

Improving Safety on Longwall Recovery



Development and Introduction of the Burty/Weise Bar (B/W Bar) for the Installation of Heusker Mesh Starter Rope for Longwall Face Recovery

1

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Introduction



The Burty Weise Bar was innovated and implemented at Crinum Mine as part of our continuous improvement philosophy

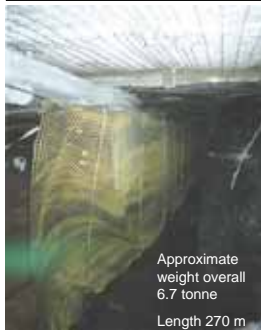
Since its implementation at Crinum Mine the Burty Weise Bar has substantially reduced injuries in the area of longwall recovery

2

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Task



Part of the process of longwall recovery is to use the Heusker Mesh to provide a secure barrier for roof control and improve personal protection.

Task - To fix the wire starter rope on the Heusker Mesh to the roof in front of the support canopies, using hand held roof bolters and 4 foot roof bolts

Approximate weight overall 6.7 tonne
Length 270 m

3

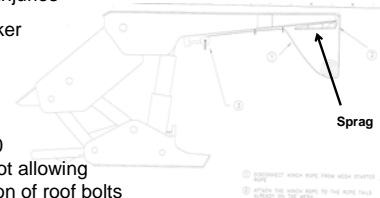
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Why Implement the B/W Bar?



- Previous means of temporary support of mesh to roof were ineffective
- Manual handling injuries
- Damage to Heusker Mesh
- Damage to hand held roof bolters
- Mesh hangs at 90 degrees to roof not allowing for easy installation of roof bolts
- Roof support sprags not able to extend past 90 degrees



4

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Why Implement the B/W Bar?



The coal face spill can pin the mesh to the AFC chain making it difficult to move



AFC

5

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Development



- Production workers designed the bar in consultation with the crew
- Endorsed by Supervisors
- Manufactured on site by the shift fitter



Burty Bar

6

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Implementation Process

- Trailed application on shift and modifications identified
- Modifications made then application trial on other shifts
- Trial successful
- Further redevelopment from Longwall Superintendent
- Burty-Weise bar evolution

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Application

Bar hooks in the hole in sprag



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Application


- Sprag extended ie. lowered
- Bar lifts mesh and pins to roof
- Holes in mesh are exposed to allow access for drill steels



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Application

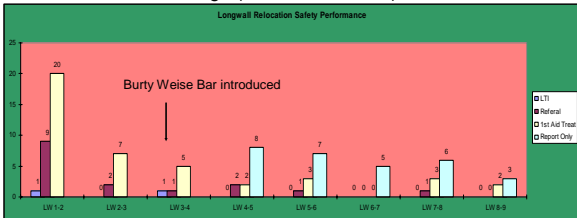
Wire rope then bolted with 4 foot roof bolts



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Results


- The Burty Weise Bar has contributed to the reduction of injuries ie, sprains/strains during the bolt up phase of the longwall changeout
- Reduction in damage (mesh and bolters)



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Outcomes

- Ease of installation bar/bolting sequence
- Reduction in bolt up sequence time frame
- Readily used by the workforce for this application
- Bar costs approximately \$50



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Summary



The Burty Weise Bar has been a development from the ground floor up and has evolved through the commitment to safety of the workforce with encouragement and support of the company for innovation