



<b>Plant/Task/Layout:</b>	<b>Unique Code:</b>	
One man Post hole borer	PM-000017	
<b>Description:</b>	One man post hole borer or ute mounted post borer and auger used to dig holes without heavy machinery or host unit.	
<b>Department:</b>	<b>Location/Project:</b>	<b>Area:</b>
Admin QLD	Head Office	
<b>Process:</b>	<b>Risk Assessment Completed By:</b>	<b>Risk Assessment Date:</b>
Design/Engineering	Ryan Bowen	10/11/2020
<b>Documents:</b>	9188-PM-000017 - One Man Machine Operators Manual.pdf	

## Hazards with Added Risks

Item	Risk Description	Initial Risk	Control(s)	Reviewer	Review Date	Residual Risk
<b>Abnormal Situation</b>						
Are there any Intermittent conditions which causes an employee to take out of the ordinary action?	Auger gets stuck digging in hard terrain or soil, or is jammed on varied ground or foreign objects, such as wire or tree roots	13 (Medium) - 52.00%	If Auger gets stuck digging hard ground, or is jammed on varied ground of foreign objects, such as wire, tree roots etc - the one man post hole digger is able to be placed into reverse and back out of the hole- unscrewing the jammed auger	AnthonyWieckmann	11/11/2023	9 (Medium) - 36.00%
<b>Condition</b>						
Is a hazard likely due to the age and condition of the plant?	Leaving the equipment out in the climate could reduce the lifetime of the equipment	13 (Medium) - 52.00%	Operator manual recommends that machine is stored in a dry and protected place to extend the life of the machine	AnthonyWieckmann	11/11/2023	9 (Medium) - 36.00%
<b>Crushing/Trapping</b>						
<i>Can anyone be crushed/trapped due to</i>						
Lack of capacity to slow, stop or immobilise plant?	Lack of capacity to slow or stop the auger from spinning could cause injury to operator	18 (High) - 72.00%	On/off lever installed on the motor to start / stop machine or stave the motor of fuel to stop motor operating the auger motor / hydraulic system	AnthonyWieckmann	11/11/2023	9 (Medium) - 36.00%
			Dead man control will ensure a quick stop if the hand is removed from the control lever	AnthonyWieckmann	11/11/2023	
Uncontrolled/unexpected movement of plant/load?	Operator could be crushed or trapped under the auger due to unexpectant movement of the plant or load.	9 (Medium) - 36.00%	Operator can control where and when to operate/ push the post hole digger, handlebars and oversized wheels make it easier to maneuver in rough terrain	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
			Dead man control will ensure a quick stop if the hand is removed from the control lever	AnthonyWieckmann	11/11/2023	
Being trapped between the plant and other structures?	Operator could become trapped between plant and other structures if operating the one man post hole digger when fitted correctly to a work platform, truck, tray, trailer or ute.	13 (Medium) - 52.00%	One man post hole digger must be fitted with the appropriate attachment components to ensure it is safe and secure.	AnthonyWieckmann	11/11/2023	9 (Medium) - 36.00%
<b>Cutting, Stabbing, Striking, Puncturing, Abrasion and Tearing</b>						
<i>Can anyone be cut, stabbed or punctured due to</i>						
Work pieces being ejected?	Operator could be struck by flying work pieces when removing spoil from the hole being dug	13 (Medium) - 52.00%	Augers shall be cleaned only when the rotating mechanism is in neutral and the auger stopped; long-handled shovels shall be used to move cuttings from the auger	AnthonyWieckmann	11/11/2023	9 (Medium) - 36.00%



