


**QLD MINERALS COUNCIL
OHS INNOVATIONS AWARDS - 2008**

Field Name	Innovations Data
<p>Title (Innovation title)</p>	<p>“THE JACK OF HEARTS” Self locking Heavy Equipment Jack</p>
<p>Problem (Brief description of problem and risk factors)</p>	<p>As part of the Rio Tinto safety strategy we have set standards that need to be followed (The GM’s Golden Rules). <i>Rule # 3 Never work under a suspended load.</i></p> <p>This new jacking system will allow us to operate more effectively within these rules.</p>
<p>Solution (Description of practical control measures put in place to solve the problem, i.e. hazard or systems based controls)</p>	<p>“THE JACK” is a combination jack & support stand in one unit & removes the need for personnel to be under the machines to position supports, whilst relying on the hydraulic system or a standard Jack.</p>



<p style="text-align: center;">Benefit</p> <p>(Brief description of outcomes, emphasising OHS benefits. Include any factors affecting successful implementation of solution)</p>	<p>This Jack and the way that it functions could be used in almost any application where there is a requirement for heavy equipment to be lifted and supported to ensure the safety of personnel under the supported loads.</p>
<p style="text-align: center;">Additional Information</p> <p>(Any information of general interest e.g. other benefits or features of innovation)</p>	<p>We checked to see if there was currently a jack available that could be used for this task that did not require the operator to be under the load to position a support stand or the locking device.</p> <p>We were surprised that there was nothing that suited. We believed a fit for task Locking Jack Stand could be produced.</p> <p>Using relatively basic engineering and design principles, “THE JACK” provides cost effective & safe support for heavy equipment.</p> <ul style="list-style-type: none"> ■ The new jack will make it simpler to lift and support machines that are not running that have in the past relied on onboard hydraulic implements to do the lifting. ■ This new jack will allow machines to be lifted, supported and lowered without the need for personnel to be under a suspended load to operate the jack or place support stands. ■ Because the jack both lifts and supports, only one piece of equipment needs to be positioned prior to raising. This significantly lowers the manual handling risks along with maintaining a clear workspace. ■ Only one person is needed to do this task, in the past a single person was needed to operate the machine and one or two to place the stands. ■ A simple counterweight lever enables or disables the locking device for raising or lowering “THE JACK”. ■ SIMPLE, COST EFFECTIVE & SAFE. <p>Presenters Wayne Nealon:- Maintenance Team Leader & Designer Myles Huntly:- Site Reliability Engineer</p>
<p style="text-align: center;">Cost</p>	<ul style="list-style-type: none"> • Project Costs to Date - \$53,500 including R&D Costs.

	<ul style="list-style-type: none"> • To complete with 4 stands \$134,000 • Current Jacks alone \$20,000+ support stands.
<p align="center">Year</p> <p>(Year the innovation was implemented, e.g. 2004)</p>	<p align="center">2008</p>
<p align="center">Photo or Diagram</p> <p>(Filename of graphic file to be attached to this innovation. e.g. machine.gif or photo.jpg)</p>	
<p align="center">Caption</p> <p>(Caption to accompany photo and/or diagram)</p>	<p align="center">“THE JACK OF HEARTS”</p> <p align="center">Self locking Heavy Equipment Jack</p>
<p>Is the innovation free of copyright?</p> <p>(Put an X beside the correct answer)</p>	<p>Yes <input checked="" type="checkbox"/> X</p> <p>No <input type="checkbox"/></p>

CONTACT DETAILS	
Field Name	Data
NOTE: Complete as many fields as you have details.	
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