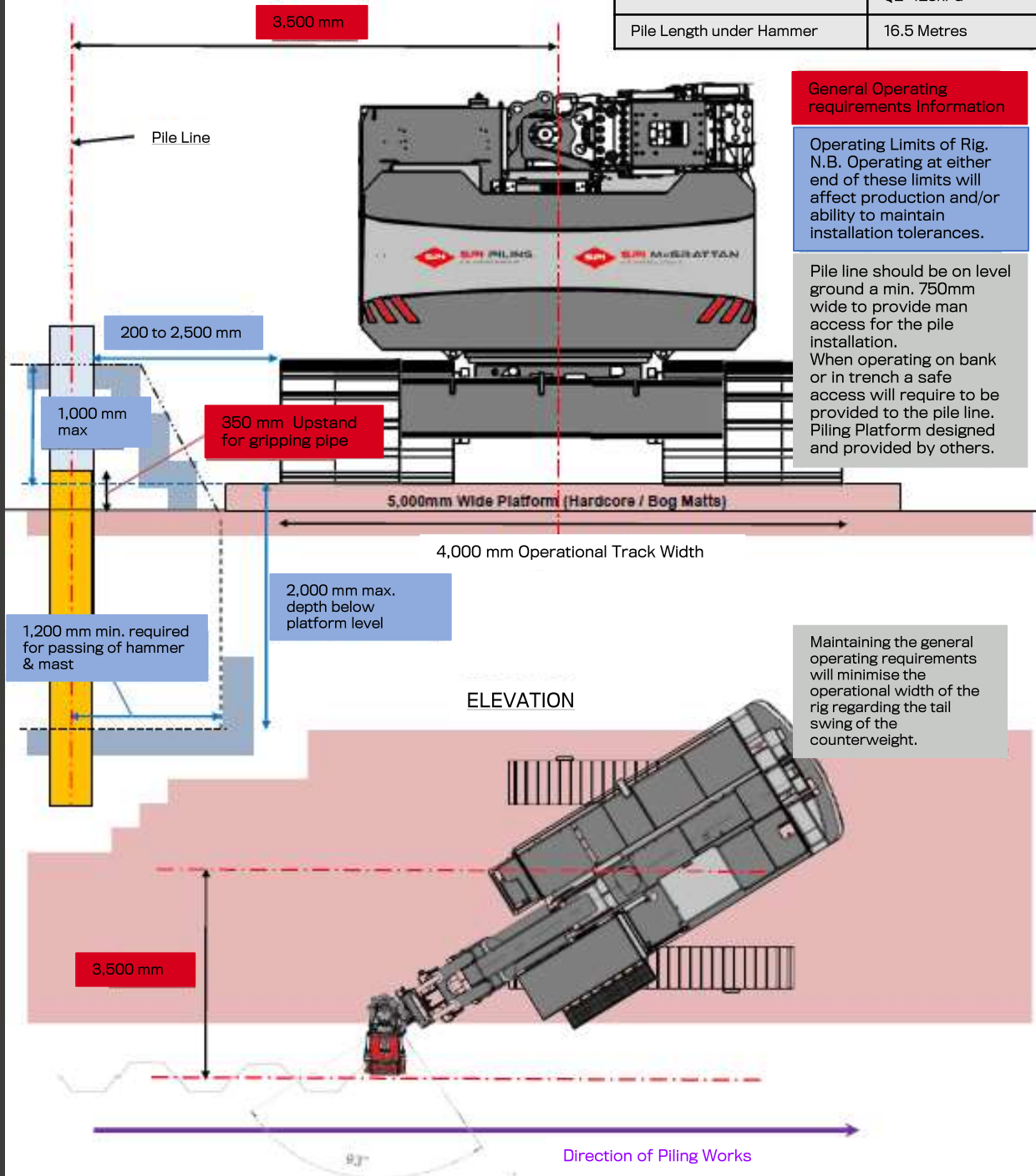


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STEEL PILING CONTRACTOR OF CHOICE

Leader Rig	ABI TM 14/17
Rig Weight	56.7 Tonne
Ground Bearing Pressure	Q1-181kPa Q2-423kPa
Pile Length under Hammer	16.5 Metres

