Bend tech

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DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT Vendor No. 1216716



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DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT

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DESIGN, ENGINEERING AND FABRICATION

Although we have a comprehensive range of standard products which we have developed over an extended period of partnerships between planning, site personnel, management and ourselves. Most of these solutions started out as a specific problem which required us to develop a solution that enabled the actions required for operational efficiency.

OUR APPROACH MEANS YOUR PROBLEMS ARE IN THE HANDS OF THOSE THAT SOLVE THEM.

COMFORT We take ownership of our role in operational efficiency with a system

that provides a holistic solution.

CERTAINTY Being available, mobile and equipped to provide on-site consultations

and scanning to ensure drawings, scopes of works and solutions are

correct is invaluable.

CONTROL Design and engineering capabilities are crucial to providing certified

and compliant solutions. We enable control over the situation.

MOTION Enabling processes and production to continue on-time is a crucial.

We provide reliable, consistent pathways towards this goal.

IMPACT Solutions that are executed on-time consistently leaves an impact on the

bottom line. Productivity receives a boost which is compounded by the benefits of the efficient use of resources which are freed up due to efficient

solution development.

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If you have a problem on-site, get in contact with the team and we will provide you with the certified salutation that you need.



WE OFFER A FULL CONSULTING, 3D SCANNING AND ENGINEERING SERVICE

Projects and the associated challenges often require custom solutions, we take pride in our CDEC system. Consultation, Design, Engineering and Construction is our holistic approach to solution development making maintenance on-site safe, efficient and easy.

CDEC PROCESS



CONSULTATION We come to you and visit your site to get a hands-on feel for your project. The aim of our consultation is to listen to and understand your requirements. If the project requires it, our 3D scanning capabilities will streamline measurement and data capture. This approach allows us to develop and discuss with you on-site, possible solutions to your problem, and the benefits we can offer.





DESIGN After the consultation we go back to our design team to begin the development of your custom solution. Our team produce designs in CAD Design complete with all drafting documentation ensuring an advanced manufacturing process. Our process allows and encourages you to be involved in the design stage and collaborate with our highly skilled team.





ENGINEERING Once the design is approved, we begin the development and engineering process. This ensures that the right material is used for your project to guarantee structural and functional integrity. We provide full certification that includes WLL, load ratings, integrity reports as well as certificate plates and identifications. We design and engineer all our solutions to ensure full compliance to ensure full compliance with Australian standards.





CONSTRUCTION Finally, once the project is ready and certified for construction, we manufacture your solution. We test, machine, fabricate and surface treat as well as trial fit your custom project. We only manufacture high quality products that provide long lasting, safe and efficient solutions.



2 TONNE WORKBENCH 900MM (H)

Part No. 5500766

CONSTRUCTION

- Heavy-duty steel
- Heavy-duty mine spec construction
- Fully certified to 2 Tonne SWL
- Height: 900mm



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WORKSHOP WHITEBOARD BENCH

Part No. 5001812

CONSTRUCTION

- · Heavy-duty mine spec construction
- Heavy-duty castors for workshop mobility
- Can be used for shutdowns or planned maintenance

Length: 1480mmHeight: 2000mmWidth: 700mm



MOBILE FLAME CUTTING TABLE

Part No. 5501032

CONSTRUCTION

- Heavy-duty steel
- Engineered and Certified to SWL 1 Tonne
- Easy to empty slag bin and safer slag collection
- Replaceable support bars
- Heavy-duty lockable wheels
- Length: 1200mmHeight: 900mmWidth: 1200mm

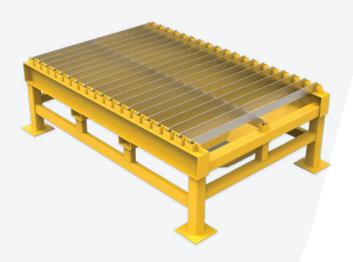


HEAVY-DUTY PLATE CUTTING TABLE

Part No. 5501163

CONSTRUCTION

- Heavy-duty steelLength: 2830mmHeight: 1000mm
- Engineered and Certified to SWL 3 Tonne
- · Easy to empty slag bin and safer slag collection
- Replaceable support bars
- Heavy-duty lockable wheels



2 TONNE TRESTLE STAND 1000MM (L) X 900MM (H)

Part No. 5001747

CONSTRUCTION

- Heavy-duty steelLength: 1000mmHeight: 900mm
- Width: 660mm
- Replaceable top section
- Fully engineered and certified
- Heavy-duty steel construction
- Stocked off-the-shelf, available for immediate delivery



5 TONNE TRESTLE STAND 1000MM (L) X 900MM (H)

Part No. 5001805

CONSTRUCTION

- Heavy-duty steelLength: 1000mmHeight: 900mmWidth: 600mm
- Replaceable top section
- · Fully engineered and certified
- Heavy-duty steel construction
- Stocked off-the-shelf, available for immediate delivery



5 TONNE TRESTLE STAND 2400MM (L) X 900MM (H)

Part No. 5001760

CONSTRUCTION

- Heavy-duty steelLength: 2400mmHeight: 900mmWidth: 656mm
- Replaceable top section
- Fully engineered and certified
- Heavy-duty steel construction
- Stocked off-the-shelf, available for immediate delivery



10 TONNE TRESTLE STAND 2400MM (L) X 650MM (H)

Part No. 5001813

CONSTRUCTION

- Heavy-duty steelLength: 1000mmHeight: 650mmWidth: 515mm
- Replaceable top section
- Fully engineered and certified
- Heavy-duty steel construction
- Stocked off-the-shelf, available for immediate delivery



FREE STANDING STEEL STORAGE RACK

Part No. 5003285

CONSTRUCTION

Heavy-duty steelHeight: 2250mmLength: 6000mm

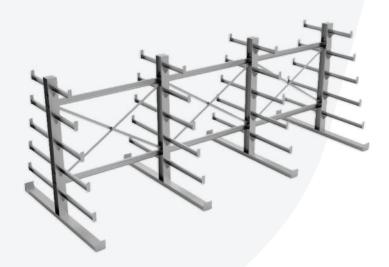
• 12 shelves (6 either side)