Item	Risk Description	Initial Risk	Control(s)	Reviewer	Review Date	Residual Risk
<b>Electricity</b>						
<i>Can anyone be injured by electrical shock or burnt due to</i>						
Working in close proximity to electrical conductors?	Operator could come into contact with underground electrical conductors.	14 (Medium) - 56.00%	Contact utility companies 'DIAL 1100' before digging. Know your digging area! Avoid hitting underground cables and pipes, over head wires, and other hazards- sticker on hand bars reminds operator to dial before dig	AnthonyWieckmann	11/11/2023	10 (Medium) - 40.00%
<b>Entanglement</b>						
Can anyone's hair, clothing, gloves, cleaning brushes, tools, rags or other materials become entangled with moving parts of the plant or materials?	Operator could become entangled with the auger whilst spinning	18 (High) - 72.00%	Operators, helpers, and other personnel working near One Man Machines must wear steel-toe safety shoes and safety glasses as a minimum. Hearing protection, respirators, and personnel protective clothing will be specified in the site-specific Health and Safety Plan or SW MS	AnthonyWieckmann	11/11/2023	10 (Medium) - 40.00%
Can other items become entangled in moving parts of the plant? (air hoses, power cables)	Operator could become entangled with hydraulic hoses on the unit.	13 (Medium) - 52.00%	Specific sized hydraulic hoses used for the post hole digger which eliminates any entanglement issues, unit also has cover over hoses in case of burst and are secured properly	AnthonyWieckmann	11/11/2023	9 (Medium) - 36.00%
<b>Ergonomics</b>						
<i>Can anyone be injured due to</i>						
Repetitive body movement?	Operator could suffer some body aches and pains digging excessive amounts of post holes	9 (Medium) - 36.00%	One-Man post hole machine is a one or two man operation, mainly designed for earth drilling- workers can rotate or assist where necessary to reduce manual handling which causes aches and pains to operator	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
<b>Fire and Explosion</b>						
Can anyone be injured by fire?	Operators could be injured by fire during refueling activities if smoking during refuelling	9 (Medium) - 36.00%	Do not smoke when refuelling machine. Allow room in the gas tank for expansion. Wipe up any spilt fuel. Secure cap tightly when done.	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
Can anyone be injured by explosion of gases, vapours, liquids, dusts or other substances?	Operators could be injured by explosion of gases, vapours during refueling activities	9 (Medium) - 36.00%	Operator manual recommend that you do not smoke when refuelling machine. Allow room in the gas/ fuel tank for expansion. Wipe up any spilt fuel. Secure cap tightly when done.	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
<b>Guarding and Emergency Stops</b>						
Are all moving parts guarded? (i.e. Rotating collars, spindles, shafts, chains, belts, nip points etc)	Due to the nature of the equipment, it is unable to guard the auger when in operation however operator or bystanders could be injured on moving parts	13 (Medium) - 52.00%	Drill stem rotation must be stopped before adding or removing sections, or making adjustments to the drill stem or sampling equipment.	AnthonyWieckmann	11/11/2023	9 (Medium) - 36.00%
			Only authorized, properly trained workers will be permitted to operate One Man Machines. All unnecessary personnel will stand clear of One Man Machines, Augers, extensions or devices while they are in operation.	AnthonyWieckmann	11/11/2023	
<b>Manual Handling</b>						
Do the actions and postures involve reaching upwards or handling loads above shoulder height?	Depending on the terrain, Operator could feel slightly uncomfortable starting each hole due to pulling down on the post hole digger to start the hole.	9 (Medium) - 36.00%	One man post hole digger actually designed so two operators can use the machine	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
			The One Man Machine and augers must be controlled by means of slow controlled operation to prevent uncontrolled swinging when the equipment is lifted into place above the bore hole or when machine is moving with auger fitted.	AnthonyWieckmann	11/11/2023	
Does the task require strenuous pushing or pulling?	Depending on the terrain, operator could be required to use excessive force to push or pull the post hole digger	13 (Medium) - 52.00%	Post hole digger designed so it has a large wheel assembly to assist in movement in rough terrain.	AnthonyWieckmann	10/11/2023	9 (Medium) - 36.00%



Item	Risk Description	Initial Risk	Control(s)	Reviewer	Review Date	Residual Risk
<b>Noise</b>						
<i>Can anyone using the plant, or in the vicinity of the plant suffer injury due to</i>						
Exposure to noise levels exceeding the maximum daily dose level? (85 dB(A) per 8hr day)	Operators could be exposed to noise exposure if operating longer than the maximum dose level (85 dB (A) per 8 hr day	9 (Medium) - 36.00%	Operator manual recommends hearing protection be worn dependant on the site safety plan or SWMS	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
<b>PPE</b>						
Is PPE required to operate this item?	Operators could be injured if not wearing the appropriate PPE when operating the one man post hole digger.	5 (Low) - 20.00%	Operator manual recommends that all Operators, helpers, and other personnel working near One Man Machines must wear steel-toe safety shoes and safety glasses as a minimum. Hearing protection, respirators, and personnel protective clothing will be specified in the site-specific Health and Safety Plan or SWMS	AnthonyWieckmann	11/11/2023	3 (Low) - 12.00%
<b>Pressurised Content</b>						
Can anyone come into contact with fluids or gas under high pressure, due to plant failure or misuse of the plant?	Operator could come into contact with pressure relief when digging ground that is hard to drill, this will stall the auger	9 (Medium) - 36.00%	If the ground is too hard to drill, the Auger is jamming on varied ground or foreign objects, such as wire, tree roots etc, the pressure relief will blow, stalling the Auger rotation. Clear Auger and start again	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
<b>Slips/Trips/Falls</b>						
<i>Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to</i>						
Uneven or slippery surfaces?	Operator could slip trip and or fall if digger holes on a slope or near uneven or slippery surfaces or obstacles.	9 (Medium) - 36.00%	When drilling on slopes, Auger Motor Head Assembly can be tilted as per incline by loosening and tightening Lock bolt	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%
			Drilling close to fences and obstacles can be made easier by sliding the handle bar left or right as required. Simply loosen and tighten the lock bolt.	AnthonyWieckmann	11/11/2023	
<b>Vibration</b>						
Can anyone be injured or suffer ill health from exposure to vibration?	Operator could be exposed to vibration dependant on the terrain being worked	9 (Medium) - 36.00%	Operator is able to determine where they dig at their own time as they are in control of the machine and the auger activation lever, Do not attempt to drill Auger to full depth in one operation. Continually clearing the hole in an up and down motion will facilitate a much easier drill operation. It may be necessary to clear cutters and Auger fighting from time to time to ensure quicker easier cutting	AnthonyWieckmann	11/11/2023	6 (Low) - 24.00%

