



## PM Grabs release clean green bulk grab.

PM Grabs has commissioned the first of its new range of bulk grabs that set new benchmarks for materials handling productivity and environmental standards.

The first three bulk diesel-hydraulic 14cu/m grabs are now in place and operating at P & O Automotive and General Stevedoring, Darwin. Further orders are under construction for the world's largest nickel mining project Koniambo, in New Caledonia.

Quality and environmental standards rather than price are driving demands for the grabs as port operators operate under increasingly demanding environmental standards.

"PM Grabs make no secret that our equipment is not necessarily the cheapest. However our clients are looking for equipment that will unfailingly meet these increasingly strict EPA standards, and we have worked closely along side the likes of P & O Automotive and General Stevedores to deliver to those requirements," says PM Grabs manager Bruce Ennis.

The "green grab" design has focussed on reducing noise and dust emissions, but also includes features to eliminate

engine fluid contamination in the marine environments they operate within.

A Tier 3 Euro standard Deutz diesel engine is at the heart of the grab design. The 89KW engine has been subject to extensive noise suppression using acoustic sound reduction materials.

The entire grab head profile allows easy maintenance access, reduces dust ingress and contains noise emissions more effectively during operations.

Product run out and spillage is also minimal. The 10-14cu/m grabs feature a unique overlapping blade seal design that maintains its integrity across a wide range of product densities.

Bucket dust control flaps can also be supplied, while all grabs are fitted with a two stage adjustable bucket opening.

This makes them flexible enough to discharge into narrower hopper spaces and allow better control over dust emissions in high wind situations.



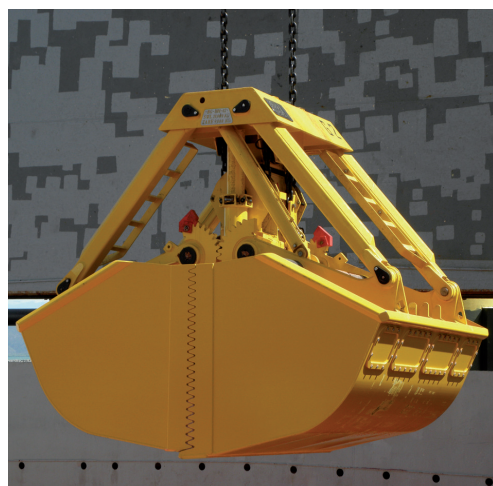
PM Grabs has also supplied two mobile hoppers with the grabs. The hoppers are designed to reduce dust emissions at discharge.

Fault and maintenance diagnostics are state of the art, thanks to a Eaton Vickers integrated control system, reducing down time and detecting problems before they become significant.

PM Grabs sees significant amounts of business ahead as the Australian commodity boom continues, and more clients are recognising the need for environmentally sound, highly productive equipment.

## Extra heavy duty PM Grab for Northern Stevedoring.

Working closely alongside Queensland client Northern Stevedoring Services, PM Grabs has developed a grab for the heavy duty unloading of bulk minerals and materials



The two 10cu/m remote operated grabs purchased by the company have replaced the stevedore's aging touch grabs.

Both are meeting all expectations for containment, productivity and ease of operation. Materials handled frequently include dense high SG materials like

Magnetite a non ferrous metal for cleaning coal, and zinc concentrate.

Northern Stevedoring services manager Jos Pascoe reports the grabs' low drift profile has proven invaluable in operating across the broad tidal range experienced in the Queensland ports of Townsville and Mackay.

"Working on the single purchase option means we can work across the tidal range, and this means delays of up to five hours experienced in the past can be avoided, a big plus for our customers."

Initial indications using the grabs on dense cargos is that single purchase performance is excellent.

"The ability to discharge without having to contact the load like touch grabs do will significantly reduce wear and damage to hoppers."

Integrity of the grabs' seal design has also proven a big plus when handling high value loads like MOP fertiliser.

"Loss onto the berth surface immediately contaminates the cargo, and devalues it, something our clients want to avoid at all costs."

While built around a 10cu/m capacity, the remote grab has had several features incorporated to enhance a design already renowned for its robustness.

These include side fenders, stiffer arms heavier 26mm Kuplex 100 grade chain and an altered digging geometry.

These modifications boosted the grabs' safe working load to 20T.

"The 10cu/m frames also mean we can transport the grabs legally by road between our port facilities."