• SWL 4.8 Tonne Capacity or 400kg per shelf

· Lifting eyes for ease of transport

· Forklift friendly for loading your product

Fully engineered and certified



HORIZONTAL STEEL PLATE STORAGE RACK

Part No. 5000220

CONSTRUCTION

Heavy-duty steelLength: 2004mmHeight: 3229mmWidth: 8000mm

· Forklift friendly for plate loading

Fully engineered and certified

 Modular design for ease of transport and erection on site

SWL 6.5 Tonne per level (bottom level 10 Tonne)

Cantilevered to ensure optimum space utilisation

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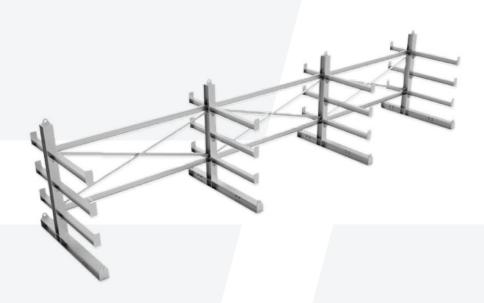
GENERAL PURPOSE STEEL RACK – LARGE

Part No.

6m - 5000222 7.5m - 5000221 9m - 5000219

CONSTRUCTION

- Heavy-duty steel
- SWL 3 Tonne per shelf
- 8 shelves (4 either side)
- Fully engineered and certified
- Lifting eyes for ease of transport
- Modular construction for ease of transport and erection on site
- Cantilevered to ensure optimum space utilisation

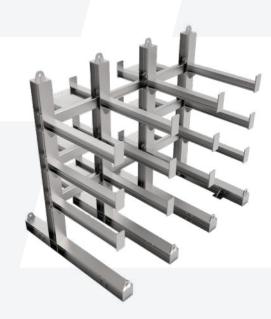


GENERAL PURPOSE STEEL RACK — SMALL

Part No. 5501168

CONSTRUCTION

- Heavy-duty steelWLL: 3T per level
- Height: 2144mmLength: 2500mm
- Width: 1852mm
- 8 shelves (4 either side)
- Fully engineered and certified
- Lifting eyes for ease of transport
- Modular construction for ease of transport and erection on site
- Cantilevered to ensure optimum space utilisation



ELECTRICAL CABLE RACKING

Part No. 5502253

CONSTRUCTION

- Heavy-duty steel
- Certified and compliant with Australian Standards
- 600kg WLL Bottom Horizontal Bar
- 300kg WLL Top Horizontal Bar
- · Finished in Y14 safety yellow



VERTICAL STORAGE RACK, STEEL PLATE

Part No. 5500758

CONSTRUCTION

Heavy-duty steel

• WLL: 8.5T per bay (51T total)

Height: 2617mmLength: 8175mmWidth: 2423mm

· Hot dip galvanised finish

 Modular construction for ease of transport and assembly on site

Fully engineered and certified



SLOPING VERTICAL STEEL PLATE RACK

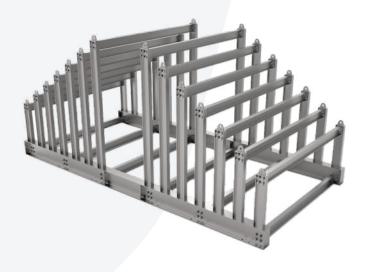
Part No. 5501254

CONSTRUCTION

Heavy-duty steelWLL: 4.25T per bayHeight: 2617mmLength: 5747mm

Width: 2865mm

 Modular design and Lifting eyes for ease of transport



BELL 429 ROTOR BLADE WORKSHOP RACK

Part No. 5504171

CONSTRUCTION

- Heavy-duty steel
- Height: 1500mm
- Length: 5000mm
- Certified and compliant to Australian Standards



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DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT

WASHDOWN RAMP

Designed and engineered for safe and efficient vehicle maintenance and cleaning. With a safe working load limit of 8 tonnes our washdown ramp can cater for anything from small four wheelers all the way up to light trucks.

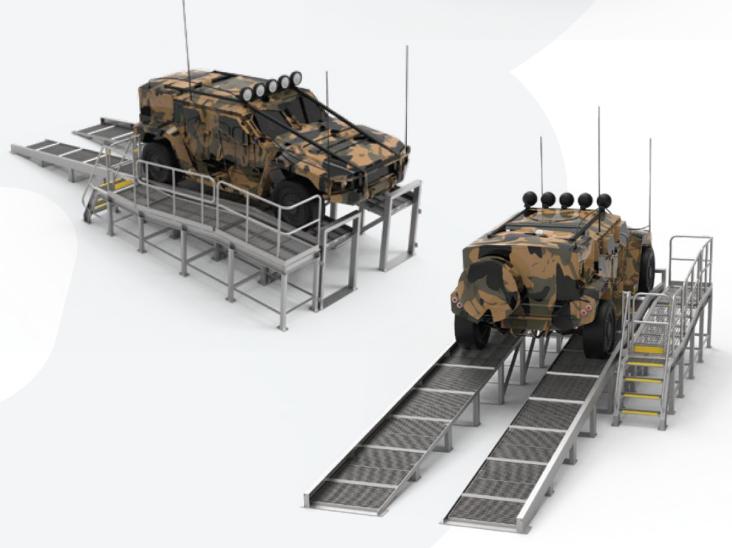
- Can be fully customised to your vehicle requirements
- Certified and compliant to Australian Standards
- Reduced ramp angle to suit a wide range of wheelbases
- Marine grade galvanised to perform under the harshest conditions
- Heavy-duty steel construction
- Heavy-duty grating and angle iron for maximum grip
- Adjacent walkway for safely exiting the vehicle
- WLL of 8 tonnes

Part No. 5502605

Supplied complete with install guides and protocols

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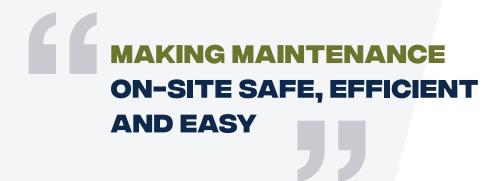


WORKSHOP TOOLBOXES

We have created many specialised tool boxes for jobs on Mine sites that have specific tooling requirements. These toolboxes provide a lean and segregated approach to ensure that operators can confirm that they have all the Tooling needed prior to performing a job. and also during the job. Each tool is clearly in view and easy to access.

