

RBE Re-Railing Operation– Moab Khotsong Mine

Date – 9 April 2019



MOAB KHOTSONG OPERATIONS



NO MATTER THE CIRCUMSTANCES,
SAFETY IS OUR MAIN PRIORITY.



WE ARE ALL **ACCOUNTABLE** FOR DELIVERING ON
OUR COMMITMENTS.



ACHIEVEMENT IS CORE TO OUR
SUCCESS.



WE ARE ALL **CONNECTED** AS ONE TEAM.



WE UPHOLD **HONESTY** IN ALL OUR BUSINESS
DEALINGS AND COMMUNICATE OPENLY WITH
STAKEHOLDERS.

Historical Accident Information



Track-bound transport	1 Jan to 31 Dec 2016	1 Jan to 31 Dec 2017
Re-Railing (casualties)	9	23
Re-Railing (Fatalities)	1	1

* Extract from Mine Health and Safety Inspectorate Annual Report 2017/2018

In 2018

Two derailment fatalities occurred in the North West Region.

- Harmony Moab Khotsong Mine
- VRM Kopanang Mine

As Moab Khotsong Mine we made the decision:

- To change the way we react to derailments
- How we treat the re-railing task

Re-railing Protocol



At Moab Khotsong we:

- Decided to implement a re-railing protocol that assists the operator:
 - To operate within the re-railing task limitations
 - Remove some of the hazards in re-railing operations
 - Provide support in making a decision when to call the Rigger

The Protocol requires:

- Shift overseer/Foreman to oversee rerailing operation
- Situational risk assessment to be done by Supervisor and team
- Identify if conditions are within the limitations of the re-railing equipment
- Call the rigger to re-rail with lifting equipment (major derailment)

Recording:

- Central RBE room (Impumelelo) means: success
- Record derailments in derailment logbooks
- Attach re-railing situational risk assessment
- Over inspection of actions recorded to address reasons for derailment
- Sign off that actions were addressed

Hazards with re-railing operations



Within conducting a re-railing task various hazards are encountered:

- Uneven surface
- Wet and contaminated areas
- Lifting at various points and at angles to the floor

To address the hazards Moab Khotsong is rolling out:

- The Yale re-railing device and ratchet lever
 - Being added to each loco caboose as standard



- Lifting capacity up to 10 tons
- Weight of Yale jack w/o lever - 37kg
- Weight of Re-railing device w/o lever - 33.5kg



Yale Jack and Re-railing device Operation

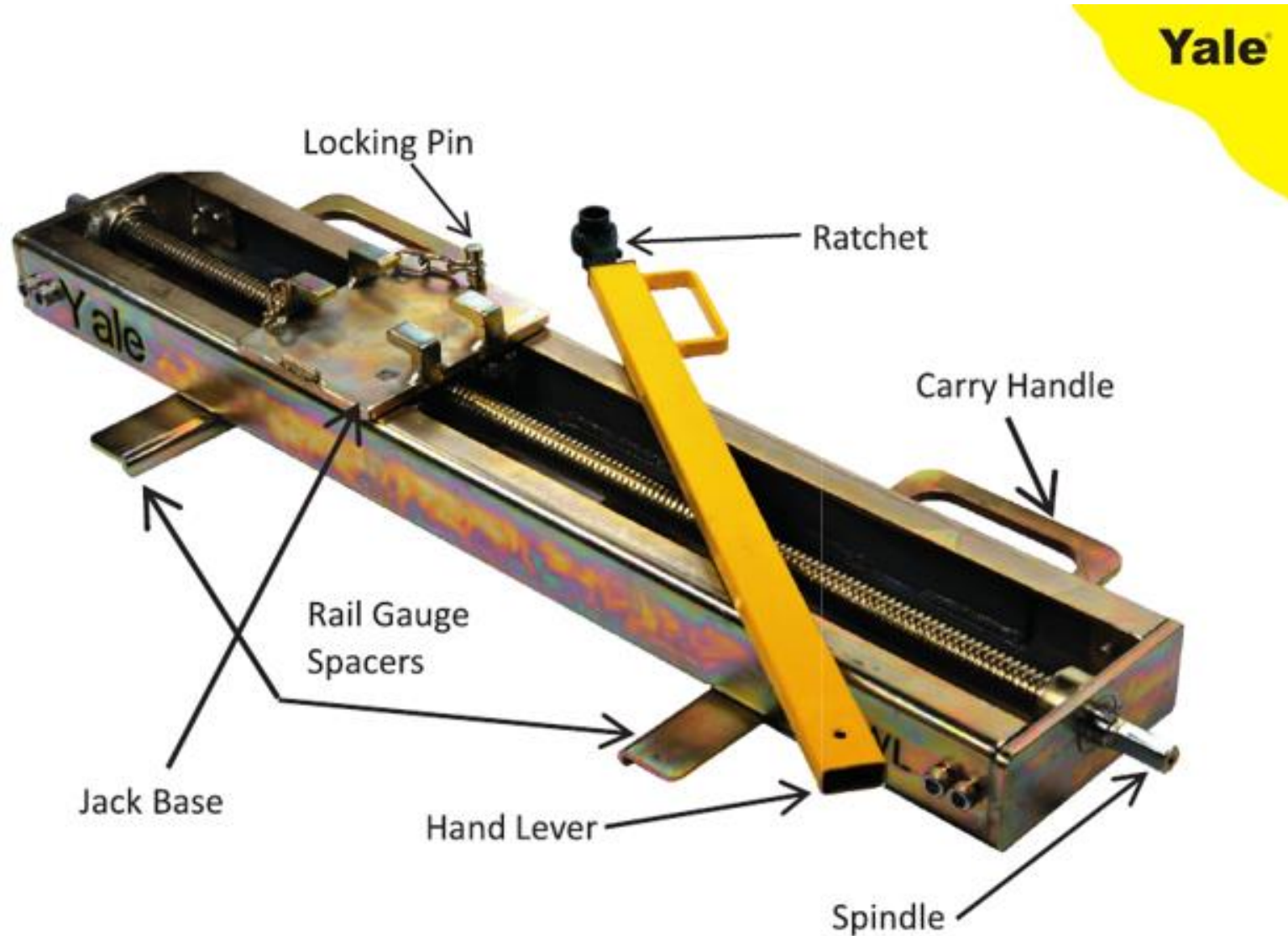


At Moab Khotsong we:

- Introduced the Yale rerailing device and ratchet lever
 - Operates within a set range of limitations
 - Is installed on firm footing that is level (over rails)
 - Keeps the operator away from the sides of the rolling stock
 - Uses set lifting points



Yale Jack and Re-railing device Operation



- Actively manage derailments
- One derailment is one to many
- Act consciously on a derailment event
- Follow through to the end

Our method of re-railment is not the best, but we are moving in the right direction