



CONSTRUCTION
Training Group

LEARNER GUIDE

Power Waste Recycler (PWR)

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Guidelines for OHS Competency Standards

Loadshifting Equipment

Power Waste Recycler

Oral/Written Assessment

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Practical Checklist

1. Conducts routine checks on equipment:

- Track tension
- Track condition and tension
- Check Hammers

Checks liquid levels:

- Complete walk around Machine
- Fuel
- Hydraulic Oil
- Engine Oil
- Battery
- Coolant
- Air Filter Indicator

Checks structure for defects:

- Damaged or broken parts
- Loose nuts, bolts and couplings

Checks attachments for defects:

- Damage
- Hoses, fittings, hydraulic rams for oil leaks
- Connections
- Grease holes and grease pins

Checks other equipment for defects:

- Checks attachments for security

2. Inspects site and plans work:

Identifies hazards:

- Power Lines
- Phone Lines
- Service Drains
- Obstructions
- People

Access and path of movement is clear:

- To work area

Fits appropriate equipment:

- Suitable tools used
- Secures catches
- Correct procedure adopted
- Works safely
- Plates

3. conducts pre-operational and post start-up checks in accordance with manufacturers specifications/operating manual

- In Neutral
- Warning Device
- Engine Start
- Gauges

5. Shut Down Equipment and Secure Site

- Machine parked in suitable area when shut down
- 3 points of contact when inspecting

Shuts Down Equipment:

- Neutralises controls
- Idles to stop, locks ignition
- Moves controls to release pressure
- Applies safety lock (where applicable)

Avoids hazards:

- Parks away from danger areas
- Removes Keys

1. Why should the maintenance service logbook be used?

This gives all persons concerned an accurate account of all services, maintenance repairs and the full service history.

2. What procedures should you follow before commencing work?

Daily pre-start check, walk around inspection and inspection on Hammers

3. What types of hazards would you consider for incorporation into your work plan when setting up on site?

- ✓ Powerlines
- ✓ Trees
- ✓ Overhead service lines
- ✓ Bridges
- ✓ Surrounding structures
- ✓ Obstructions
- ✓ Facilities
- ✓ People
- ✓ Other equipment
- ✓ Dangerous materials
- ✓ Underground services
- ✓ Recently filled trenches

4. What hazard control strategies would need to be included in the plan for the evaluation procedures?

- ✓ Task being performed
- ✓ Any site hazard
- ✓ PPE required by Excavator personnel
- ✓ Warning signs
- ✓ Barriers
- ✓ Traffic Control
- ✓ Lighting
- ✓ Dangerous/Hazardous materials

5. What should be provided for the Grinder operations working at night or in darkened areas?

There should be sufficient lighting over all the work area

6. What precautions must be observed when working near overhead powerlines?

Never work closer than the minimum distance specified in AS2550. Ensure the Excavator is correctly earthed and that barriers/barricades are erected around the work area for public safety. Safety helmets need to be worn around the site.

7. a) What is the minimum distance any part of the plant is allowed to set up near overhead powerlines?

You must stay 6.4m from domestic powerlines and 10m from high voltage transmission lines

or

With qualified Spotter, you can operate between 3-6.4m from domestic powerlines and 8-10m from high voltage transmission lines

7. b) If you want to work closer than the distances what can you do?

Must seek an exemption from the relevant authority

8. Why should hammers be checked?

The hammers may become loose or dislodged causing damage to PWR or injuries to surrounding personnel

9. What safety precautions should you take before working on hammers?

Lock out compression roller with safety pin

10. What should be used to prevent hearing loss when working around the machine?

Hearing protection

11. What is a safe working distance for people to be near the machine when operating?

Approx 100m

12. Why is it important to separate defective equipment?

To eliminate the possibility of further re-using the faulty or defective equipment

13. When interference (tampering) is identified, to whom should the plant operator report any faults to?

To an authorised person/employer

14. What action would you take if you noticed a bulge from a hydraulic hose?

Stop operating > Tag out Machine > Take keys > Report

15. How would you mount and dismount climbing into the hopper?

Facing forward maintaining 3 points of contact

16. Name 3 defects to look for when inspecting the hydraulic system:

- Splits
- Cracks
- Bulgers
- Leaking Fittings

17. Name hazards that must be checked on the worksite before operating the grinder:

- Overhead hazards
- Personnel
- Vehicles/trucks
- Ground conditions

18. How often would you check hammers?

On pre-start and when required due to sudden damage and defects

19. When a danger exists on a site, what should be posted or erected to warn people of the danger?

Signs and barricades

20. If any signals are observed through warning lights, cut outs, or alarms, what action would you take to have the defect rectified?

Assess the situation and take appropriate effective action, cease work and notify supervisor.

21. When should an operator wear a safety helmet?

When there is a possibility that the operator could be struck on the head.

22. What is the minimum type of footwear that an operator



should wear to operate load shifting equipment?

Fully enclosed safety boots

23. Are you permitted to allow a person to ride upon a machine, or any part of the moving machine?

No

24. If the machine wants to suddenly stall or slow, what action would you take?

Lift compression roller to free up jammed material

25. What action would you take for fitting new hammers?

Lock out machine and pin compression roller and release pressure on drive

26. What would be the possible causes of the conveyor belt wandering?

Materials build up on rollers or uneven loading

27. How often should conveyor belts be checked?

Daily

28. When changing rotor discharge grates, what paperwork is required before you enter through the side cover access?

Confined space permit

29. How often should the grinder be greased?

Daily

30. What must be done before any maintenance is performed on the grinder?

Apply the safety lockout/tag out device

31. What are the two types of rotors that can be used in the grinders?

- Pinned
- Drum

32. Is it permissible to load trucks with the grinder while grinder is in full operation? Explain your answer.

No, it is dangerous operation due to flying material produced from grinder. Debris can be projected up to a 90m radius from the plant

33. When inspecting feed system & point of operation, Name 4 items you should look for?

- Hopper walls
- Upper chain Deck
- The bits (Hammers) to anvil or point of operation gap
- Condition & wear of bits (Hammers) bolts and nuts
- The feed conveyors drag chain & its tension
- Condition & wear of anvil
- Condition & Wear of the rotors side wear plate