Product Benefits

- High strength Steel Construction
- Gas Struts for lid
- Key Lock
- Heavy Duty hydrocarbon resistant foam cut out
- Each Tool has a Specifically CNC routed cutout
- · Forklift slots to enable easy movement around site
- Can be painted to your specific company requirements
- Specific Signage and Stickers available on request
- Wheels can be added for ease of manoeuvrability on site
- These are made to suit your particular set of tools for each job, and can be certified and load rated to Australian Standards



WORKSHOP TOOLBOXES

SPECIALISED TOOL BOX 1295MM X 1200MM

Part No. 5500903

CONSTRUCTION

- Heavy-duty steel
- Height: 500mm
- Gas Struts for lid
- Key Lock
- Heavy Duty hydrocarbon resistant foam cut out
- Each Tool has a Specifically CNC routed cutout



SPECIALISED TOOL BOX 1550MM X 900MM

Part No. 5501068

CONSTRUCTION

- Heavy-duty steel
- Height: 535mm
- Gas Struts for lid
- Key Lock
- Heavy Duty hydrocarbon resistant foam cut out
- Each Tool has a Specifically CNC routed cutout



SPECIALISED TOOLBOX WITH DRAWER

Part No. 5501871

CONSTRUCTION

- Heavy-duty steel
- Height: 730mm
- Width: 790mm
- Gas Struts for lid
- Heavy Duty hydrocarbon resistant foam cut out
- Each Tool has a Specifically CNC routed cutout



WORKSHOP TOOLBOXES

SPECIALISED TOOL BOX 1750MM X 900MM

Part No. 5500957

CONSTRUCTION

- Heavy-duty steel
- Height: 500mm
- Gas Struts for lid
- Key Lock
- Heavy Duty hydrocarbon resistant foam cut out
- Each Tool has a Specifically CNC routed cutout



SPECIALISED FRONT ACCESS TOOLBOX

Part No. 5501946

CONSTRUCTION

- Heavy-duty steel
- Pins for tool positioning
- Labeled small parts bin with adjustable partitions
- Labeled double height bin with adjustable partitions



TOOLBOX TROLLEY

Part No. 5501875

CONSTRUCTION

- Heavy-duty mine spec
- Length: 900mmWidth: 945mm
- Height: 945mmLarge industrial castors
- Lockable doors and drawers
- All drawers on heavy duty rollers
- · Heavy duty top bench for component servicing

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E-HUB EFFICIENCY WORK STATION MINI

Part No. 5500866

CONSTRUCTION

- Heavy-duty steel
- 25-inch screen included
- Small whiteboard on front
- Flip-up whiteboard at rear
- 3x heavy duty document clips
- Transportable with handles
- Adequate storage shelving
- Storage for Tags
- Robust pipe surrounds
- Powder-coated steel cabinet
- Dust proof cabinets and housing
- Large lockable castors
- Plug and play





GENERAL PURPOSE PLATFORMS

ACCESS PLATFORM 1200MM

Part No. 5412174

CONSTRUCTION

Heavy-duty aluminium

Length: 1100mmWidth: 1000mmSelf-levelling jacks

Self-closing gate

Safety handrails

Non-slip stairway and work area



ACCESS PLATFORM 1400MM

Part No. 5401235

CONSTRUCTION

Heavy-duty aluminium

Length: 2783mmWidth: 900mmSelf-levelling jacks

Self-closing gate

Safety handrails

· Non-slip stairway and work area



ACCESS PLATFORM 1600MM

Part No. 5401183

CONSTRUCTION

Heavy-duty aluminium

Length: 824mmWidth: 780mmSelf-closing gateSafety handrails

Non-slip stairway and work area



GENERAL PURPOSE PLATFORMS

ACCESS PLATFORM 1900MM

Part No. 5412036

CONSTRUCTION

- Heavy-duty aluminium
- Length: 3903mmWidth: 1000mm
- Self-levelling jacks
- Self-closing gate
- Safety handrails
- · Non-slip stairway and work area



ACCESS PLATFORM 1850MM

Part No. 5414025

CONSTRUCTION

- Heavy-duty aluminium
- Length: 2000mmWidth: 1200mm
- Safety handrails
- Non-slip stairway and work area



ACCESS PLATFORM 1700MM

Part No. 5414112

CONSTRUCTION

- Heavy-duty aluminium
- Length: 1200mm
- Width: 950mm
- Self-levelling jacks
- Self-closing gate
- Safety handrails
- · Non-slip stairway and work area



GENERAL PURPOSE PLATFORMS

ACCESS PLATFORM 2200MM

Part No. 5412038

CONSTRUCTION

- Heavy-duty aluminium
- Length: 4003mmWidth: 1100mm
- Self-levelling jacks
- Self-closing gate and safety handrails
- Non-slip stairway and work area



ACCESS PLATFORM 2500MM

Part No. 5401237

CONSTRUCTION

- Heavy-duty aluminium
- Length: 4480mmWidth: 1200mm
- Self-levelling jacks
- Self-closing gate and safety handrails
- Non-slip stairway and work area



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DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT



AVIATION PLATFORMS





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SIKORSKY S92 RH TAIL ACCESS PLATFORM

Part No. 5001970

A safe, certified and compliant access platform designed and engineered to access the tail of the Sikorsky S92 Helicopter.

CONSTRUCTION

- Full Tig welded Aluminium RHS
- Tread Plate Decking
- Gridmesh Stair Treads
- Self-closing gate
- D Rubber on edges
- · Non slip yellow tread nosing on all treads
- SWL markings attached to platform



SIKORSKY S92 LH TAIL ACCESS PLATFORM

Part No. 5501953

A safe, certified and compliant access platform designed and engineered to access the tail of the Sikorsky S92 Helicopter.