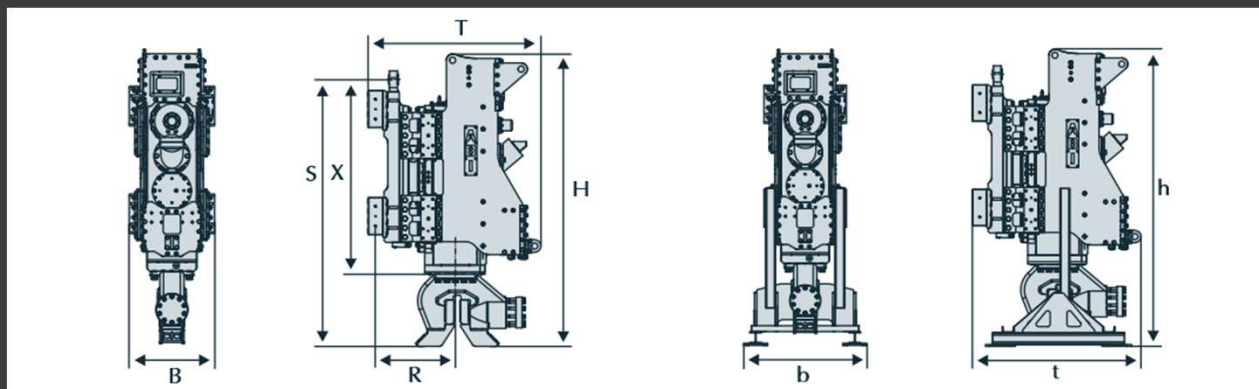


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Vibrators MRZV-18V



Technical Data MRZV 18V

Static Moment	kgm	0-18
Dynamic mass	kg	2730
Amplitude x2	mm	13
Nominal resolutions	Min-1	2160
Centrifugal Force at normal frequency	kN	925
Static Extraction force max.	kN	200
Nominal oil pressure	MPa	32
Hydraulic flow rate max.	l/min	693
Require hydraulic Power at vibrator	kW	360
Total weight* / transport weight*	kg	4120 / 4335
Weight of pile elements max.**	kg	2750

Dimensions*

H	Height	mm	2720
B	Width	mm	690
T	Depth	mm	1405
R	Guild to driving axle	mm	650
S	Locking to bottom	mm	2530
X	Locking to vibrator bottom	mm	1880

Transport Dimensions

Height (h) / Width (b) / Depth (t)	mm	2800 / 1030 / 1405
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ASSESSMENT FOR TRANSFER OF VIBRATION DURING PILE DRIVING & EXTRACTION

INPUT INFORMATION

Hammer Model:

Hammer Type:

Soils Information:

* C Value, refer to adjacent Table 1

Maximum Power Energy: **10000** J/cycle

Lower Power Energy: **0** J/cycle

Table 1: Soils Information

Method	Ground Conditions	C
Impact	Very stiff cohesive, dense granular, rock, fill with large obstructions	1.00
	Stiff cohesive, medium dense granular, compact fill	0.75
	Soft cohesive, loose granular, loose fill, organic soil	0.50
Vibro	All soils	0.70

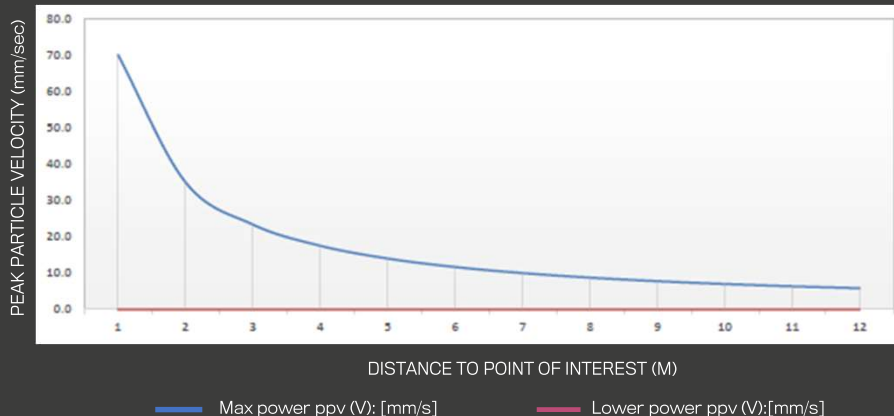
OUTPUT INFORMATION

Based on the following equation the theoretical PPV levels has been calculated to demonstrate the required safe working distances to work within the stated limits.

$$v = C\sqrt{W}/r.$$

Where : V = ppv, C = Soil/hammer parameter, W = hammer energy per blow/cycle, r = distance to point of interest.

Vibration Estimation



ASSESSMENT OF SAFE WORKING DISTANCES BASED ON STANDARDS TRIGGER LEVELS

Hazard Classification	ppv	Radius	Radius	Hazard Classification	ppv	Radius	Radius
	mm/s	m	m		mm/s	m	m
Ruins, Buildings of architectural merit	2	35.0	0.0	Heavy Industrial	15	4.7	0.0
Residential	5	14.0	0.0	Buried Services (general)	25	2.8	0.0
Light Commercial	10	7.0	0.0	Buried Services (old brick sewers)	12.5	5.6	0.0

Tolerance of building (not occupants)

Values from EC3:5 FOR COSMETIC DAMAGE – DEPENDENT ON HAMMER TYPE

Values are only a prediction of the transfer of vibration from BS guidelines. These do not take full ground conditions into consideration.

There will only be lower levels information if the hammer selected is Variable Power and the information is available.