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|  <p><b>ASSMANG</b><br/>MANGANESE<br/>BLACK ROCK MINE OPERATIONS</p> | <b>ASSMANG (PTY) LIMITED</b>             |  | Revision No.:       | 9.0        |
|  | <i>Daily Winder Examination - FITTER</i> |  | Next Revision Date: | 2018/05/15 |
|  | Document No: PRO-Eng-M-Ge-S-713          |  | Effective Date:     | 2016/06/15 |

# Daily Winder Examination - FITTER

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### **1. Purpose**

The purpose of this procedure is to:

- Prevent incidents/accidents
- Prevent damage to equipment

### **2. Scope**


Ensure that the daily mechanical maintenance is conducted in accordance with the Mine Health and Safety Act, Act 29 of 1996

### **3. References**

- 3.1. Mine Health and Safety Act, Act 29 of 1996, Schedule 4, Regulations (16.16), (16.74), (16.74.1), (16.77), (16.78), (16.78.1), (16.78.2) and (16.82)
- 3.2. SANS 10294:2000 – Code of Practice – The Performance, Operation, Testing and Maintenance of Drum Winders relating to rope safety. Sections: 5.9, 5.10, 9.10.
- 3.3. W.E.D Logbook.
- 3.4. Machinery Record Book.
- 3.5. Planned Maintenance Work Order.
- 3.6. PROCEDURE: Clutching Procedure Persons Winder - PRO-Eng-M-NC-S-1535
- 3.7. PROCEDURE: Clutching Procedure Rock Winder - PRO-Eng-M-NC-S-1536
- 3.8. PROCEDURE: Clutching Procedure Persons Winder – PRO-Eng-M-NC-S-687

### **4. Abbreviations & Definitions**

W.E.D - Winder Engine Driver

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## **5. Responsibilities**


- 5.1. Every fitter doing winder examination must know the procedure

## **6. General**


- 6.1. The daily examination of winding plant is to be carried out in accordance with the Minerals Act and Regulations, with special attention given to:
- 6.2. "The conveyances, sheave wheels, brakes, depth indicator, rope and attachments, safety and protection devices and all external parts of the winder upon the proper working of which the safety of persons and the winder depends"
- 6.3. Before the daily examinations are carried out on the conveyance, it is the duty of the Banksman to ensure that the conveyance is empty, clean and free of rubble.
- 6.4. No modifications may be made to winder equipment without the approval of the responsible Engineer.
- 6.5. The recommended "Brakes off", "Brakes on", "Quick drop", "Brake 90% on" marks must be clearly painted on the brake stroke indicators. This will facilitate easy checking of the brake settings and will immediately show, without having to physically take measurements, if the settings have deviated from the recommended values.
- 6.6. Fitter must report any deviations to the responsible Foreman/Engineer.
- 6.7. Repair deviations.
- 6.8. Use safety harnesses when working beyond shaft gates.

## **7. Description Of Procedure**

- 7.1. Check the W.E.D. Logbook for any adverse conditions recorded by the W.E.D.
- 7.2. The responsible person must record in the W.E.D. Logbook; confirming that Daily Hoist and Rope Examination is about to begin. The responsible W.E.D. to countersign.
- 7.3. Responsible person to examine the following in the Winder House:
  - 7.3.1. Oil levels in the brake oil tank, gearbox oil tank and bearing oil tank.
  - 7.3.2. The brakes settings for deviation on the following conditions "Brakes off", "Brakes on", "Quick drop", "Brake 90% on" position on the brake stroke indicators.
  - 7.3.3. The air gap between brake linings and brake path for rubbing.
  - 7.3.4. The clove hitch knot and crosby clamps for tightness and visually check the rope.
  - 7.3.5. The sheave wheels, brakes, clutches, drums, auxiliary drives, depth indicator, safety devices and all external parts of the winder for cracks, bends, corrosion, loose rivets or bolts.
  - 7.3.6. The bearing temperature on the gauges for deviations in temperature.
  - 7.3.7. The fuel levels in the alternative brake release system. (Only on Persons Winders)
- 7.4. W.E.D. to test brakes as in Clutching Procedure Persons Winder - Nchwaning 2 and Clutching Procedure Rock Winder - Nchwaning 2. Fitter to adjust brakes if necessarily. (Refer to Clutching Procedure Persons Winder – Nchwaning 3)

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- 7.5.** Banksman must ring conveyance to the Bank.
- 7.6.** Banksman must ensure skip/cage is empty and clean.
- 7.7.** Fitter to use safety harness and secure it properly to the bank steelwork to examine the following:
- 7.7.1. Remove any jammed rocks/material between skip/cage and bridle.
  - 7.7.2. Visually examine the top and bottom guide rollers, replace if tyres are damaged, and adjust if worn to ensure that the slippers are running centrally in the guides. (Refer to NCH 2 Persons and Rock Winder Procedures.)
  - 7.7.3. Visually examine the top and bottom guide bushes, replace if bushes are damaged or worn. (Refer to NCH 3 Persons Winder Procedure)
- 7.8.** Banksman must ring conveyance to the desired height for further inspection to examine the following:
- 7.8.1. When moving slowly up/down for signs of distortion or scrape marks, indicating that the conveyance might be catching something in the shaft or that the conveyance might have been struck by something.
  - 7.8.2. The trigger arm at latch point for bends, wear and smooth operation (Rock Winder)
  - 7.8.3. The detaching hook for impact damage or distortion.
  - 7.8.4. The copper pin for free movement.
  - 7.8.5. The distance between the resin socket and the rope wedges for any rope slippage. (Refer to NCH 2 Rock and Persons Winder Procedures)
  - 7.8.6. The distance that the resin had pulled into the socket and the rope immediately above the socket for signs of damage. (Refer to NCH 3 Persons Winder Procedure)
  - 7.8.7. The rope immediately above rope cappel for signs of damage. (Refer to NCH 2 Rock and Persons Winder Procedures)
- 7.9.** Banksman must ring to W.E.D to bring the other conveyance to bank and stop on the desired height for inspection.
- 7.10.** Repeat procedure from 7.8 to 7.8.7 for the opposite conveyance.
- 7.11.** Fitter must clear and sign off the W.E.D Logbook. The responsible W.E.D. must countersign. Fitter must record findings, repairs or deviations and add Job Card Number in the Machinery Record Book.

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## 8. Records

| No | Record | Ref. | Resp. Person | Storage | Retention Period | Disposition |
|----|--------|------|--------------|---------|------------------|-------------|
| 1  |        |      |              |         |                  |             |
| 2  |        |      |              |         |                  |             |
| 3  |        |      |              |         |                  |             |

## 9. Appendix

None