CONSTRUCTION

- Full Tig welded Aluminium RHS
- Tread Plate Decking
- Gridmesh Stair Treads
- Self-closing gate
- D Rubber on edges
- Non slip yellow tread nosing on all treads
- SWL markings attached to platform



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BELL 429 TAIL ROTOR INSPECTION PLATFORM

Part No. 5540170

A safe, certified and compliant access platform designed and engineered to access the tail rotor of the Bell 429 helicopter.

CONSTRUCTION

- Full Tig welded Aluminium RHS
- Tread Plate Decking
- Gridmesh Stair Treads
- Self-closing gate
- D Rubber on edges
- · Non slip yellow tread nosing on all treads

• SWL markings attached to platform





BELL 429 DOUBLE SIDED MX PLATFORM

Part No. 5504169

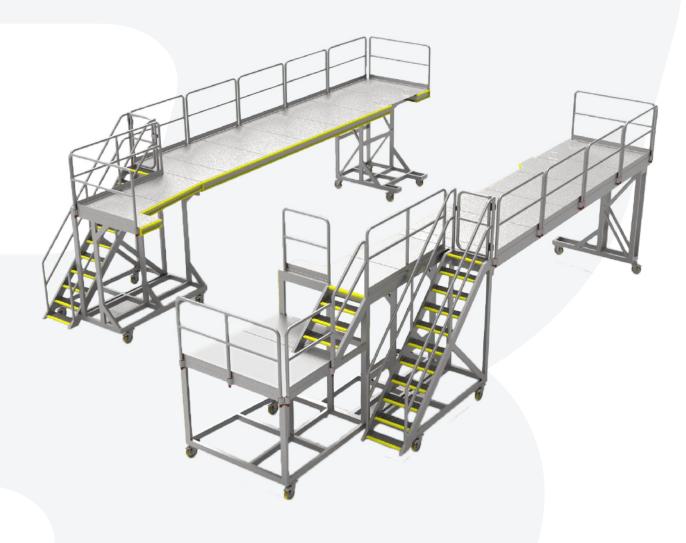
A safe, certified and compliant access platform designed and engineered to access the main rotor, engine and transmission of the Bell 429 helicopter.

CONSTRUCTION

- Full Tig welded Aluminium RHS
- Tread Plate Decking
- Gridmesh Stair Treads
- Self-closing gate
- D Rubber on edges
- Non slip yellow tread nosing on all treads
- SWL markings attached to platform







SIKORSKY S92 TOP FRAME ACCESS PLATFORM

Part No. 5501798

Designed and engineered, safe and efficient Sikorsky S92 access platform. Certified and compliant with Australian Standards.

CONSTRUCTION

- Heavy-duty aluminium access platforms
- Certified and compliant with Australian Standards

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- Fitted with heavy-duty castors
- Fitted with non-slip step nosing's
- Fitted with self-closing gates



IIII DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT

BOLLARDS



BOLLARD 50NB 1200MM

Part No. 5501516



BOLLARD 50NB 1200MM

+ SIGN MOUNT

Part No. 55015162

Site bollards designed to aid in traffic and area management.

CONSTRUCTION

- Heavy-duty steelBlasted and high-performance coated



BOLLARD 65NB 1200MM

Part No. 5501332



BOLLARD 100NB 1200MM

BOLLARDS



BOLLARD 1200MM

Part No. 5500919

Site bollards designed to aid in traffic and area management.

CONSTRUCTION

- Heavy-duty steel
- Blasted and high-performance coated



BOLLARD 1200MM SURFACE MOUNTED

Part No. 5501482



BOLLARD 1400MM

Part No. 5503236



BOLLARD 1410MM

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PERSONNEL GATES





SELF-CLOSING GATE 850MM

Part No. 55007241

SELF-CLOSING GATE 870MM

Part No. 55007242

Site and plant gates designed to aid in personnel and area management.

CONSTRUCTION

- Heavy-duty steel
- Blasted and high-performance coated



SELF-CLOSING GATE 960MM

Part No. 55007243



SELF-CLOSING GATE 1000MM

PERSONNEL GATES



SELF-CLOSING GATE 1050MM

Part No. 55007245



SWING GATE 800MM

Part No. 5502994

Site and plant gates designed to aid in personnel and area management.

CONSTRUCTION

- Heavy-duty steel
- Blasted and high-performance coated



SWING GATE 820MM

Part No. 5502999



SELF-CLOSING GATE WITH HANDRAIL

PERSONNEL GATES



SELF-CLOSING GATE 1000MM (H) X 650MM (W)

Part No. 5503238



SPRING LOADED GATE 960MM (H) X 720MM (W)

Part No. 5502838

Site and plant gates designed to aid in personnel and area management.

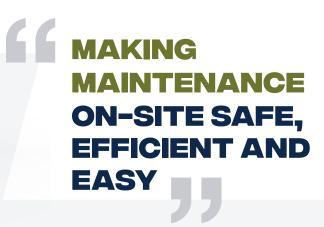
CONSTRUCTION

- Heavy-duty steel
- Blasted and high-performance coated



SELF-CLOSING GATE 1020MM (H) X 1075MM (W)

Part No. 5502638



DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT

PERSONNEL GATES



ROCK BREAKER GATE
AND HANDRAIL 1000MM

Part No. 5502995



PRIMARY CRUSHER GATES

Part No. 5503253

Site and plant gates designed to aid in personnel and area management.