## Hazards Deemed Not Applicable

Item
<b>Entanglement</b>
<ul style="list-style-type: none"> <li>Other factors</li> </ul>
<b>Crushing/Trapping</b>
<i>Can anyone be crushed/trapped due to</i>



**Item**

- Material falling off the plant?
- The plant tipping or rolling over?
- Parts of the plant collapsing?
- Contact with moving parts during testing, inspection, operation, maintenance, cleaning or repair?
- Being thrown off or under the plant?
- Other?

**Cutting, Stabbing, Striking, Puncturing, Abrasion and Tearing**

*Can anyone be cut, stabbed or punctured due to*

- Contact with sharp or flying objects?
- Contact with moving parts during testing, inspection, operation, maintenance, cleaning or repair?
- The mobility of the plant?
- Uncontrolled or unexpected movement of the plant?
- Other?

**Shearing**

- Can anyone's body parts be sheared between two parts of plant, or between a part of the plant and a work piece or structure?

**Electricity**

*Can anyone be injured by electrical shock or burnt due to*



**Item**

- Live electrical conductors?
- Overload of electrical circuits?
- Damaged or poorly maintained electrical leads, cables or switches?
- Water near electrical equipment?
- Lack of isolation procedures?
- Other?

**Noise**

*Can anyone using the plant, or in the vicinity of the plant suffer injury due to*

- Excursions above 140 dB(A)?

**Radiation**

- Can anyone using the plant, or in the vicinity of the plant suffer injury or illness due to exposure to radiation? (Consider all types of radiation, X-rays, Gamma rays, Microwaves, UV, IR, Lasers)

**Friction**

- Can anyone be burnt due to contact with moving parts, materials or surfaces of the plant?

**Lighting**

- Is lighting adequate for normal operation, cleaning and maintenance?

**Temperature**

- Can anyone come into contact with objects at high or low temperatures?



**Item**

- Other?

**Suffocation**

- Can anyone be suffocated due to lack of oxygen, or Atmospheric contamination?

**PPE**

- Is appropriate PPE signage displayed on this item?
- Other?

**Slips/Trips/Falls**  
*Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to*

- Poor housekeeping, eg. swarf or spillage in the vicinity?

**Ergonomics**  
*Can anyone be injured due to*

- Poorly designed seating?
- Constrained body posture or movement or maintaining the same posture for prolonged periods?
- Other?

**Manual Handling**

- Do the actions and postures involve holding loads away from the body?
- Do the actions and postures involve twisting the back, neck or upper body?
- Do the actions and postures involve sideways bending or loading handling on one side?



**Item**

- Does the task involve long carrying distances?
- Does the task involve sudden jerky, rapid or unexpected movements?
- Are the forces and loads handled bulky, large or awkward?
- Are the loads handled difficult or uncomfortable to grasp or hold?
- Are the loads handled unstable, unbalanced or unpredictable?

**Guarding and Emergency Stops**

- Are emergency stops clearly marked and operational?

**Location**

- Does the plant impact on the surrounding workplace and Create potential hazards? (Consider potential impact on the design and layout of the workplace)
- Is the location of the plant appropriate? (Consider potential affects due to the environmental conditions and terrain)
- Other?

**Abnormal Situation**

- Could any foreseeable abnormal conditions, misuse or fluctuations in operation conditions create potential hazards? (State nature of hazards)
- Other?

**Systems of Work**

- Could work systems/processes associated with the plant create potential hazards? (list hazards)



**Item**

- Have adequate arrangements been made for safe access and egress from the plant?
- Are operating procedures provided?
- Are operator controls located appropriately and clearly labelled?

**Other**

*Can anyone be injured or suffer ill-health from exposure to*

- Chemicals?
- Toxic gasses or vapours?
- Fumes?
- Dusts?
- Oils?
- Other?

**Falls from Heights**

*Can anyone fall from a height due to*

- Lack of proper work platforms, stairs or ladders?
- Lack of guardrails or other suitable edge protection?
- Unprotected holes, penetrations or gaps?



Item
<ul style="list-style-type: none"><li>• Poor floor or walking surfaces, such as the lack of a slip-resistant surface?</li></ul>
<ul style="list-style-type: none"><li>• Steep walking surfaces?</li></ul>
<ul style="list-style-type: none"><li>• Collapse of the supporting structure?</li></ul>
<ul style="list-style-type: none"><li>• Other?</li></ul>