

Safe Work Instruction - Pipecutter - Wheeler Rex

DO NOT use this plant* unless you have been inducted in its safe use and operation by an Authorised Experienced Operator

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process. Additional training may be required for high risk plant. Site and task may change required PPE.

PERSONAL PROTECTIVE EQUIPMENT



Eye protection must be worn



Long and loose hair must be contained or covered.



Hearing protection must be worn



Foot protection must be worn



Hand protection must be worn



P2 face mask must be worn when airborne dust or fumes are created



High visibility clothing must worn

POTENTIAL HAZARDS AND RISKS

- Entanglement**
Entanglement in moving parts
- Manual Task Injury**
Manual task injury from incorrect manual handling techniques
- Slip, Trips, Falls**
Slip, trip, fall due to uneven or slippery work surfaces
- Other**
Hearing damage from excessive noise
Irritation from excessive dust
Exposure to toxic fumes
Burn injury
Exposure to asbestos
- Explosion**
Explosion of gases, vapours or liquids
- Cutting, Stabbing or Puncturing**
Injury from contact with moving parts
Injury from sharp or flying object
- Exposure to High Pressure Fluid**
Injury from exposure to high pressure fluids

PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete site specific risk assessment
- ✓ Complete visual plant check before operation
- ✓ Ensure you are familiar with plant operations and controls
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines

OPERATING PROCEDURES

- ✓ Keep clear of moving plant parts
- ✓ Operate plant to the conditions of the work area
- ✓ Place the PipeMaster unit on a stable platform and remove the blade cover, the blade retaining nut, and the spacer washer and collar. Select the correct blade for the material to be cut – Diamond tipped for CI & DI, Carbide tipped for Carbon Steel etc
- ✓ Slide the selected blade onto the drive shaft. Be sure to install with the correct rotation orientation as noted on the blade and blade cutter. The blade should rotate counter-clockwise
- ✓ Determine the amount of chain required – see chain chart. The tool has 11 chain sections installed. Additional chain sections can be attached after the tool is placed on the pipe

- ✓ Clean the area of the pipe where the PipeMaster is to be placed ensuring to remove all loose and protruding material that may affect the rotation of the cutter. Ensure that adequate space is dug out under the pipe to allow for the cutter to travel completely around the circumference of the pipe - approx 200mm
- ✓ Set the PipeMaster on to the pipe to be cut. Be sure that the blade has been raised to its highest position so that the blade will not be resting on the pipe. The blade is positioned by loosening the hex nut to the notched side arm and moving it up or down
- ✓ Ensure that the unit is square on the pipe by checking that the 4 wheels are all in solid contact with the pipe wall
- ✓ Attach the proper amount of chain, wrap it around the pipe and engage the hooks on the chain take-up mechanism. Tighten the chain securely using the open wrench supplied in the tool kit. It is acceptable if several sections of chain extend beyond the take-up mechanism
- ✓ The unit should be started with the blade slightly past the vertical centre point so that the cut will be finished on top of the pipe. This will minimise pinching the blade

- ✓ Ensure that the drive engagement lever is in neutral or no-travelling position. The neutral position is extending straight out from the body of the cutter
- ✓ Connect the unit to the Hydraulic Power Pack or other hydraulic source ensuring that the hydraulic flow does not exceed 6ltrs/min. Check that no adjusting keys or wrenches are connected to the cutter and start the hydraulic flow checking the blade rotation. If the blade is not rotating counter-clockwise, reverse the hoses
- ✓ Connect a water supply to the connections on the tool and ensure that it is spraying onto the blade
- ✓ Loosen the blade lock nut and plunge the blade fully into the pipe so that the blade housing is just clear of the pipe surface
- ✓ Engage the travel lever to start unit moving around the pipe
- ✓ The tool should travel on its own for the duration of the cut. However, the operator should watch the progress closely to ensure proper operation. Wedges should be installed at a few points around the pipe to avoid pinching the blade – especially once the cutter reaches the bottom portion of the pipe. Be sure that water is always supplied to the blade. If necessary stop the cut and refill tanks if necessary
- ✓ Occasionally on pipes that are wet or slippery, the travelling wheels may begin to slip as the cutter comes up the back side of the pipe. Slight upward pressure may be needed to be applied until the tool reaches the top of the pipe
- ✓ Depending on the diameter and thickness of the pipe, there may be some deviation from the start and end of the cut. If a totally accurate cut is required, a tracking guide will have to be used
- ✓ When the cut is complete stop the unit by switching the travel lever to the off position and raise the blade fully out of the pipe whilst it is still cutting to prevent it from jamming. Lock it in the raised position
- ✓ Turn off the hydraulic and water supplies and remove the hoses
- ✓ Loosen the chain take-up mechanism and remove the PipeMaster from the pipe

ENDING OPERATIONS

- ✓ Allow plant to cool before performing any maintenance, refuelling or thoroughly cleaning the unit
- ✓ Ensure plant is in good working order and pack it and all the accessories back into its carry box

DO NOT

- ✗ Do not use if plant is faulty. Attach a DO NOT OPERATE tag and report fault to your supervisor
- ✗ Do not leave plant running unattended
- ✗ Do not insert your hand into rotary sections

- ✗ Do not use deformed or rusted chains, otherwise the chain may disengage
- ✗ Do not mistake the top and bottom sides of the chain
- ✗ Do not place machine on pipes when it is not in use
- ✗ Do not perform any cutting near flammable items
- ✗ Do not wear loose jewellery
- ✗ Do not use mobile phone while operating plant

*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.