



# Rustenburg and Kroondal Operations RMM Initiatives 2020

September 2020

- The SSP system for managing FOGs is referred to as the Rock Mass Management System.
- Pro-active approach to managing FOGs focused on best practice design, fit for purpose systems and engineering (support) controls.
- The aim of this presentation is to give an outline of some of the engineering controls currently in place at SSP:

- Canopy Jacks
- Safety Camlok



- Some ground conditions pose a risk during temporary support installation e.g. brows, domes, shallow dipping faults
- Canopy jack introduced to mitigate this risk
- Nets are extended from jacks allowing the next line of jacks to be installed under net cover.



- Replaced standard camlok with safety camlok
- Standard camlok had drawback that it could be released without remote release sling
- Safety camlok ensures that jack can only be removed via release sling at the required remote distance

- Blast-on Mesh





## Blast-on Mesh

- Installed at panel face as areal coverage support
- Used in blocky ground areas
- No need to install temporary nets

- Stope Roof bolters





## Stope Roof bolters

- Implemented at our Marikana operations
- Enables semi-remote drilling of stope roof bolts.
- Reduces exposure time directly underneath drilling area