

## *Category 1: Work Health and Safety*

# Hydraulic Push Bar Caterpillar RM 500 (Hydro Bar)

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THE Mining



## 2021 AustStab Awards of Excellence

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# The Need

- THE Mining identified safety as the driving force of change
- The wire winch method was identified to have design faults, creating higher risk of injury on the worksite through failure of wire causing potential serious injury or death
- Required a functionally safer method



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- The team identified the importance of keeping ground staff away from crush points and site exclusion zone
- This was paramount to the design process



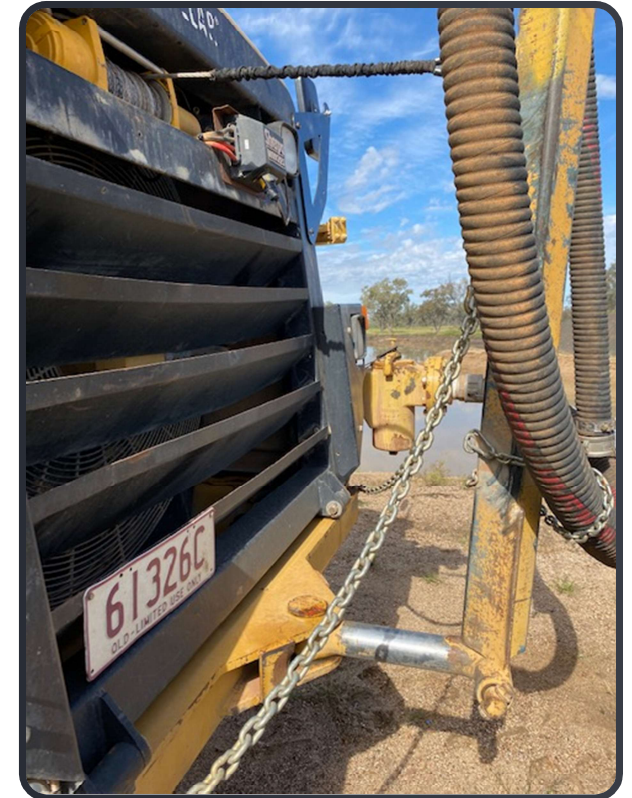
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- The design and construct were undertaken by numerous senior staff headed up by chief design technician Malcolm Munro and auto electrician Troy Beyer



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- Since its conception (prototype), the Hydro Bar has evolved with input from operators and the design team



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- We now have a safe and user-friendly piece of equipment with anti-burst valves and a floating hydraulic system allowing the water truck to be connected in all ground conditions



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- There is a one-touch control panel allowing visual contact of ground staff and machine operators



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- The design also has a safety mechanism in place that only allows the hydraulic system to hold the weight of bar only, eliminating any opportunity for it to be used as a lifting device onsite



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- The practicality and increased safety has justified the costs of design and installation of Hydro Bar on the THE Mining fleet of Caterpillar RM500s
- Fully installed parts and labour is \$10,800 and is available for purchase as a kit or fully installed



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- We also highly recommend where possible that all site water trucks be encouraged to have ring feeders allowing a hands-free connection as opposed to dropping a pin into frame whilst machines are moving



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