

# Risk Assessment

## RA100 - General use of Piling Rig & Vibro



ABI Equipment Ltd	Creation Date: 10/07/17
General use of Piling Rig & Vibro	

Main Hazards are:	
Crushing when standing in the Danger Area.	Danger from falling machine parts and parts ejected from the machine.
Spraying of liquids under pressure due to failure and mechanical damage.	Loss of stability
Touching of hot machine parts during operation and maintenance.	Loss of stability through unskilled personnel operating machinery.
Injury from falling loads, collisions and unexpected movements.	Loss of stability through human misbehavior and carelessness.
Excessive noise when standing in the Danger area without suitable ear protection.	Loss of stability through slips, trips and falls out of the cab or from the machine.
Inhalation of harmful liquids or gases.	
Fire & explosion.	
Persons / Property affected	
All Employees	General Public
Rig Operator	Slinger/Spotter
Other Personnel on site	Visitors
Unauthorised People on Site	

Assessment of Risk:	Severity	4	X	Likelihood	4	= Risk	16
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Control Measures already in Place	PPE Required
1. The Customer is responsible for the safety of the operation area.	Safety helmets <input checked="" type="checkbox"/>
2. Only personnel qualified, authorised, and instructed by ABI Equipment are allowed to operate the Piling Rig, attachments and Winch.	Hi-Vis Jackets <input checked="" type="checkbox"/>
3. Only authorised personnel are allowed in Danger Area. Wherever possible personnel to leave Danger Area when the Rig, attachment or Winch are in operation.	Safety footwear <input checked="" type="checkbox"/>
	Eye protection <input checked="" type="checkbox"/>
	Dust masks <input type="checkbox"/>
4. Sling/Spotter or Service technician to maintain visual contact with Operator at all times.	Ear plugs <input checked="" type="checkbox"/>
	Earmuffs <input checked="" type="checkbox"/>
5. Area to cordoned off if likelihood of unexpected personnel in Danger Area.	Gloves <input checked="" type="checkbox"/>
6. Piling Rig and attachment to be inspected daily in accordance with the daily check sheet and properly maintained in accordance with the ABI Manual.	Protective overalls <input checked="" type="checkbox"/>
7. Hydraulic System to be de-pressurised before maintenance work starts.	Gauntlets <input type="checkbox"/>
8. Hydraulic System to be de-pressurised before oil levels are topped up or work is done on fluid control.	Harnesses <input type="checkbox"/>
9. Machine parts must be allowed to cool down before being touched or maintained.	Breathing apparatus <input type="checkbox"/>
	Face masks <input type="checkbox"/>
10. Ear defenders to be worn at all times in danger area while in operation.	
11. Machine to be maintained and repaired in accordance with the ABI.	
12. Rig to be operated on load bearing ground away from excavations.	
13. Rig to be moved/operated in accordance with ABI Operators manual in the correct position and correct manner.	
14. Suitable PPE to be worn at all times.	
15. All personnel to know the location of the emergency stop buttons.	
16. No Personnel to stand under or near any load while being lifted.	

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<b>Assessment of Risk:</b>	Severity	3	X	Likelihood	2	= Risk	6
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Additional Controls required	PPE/Equipment
The employee must be adequately trained and competent to operate a piling rig and vibro.	<b>All personnel MUST wear the appropriate level of PPE for the activity they are involved with or area they are in</b>
Newly trained staff should be supervised until a suitable level of competency has been achieved.	
In extreme weather or where time is crucial, the Customer is responsible for maintaining a safe site and in supervising and instruction the Piling Rig Operator and Slinger/Spotter.	
At least two people should be present when operating and moving the Piling Rig and Vibrator: The Operator and Slinger/Spotter. Other people may be present, but they must be outside the Danger Area.	
The rig is on hire: Usually 10 hours per day and 50 hours per week. An additional risk assessment is needed if the piling operation is at night, longer than normal working hours or on a shift basis.	
All personnel on site should be made aware of the safe systems of work. The Operator and Supervisor must have read and understand the ABI Operators Manual. All personnel involved must know where the Danger Area is and how to operate the Emergency Stop Buttons.	

<b>Assessment of Risk:</b>	Severity	3	X	Likelihood	2	= Risk	6
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Approval and Review		
Prepared by:	Cathy Sheehan	10/07/2017
Updated by	Ash Soliman	04/10/2024
Review by:	Ash Soliman	04/10/2024

RISK RATING = L x S			Hazard Severity (S)				
			1 Negligible	2 Slight	3 Moderate	4 High	5 Very High
Likelihood (L)	1	Very Unlikely	LOW	LOW	LOW	LOW	LOW
	2	Unlikely	LOW	LOW	LOW	MEDIUM	MEDIUM
	3	Possible	LOW	LOW	MEDIUM	HIGH	HIGH
	4	Likely	LOW	MEDIUM	HIGH	HIGH	HIGH
	5	Very Likely	LOW	MEDIUM	HIGH	HIGH	HIGH

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Likely Hood	
1. Very Unlikely	A freak combination of factors would be required for an accident/incident to occur
2. Unlikely	A rare combination of factors would be required for an accident/incident to occur
3. Possible	Could happen when accidental factors are present but otherwise unlikely
4. Likely	Not certain to happen but an additional factor may result in an accident/incident
5. Very Likely	Almost inevitable that an accident/incident would occur
Hazard Severity	
1. Negligible	Negligible injury, no absence from work
2. Slight	Minor injury requiring first aid
3. Moderate	Injury leading to a lost time accident
4. High	Involving a single person with a serious injury / death
5. Very High	Multiple persons with serious injury / death
Outcomes	
LOW	Score (1-6) May be acceptable. Annual Review to see if risks can be reduced further
MEDIUM	Score (8-10) Identify controls must be identified or specific method statement required
HIGH	Score (12-25) Task <b>must not</b> proceed. Senior Management to consider if the risks can be reduced by purchase of additional training, additional equipment, additional staff, additional signage, safe system of work, permit to work or radical changes in method.

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Prepared by	Cathy Sheehan
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