CONSTRUCTION

- Heavy-duty steel
- Blasted and high-performance coated

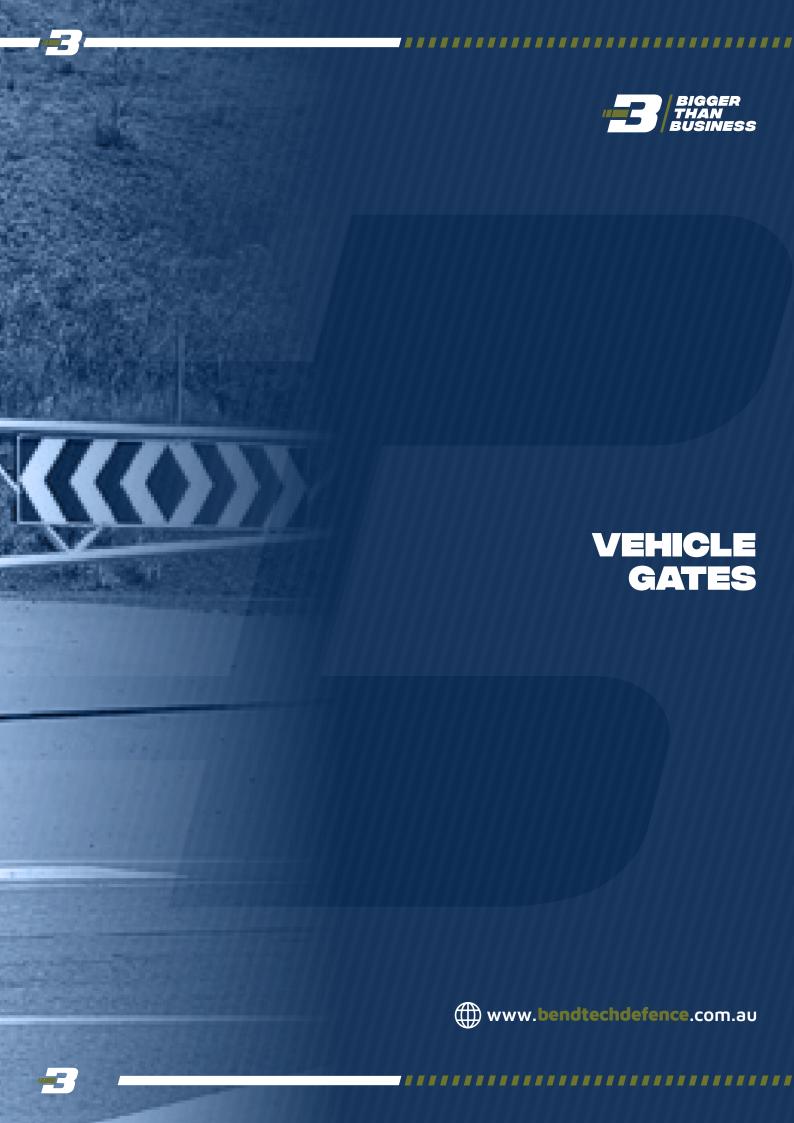


MOBILE BARRICADE CART 1100MM

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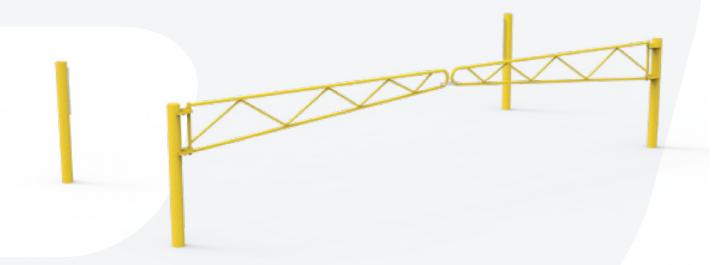
Part No. 5503530

WE CAN CUSTOMISE ANY PRODUCT FOR YOUR SITE REQUIREMENTS



DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT

VEHICLE GATES



BOOM GATES

Part No. 5501974

Site and plant gates designed to aid in personnel and area management. Our gates can be completely customised to suit your requirements.

CONSTRUCTION

- Heavy-duty steelBlasted and high-performance coated



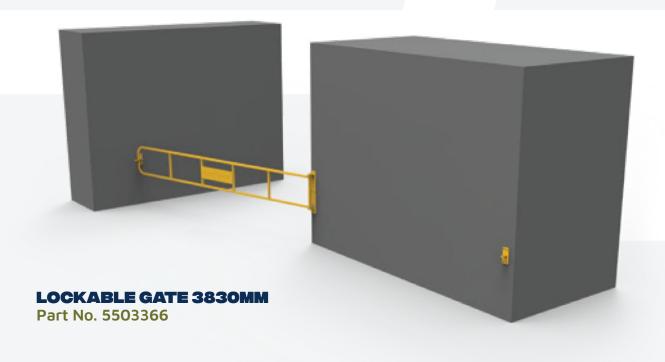
VEHICLE GATES



Site and plant gates designed to aid in personnel and area management. Our gates can be completely customised to suit your requirements.

CONSTRUCTION

- Heavy-duty steelBlasted and high-performance coated





SITE HANDRAILING



HANDRAIL AND SELF-CLOSING GATE 1000MM

Part No. 5502641



BARRIERS

We supply all barrier and W-beam components and configurations. Either send us a list of parts and requirements or send us the details of the area you need to barricade.

WE CAN SUPPLY ANY LENGTH OR AMOUNT OF:

• W-bean • Bends • Fixings • Posts • Nosing's • Hardware • Signage







GRATING AND FENCING

FENCING

We supply all fencing and gate components and configurations. Either send us a list of parts and requirements or send us the details of the area you need to fence or enclose

GRATING

We supply all grating components, patterns and finishes. You can send us your requirements or list of parts and we will supply you with everything you need.

MATERIAL OPTIONS:

• Aluminium • Steel • Stainless steel 304 and 316

FINISHING OPTIONS:

- Untreated
 Galvanised (steel only)
 Bitumen dipped (steel only)
- Electro-polished (stainless steel only) Anodised Powder coated
- Mill finish (aluminium or stainless steel only)

WE CAN SUPPLY ANY LENGTH, SIZE OR AMOUNT OF:

- Rolls of fencing Posts Wire or barbed wire
- Gates Hinges Locks Hardware

PATTERN OPTIONS:

- Load Bar Pitch 30mm / Cross Rod Pitch 100mm
- Load Bar Pitch 30mm / Cross Rod Pitch 50mm
- Load Bar Pitch 40mm / Cross Rod Pitch 100mm
- Load Bar Pitch 40mm / Cross Rod Pitch 50mm
- Load Bar Pitch 60mm / Cross Rod Pitch 50mm

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^{*}Serrated and plain bars available with any configuration or finish









Prevent falls down the stair with the firm safety bar



3 Gate gives access to work surface off the end or either side



Reach over obstacles with generous 1.74m platform



Anti sway platform locks. Physical lock at every step height



Climb or decend hands free. Spacious, easy gradient stairs



Efficent to climb with constant grade stair at any platform height



Safe and steady height adjustment with hydraulic safety valve + decent speed control



