

COMPOSITE STANDS

Get your gear off the ground.

The **WORLD'S LIGHTEST JACK STANDS**
that address personal injury risk and improve functionality,
increasing productivity and operational savings.

COMPANY PROFILE



Total Assembly Weight
142.4 Tonnes

56kg





62kg



Caterpillar 796AC Mining Truck Build



1 | OVERVIEW

Game changing Composite Stands™:


-  An innovative, light weight jack stand that is used to support and load bear elevated equipment during assembly, maintenance, repair and storage activities.
-  Made from composite materials with superior compressive strength and light weight alloys that weigh significantly less than their comparable counterpart – the traditional heavy steel jack stands that are used predominantly for such tasks across many industries throughout the world.
-  Cost effective and offer many advantages in the areas of safety, manual handling, ergonomics, usability, efficiency, productivity, operational savings and corrosion.
-  A product that has had extensive research & development in private and university based production and testing facilities. This has been undertaken over several years, resulting in the maturity of the current product range.

-  Tried and tested to comply with the relevant industry standards AS 2538:2016 | AS 2693:2007 and Patented.
-  Unique and have a comprehensive product range with various sizes/capacities that includes placement trolleys, accessories and 5S storage solutions.
-  Proving to be very successful with excellent feedback and market acceptance from personnel involved with customer trials.
-  Made in an Australian facility that has been established to manufacture the products for the initial supply to localised Australian customers – volume orders have now been placed by key stakeholders including the likes of Hastings Deering, Komatsu, Hitachi, BHP, Glencore, Rio Tinto, Fortescue, GBF and the list goes on.



2 | WHAT ARE COMPOSITE STANDS?

Composite Stands™ are:

-  Very light weight and extremely strong jack stands that are used to support equipment during assembly, maintenance, repair and storage activities – jack stands are essential for load bearing in every workshop and country globally.
-  Made out of advanced composite materials that construct the support column. The lower capacity devices have a durable cast steel engagement head, handle and a strong die cast aluminium base that are all powder coated. The larger capacity devices have a fabricated steel base configuration for heavier load bearing. All to maximise a maintenance free service life.
-  A health and safety alternative for workers engaged in the above listed activities that can dramatically improve efficiency and productivity due to the ease of movement.
-  Advantageous via their light weight design which reduces risks associated with manual handling whilst positioning and storing stands.
-  Engineered to be corrosion resistant and durable with an increased service life and reduced maintenance.

Courtesy of, Hama Hydraulics at Perth WA



“They are the real deal. We always receive positive comments every time we arrive onsite for the first time.”
Phil Godding, Director, Hama Hydraulics

Komatsu, Mt Thorley





3 | PRODUCT INNOVATION MATURE R&D PROGRAM - SINCE 2016

The product was conceived mid 2016 – recognition of heavy steel sections in jack stands for assembly, maintenance, repair and storage of equipment and the associated ergonomic/safety issues with their use – proposal to investigate the use of composite materials as an alternative in this field.

Composite materials possess extremely high strength to weight properties. They found their way from aviation, aerospace and motorsport industries into more mainstream industrial uses across many sectors. Even so, their commercial success and acceptance suffers with labour-intensive manufacturing inputs and the fact that they lack strength in compression. Whereas they are immensely strong when placed under tensile loads.

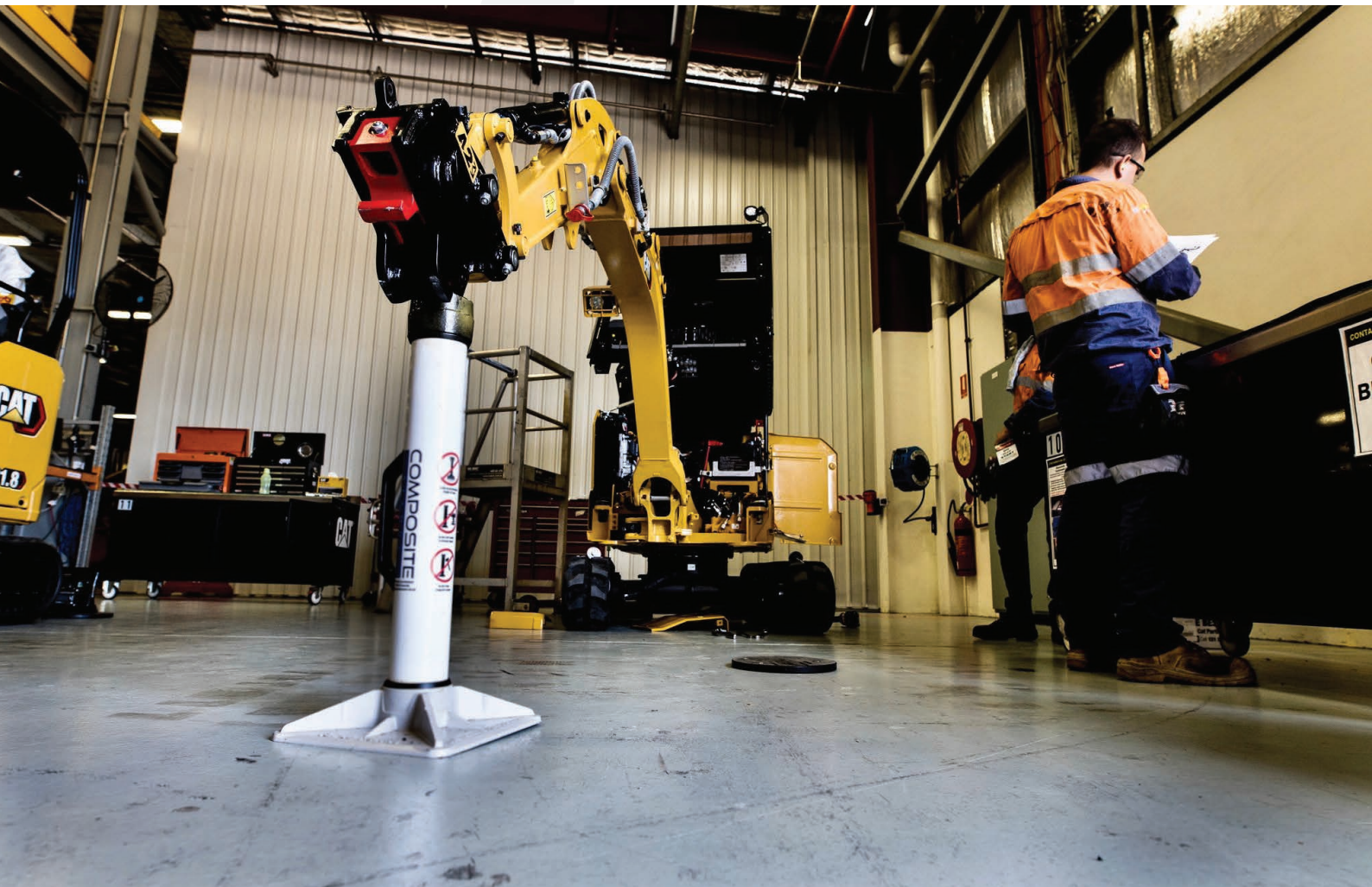
Our innovation was to devise a continuous protruded molded composite section which reduces the labour inputs significantly. Specifically axially wound composite filaments. In combination with a lightweight cast alloy base and a durable and hard cast steel top/cap – all aimed at dramatically reducing final product mass whilst retaining high compressive strength capabilities.