Easy to load and transport with forklift pockets in chassis





EQUIPTEC GIRAFFE BENEFITS



GIRAFFE G20 HEIGHT RANGE

*One base model reaching up to 4.7m



Part No. 5800500

CONSTRUCTION

• Deck height range: 1500mm - 2900mm

Overall width: 1456mm
Overall length: 4495mm
Platform width: 780mm
Platform length: 1786mm

• WLL: 300kg



Part No. 5800502

CONSTRUCTION

• Deck height range: 1800mm - 3100mm

Overall width: 1456mm
Overall length: 4750mm
Platform width: 780mm
Platform length: 1786mm

• WLL: 300kg

GIRAFFE G20 + 2 STEP

Part No. 5800503

CONSTRUCTION

• Deck height range: 2000mm - 3300mm

Overall width: 1456mm
Overall length: 4945mm
Platform width: 780mm
Platform length: 1786mm

• WLL: 300kg













GIRAFFE

G20 HEIGHT RANGE

*One base model reaching up to 4.7m

GIRAFFE G20 + 4 STEP

Part No. 5800504

CONSTRUCTION

Deck height range: 2400mm - 3800mm

Overall width: 1900mm
Overall length: 5395mm
Platform width: 780mm
Platform length: 1786mm

• WLL: 300kg



GIRAFFE G20 + 8 STEP

Part No. 5800505

CONSTRUCTION

• Deck height range: 3700mm - 4700mm

Overall width: 2500mm
Overall length: 7270mm
Platform width: 780mm
Platform length: 1786mm

• WLL: 300kg



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GIRAFFE

OPTIONAL ACCESSORIES

The Giraffe G20 system includes many retrofittable accessories allowing you to configure a more exact solution for your access challenges.



HAMMERHEAD DECK

Part No. 5800507

 With a capacity of 200kg WLL this deck not only gives more room, but also offers both side gates and individually removable front facing gates. That's great unobstructed access to the workface on one or both sides.



ANGLED DECK

Part No. 5800508

- When you are faced with tight space the G20 Angled Deck will save you precious room.
- With a 150kg capacity it includes an end gate and the same pack components can be assembled either to the right hand or left hand sides.

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SLIDE OUT DECK

Part No. 5800506

- The Slide Out Deck allows you to reach out up to 2.9m over an obstacle, even with a 150kg loading. It still features 3 exit gates as does the standard deck and rolls out effortlessly at any height.
- Once you are finished with it, simply slide it back in out of the way.



ALL TERRAIN KIT

- Larger diameter, heavy duty, towable wheels along with Jack Stands at each corner allow units with this accessory added to operate off the hard stand.
- With a level bubble on each corner, its easy to get the unit level and firm even if the ground is uneven.

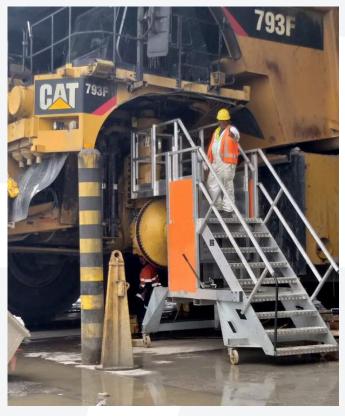






GIRAFFE SERIES

















Self closing, full size front gate



Convenient, solid rear gate, swings up or down



Generously sized work deck with a 250kg WLL, allowing for work gear



Extra sturdy stable work deck with tough oversize mast and roller system



Rapid spring assisted adjustment



Six height installments to fit multiple tasks



Spacious, easy and gradient stairs with non-slip yellow treads

DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT

MONKEY SERIES BENEFITS

*

A solitary Monkey MX21 can replace multiple fixed height platforms.

The Monkey can be used as both a work deck or an accessway.

Efficient in use and efficient to store...here are a few more great Monkey benefits!







MONKEY SERIES MX21 RANGE

The Monkey MX21 units have been tested and confirmed to meet or exceed the strength, stability and all other applicable requirements for the following standards:

- ANSI-ASC A14.7-2011 (USA) CSA Z11-12 (Canada) AS/NZS 1576.1 (Australia and New Zealand).
- *On base model reaching up to 4.5 metres. Working load limit 250kg

MONKEY MX21

Part No. 5600543

CONSTRUCTION

• Deck height range: 1500mm - 2750mm

Overall width: 1177mm
Overall length: 2242mm
Platform width: 642mm
Platform length: 1041mm



MONKEY MX21 + 4 STEP SUB CHASSIS

Part No. 5600548

CONSTRUCTION

Deck height range: 2500mm - 3750mm

Overall width: 1177mm
Overall length: 2684mm
Platform width: 642mm
Platform length: 1041mm



IIIII DEPARTMENT OF DEFENCE MAINTENANCE SUPPORT

MONKEY SERIES MX21 RANGE

*

MONKEY MX21 + ALL TERRAIN

Part No. 5600547

CONSTRUCTION

Deck height range: 1500mm - 2750mm

Overall width: 1449mm
Overall length: 2242mm
Platform width: 642mm
Platform length: 1041mm



MONKEY MX21 + GO-BASE

Part No. 5600546

CONSTRUCTION

• Deck height range: 1500mm - 2750mm

Overall width: 1177mm
Overall length: 2242mm
Platform width: 642mm
Platform length: 1041mm



MONKEY EXTENDED CANTILEVER

Part No. 5600549

CONSTRUCTION

• Deck height range: 1500mm - 2750mm

Overall width: 1177mm
Overall length: 2990mm
Platform width: 749mm
Platform length: 1788mm





MONKEY SERIES









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MONKEY SERIES MX21 RANGE



GO-BASE CHASSIS

Part No. 5600559

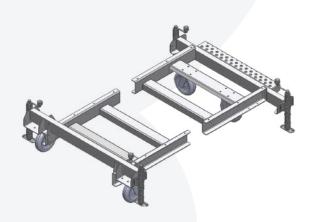
Heavy-duty lockable wheels promotes movement and storage efficiency.



ALL TERRAIN KIT

Part No. 5600547

This option is suitable for outdoor working requirements. Rubber wheels and independent, adjustable jack stands provide stability and ability to level the MX21 on undulating sites.



HYDRAULIC KIT

Part No. 5600550

The smooth, double action hydraulic kit makes adjusting deck height easier and more efficient. Recommended with additional weight kits such as the Extended Cantilever.

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Safety bar at the rear of the platform stays out of the way for climbing on or off the deck and clips on easily behind the user



Easy pull trigger rod gives a positive lock at each of the four deck heights



Easy loading with strong 'tie-down' points



Quick to shift around the site with the integral carry handles.

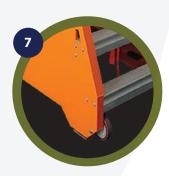


Very Light and very strong thanks to the effective design and the predominantly aluminium structure.



A unique 'flip feet' provide extra stability when the deck is in use, but flip conveniently out of the way when you need to get through a narrow gap.

..........



Simple to move just tilt until wheels engage and then push around



VRS SQUIRREL BENEFITS



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VRS SQUIRREL SERIES

The VRS Squirrel Series brings the safety and efficiency of the VRS platform series, right down to the smaller tasks in building and maintenance in many industries. It has excellent manoeuvrability and is fully height adjustable, which has made it the platform of choice for tradesmen on building sites, right through to maintenance workers in oil refineries.



VRSQ-14

Part No. 5800194

CONSTRUCTION

Deck height range: 720mm - 1440mm
Overall width (flap feet out): 776mm
Overall width (flap feet in): 644mm

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Overall length: 1090mmPlatform width: 510mmPlatform length: 565mm

VRSQ-17 (WITH GO BASE)

Part No. 5800510

CONSTRUCTION

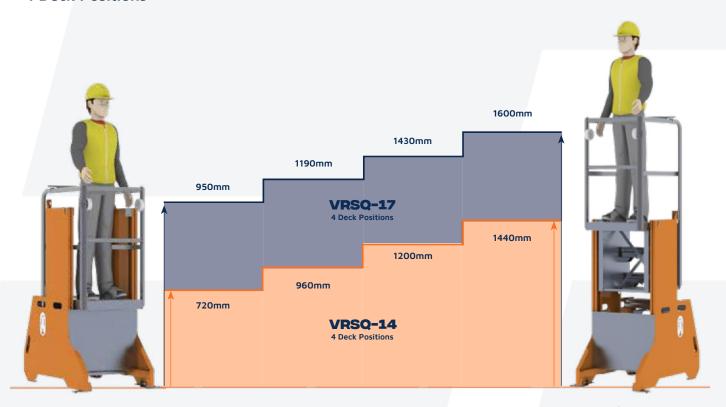
Deck height range: 950mm - 1600mm

Overall width: 1050mm
Overall length: 1200mm
Platform width: 510mm
Platform length: 565mm

VRSQ-14 AND VRSQ-17

HEIGHT ADJUSTABLE PLATFORMS

4 Deck Positions



Lowest Position Highest Position



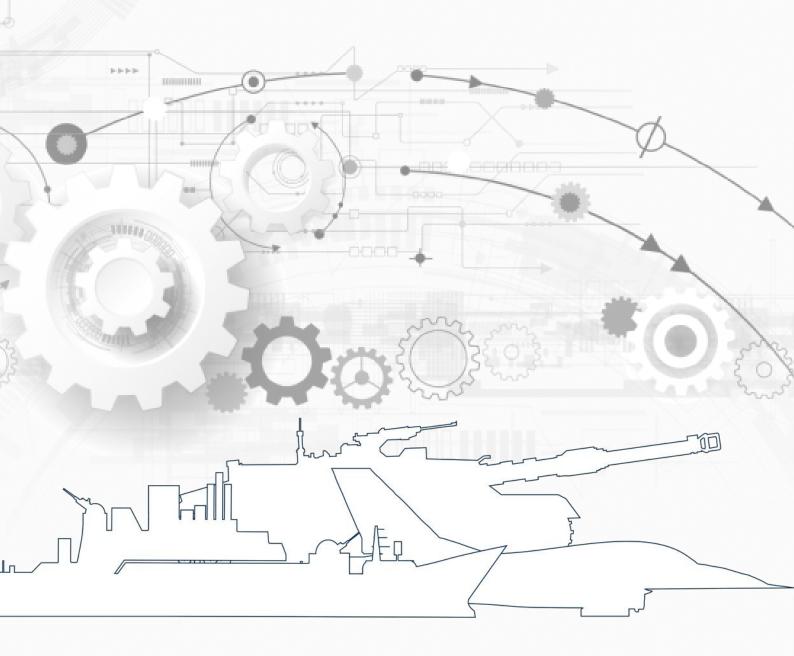






ENGINEERED OPTIMISATION:

WEIGHT REDUCTION, SPATIAL ECONOMY AND ERGONOMICS



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INTRODUCTION

Weight reduction, space saving, and ergonomic improvements are critical components of safe, and effective equipment. Weight has a large bearing on the performance of equipment in terms of safety, efficiency, mobility, and strength. In a lot of cases weight reduction can be employed in the design phase to solve problems in these areas. This is often done through material substitution, but considerations need to be made around the flow on effects of using a different substrate for the same application. Performance characteristics reliant on strength and environmental resilience as well as the asset or equipment's longevity and cost are important to factor into the decisions around materials.

In industrial scenario's space is often limited, both for storing when not in use as well as for personnel to be able to use the equipment effectively. Space saving in the context of storage as well as a piece of equipment's performance in the space available signify intelligent design. Thinking outside the box while satisfying performance and certification outcomes are the hallmarks of leading capability. This feeds into providing personnel the equipment they need to execute theirroles with safety, efficiency, and productivity at the forefront.

The by-product of intelligent design which incorporates weight reduction, strength and performance increases and spatial awareness is ergonomics. Equipment that enables safe, efficient, and practical performance is invaluable. Achieving this in an industrial setting is only possible through design, engineering, and fabrication as a holistic process.

HOSE LANCES CASE STUDY:

Leveraging weight reduction through material substitution and ergonomics improvements for a safer system

PROBLEM

Our client had fabricated their own hose lances on-site for hosing down and cleaning the inside of their process chutes. The lance is used by the operator standing behind a mesh access door on the outside of the process chute. The operator pushes the lance through the gap in the mesh and cleans down the inside of the chute.