Extensive Research and Development (R&D) through fabrication, testing and certification was undertaken throughout 2016, 2017 and 2018. Incorporating University of Newcastle NSW & the University of Southern Queensland's structural laboratory test work. Expert assistance was also sought after including composite material science and complex base casting metal flow analysis.

The R&D and product manufacturing investment has been extensive in this period. Products have been fully tested and certified to all relevant regulatory standards that apply globally.

Ongoing R&D activities have focused on product improvements. This has been across handle bonding, load case dynamics, as well as the development of very high-capacity composite jack stands – which is now in final certification and testing stages.

Hastings Deering, Archerfield





4 | STRONG INTELLECTUAL PROPERTY AND GLOBAL PATENT PROTECTION









Global IP protection in place for Composite Stands:

-  International Trademarks for brand and logo.
-  Provisional Patent filed in early 2016 and subsequent International PCT application processes have been through rigorous examination.
-  All patent claims have been found to be deemed 'Novel and Inventive' – a very strong endorsement of strength and validity of the ultimate patent.
-  National phase standard 20 year patent processes have subsequently been entered in for many countries globally.
-  An additional provisional Patent was also filed in 2018, capturing the enhanced innovations associated with the very high-capacity Composite Stands – this will proceed through the same processes in due course.



5 | MARKET ACCEPTANCE, INITIAL ORDERS AND CUSTOMER FEEDBACK

-  Final product testing and 'in-field' trials (Nov/Dec 2017) commenced and were successful at Brambles Industrial Services (BIS) in Australia – BIS is a large mining and civil engineering services business.
-  Prior to these trials the initial 'development' products were tested in small scale localised environments to ensure ease of use and practicality to ensure robustness of the design.
-  The final product trials were with full unfettered 'in-field' use by maintenance personnel having received the products as customers would receive them – including the brochures, instructions that would apply etc.
-  Extended successful trials have subsequently been undertaken or are underway by targeted customers including Hastings Deering, Westrac, William Adams (Caterpillar dealers in Australia), Komatsu Australia, Hitachi etc.
-  Testimonials from maintenance personnel and management who have used the stands have been excellent.
-  Customers have commenced placing initial orders at scale and have also commenced "rolling out" the products across their businesses.



5 | MARKET ACCEPTANCE, INITIAL ORDERS AND CUSTOMER FEEDBACK con't.



A Huge Impact Reducing The Risk With Transport

“Reaching out today to express our happiness with your product here in Mackay. Very impressed with the Composite Stands we purchased for our Equipment Assembly Pad. They have made a huge impact reducing the risk with transport and manual handling of machinery stands in the area.”

Graham Mallet, Service Supervisor, Hastings Deering

Greatly Improved Both Safety & Efficiency

“Since acquiring the 2.2m composite stand, it has greatly improved both safety and efficiency within our workshop. The main use for these stands is for raising the loader frames on large Wheel Loaders to assist with accessing the main control valve and for the removal/install of tilt cylinders. The stand is also being used to support implements on many other machines while under repair. For the size of this stand, it is easily maneuvered by one person. The communication with Composite Stands and timeliness in delivery of this stand was excellent. We are currently organising for our entire Used Equipment and Rental workshop to be supplied with new composite stands to replace our older equipment.”

Matt Diflo, Foreman, Hastings Deering



Greatly Reduced Manual Handling Effort

“Really great feedback from the guys on the floor in regards to the greatly reduced manually handling effort required when setting up for the truck to sit on compared to other stands that we have onsite.”

Paul Carman, Foreman, Hastings Deering



6 | ORGANISATIONS WHO ARE UTILISING OUR PATENTED COMPOSITE TECHNOLOGY





12.5 Tonne Bucket Stand



'Designed and Certified in Australia'

Independently tested by University of Southern Queensland (USQ),
compliant with Australian Standards: AS 2538:2016 | AS 2693:2007 and Patented.



Composite Stands Pty Ltd @ 2024
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