Running parallel to this was the associated manual handling issues. The lances were between 6 and 8 kilograms depending on the length. Although not extremely heavy in isolation the lances' completely solid, rigid construction coupled with delivering high pressure water created a significant safety hazard.

During one wash-down incident loose debris broke away above an operator's head which landed on the lance. The impact caused the end of the hose to hit the operator's face. The result was a significant facial injury – which could have been much worse.

TECHNICAL REQUIREMENTS

Our client required a solution that absorbed impact while also reducing the overall weight of the lances. We needed to improve functionality and ergonomics of the lances, while satisfying the client's strict site centric specifications.

Shown to the right is the original lance - Mild Steel 1" SCH80 pipe and fittings (Ø33.40D x 4.6 thick wall).

THE CORE OF THE PROBLEM IS
THAT THE CURRENT SOLUTION
WAS PUT TOGETHER ON-SITE
AND WAS THEREFORE NOT
ENGINEERED OR CERTIFIED



SOLUTION - WEIGHT REDUCTION

Our solution was material substitution, from Mild to Stainless Steel. This enabled us to decrease the size of the pipe - $\frac{1}{2}$ " SCH40 (Ø21.3X2.77 thick wall). Although Stainless is heavier than Mild Steel, by reducing the size of pipe we drastically reduced the weight. This also allowed us to use smaller valves and fittings, creating further reduction in weight.

SHOCK ABSORBTION

Rigidity ultimately intensifies shock scenarios, to solve this problem we developed a flexible connection. This created a mediating effect by remaining rigid enough while no under pressure, maximising performance, and function, while providing the required shock absorption characteristics when in use.

SAFETY

Maximising safety is always top of mind when we are developing a new solution or improving on an existing one. In this case we were able to reverse the orientation of the lances on and off. Meaning if the lance is dropped it won't inadvertently turn on.

RESULTS

- Weight of each lance has been reduced from 6-8 kilograms to 2-3 kilograms.
 The lances are more ergonomic and functional for operators
- The addition of a shock absorption feature minimises risk
- Reversal of the on/off orientation maximises safety



MOBILE ACCESS PLATFORM CASE STUDY:

Spatial limitations, manual handling, performance, and certification solved with intelligent design

CASE STUDY 2 - MIGHTY MOUSE

PROBLEM

Our client required a mobile platform to access a critical part of their plant. The platform is needed to perform maintenance on one of the head chutes located 45 metres from the ground. The task is made more difficult given the only means of access is to crane a platform onto an adjoining walkway. The walkway is narrow and is floored with grid mesh.

Australian Standards require handrails around the area of work or occupation be 900mm high from the ground someone is standing. Handrails below this height present a significant working at heights and fall hazard – in this case over 45 metres. The access platform needed to be designed to mitigate this hazard.



Aside from access to the head chute, the platform is also required for general use. The platform also needed to be as light and compact as possible. Walkways are tight and access to the area is limited. Personnel may therefore need to push the platform 300 metres or more to the maintenance area.

Prior to the design, engineering, and fabrication of this platform there was no access step or platform in existence that satisfied all these functional and safety requirements.

TECHNICAL REQUIREMENTS

- Compact enough to fit down tight walkways and functional to make 90 degree turns navigating plant and handrail obstacles
- Light enough to be ergonomic and safe to push easily and potentially long distances
- Engineered, certified and compliant with Australian Standards

SOLUTION

The team were able to design a platform that satisfied all requirements. The use of steel and aluminium ensured overall tare weight was kept as light as possible while maintaining stability. Attachable outriggers also allowed for less counterweights and enabled a smaller overall platform footprint.

Removable drop-in steps and handrails further narrowed the footprint and enabled the required 90 degree turning capability. To solve the safety problem associated with the use of the platform and the nearby working at heights hazards, removable protection handrails were included in the design. These are reversable to allow for use on the left and right-hand side.



RESULTS

The finished platform is portable and easy to manoeuvre. The overall weight was kept to 260kg making the platform easy to move long distances along the grating walkways on the plant. The platform can be used anywhere along a walkway including next to existing handrails – one of the first of its kind.

OVERALL DIMENSIONS (MM):

• In transit (just base on castors): 700H x 810L x 662W

When erected without handrail extension: 1620H x 1085L x 1050W

• When erected with handrail extension: 1620H x 1640L x 1050W

• WLL: 150kg

Tare weight: 261kg

• 4 swivel castors + 4 outriggers

Forklift pockets + lifting lugs





CONVEYOR MAINTENANCE CASE STUDY:

Manual handling minimised, safety transformed, and maintenance made easy with intelligent design and material application

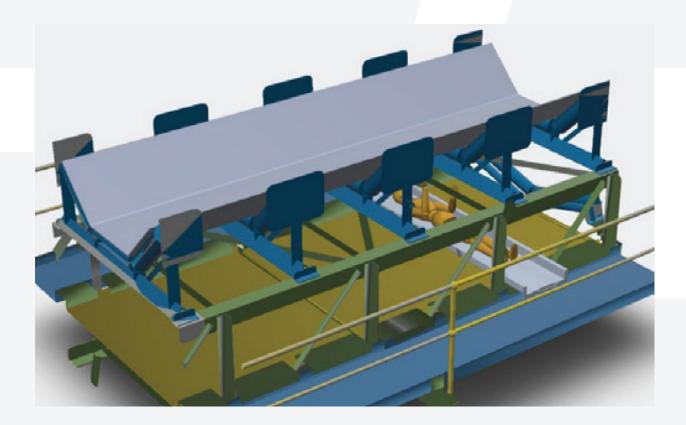
PROBLEM

Conveyor Return Idlers can only be removed or maintained while in situ. This process requires a specialised plank that enables maintenance personnel to slide under the belt to perform the task – like a car mechanic.

The existing plank design our client had implemented was constructed from 6mm plate and weighed approximately 30kg, 38kg and 47kg for the 2.3m, 3m and 3.7m planks respectively. The planks need to be transported on a vehicle to the maintenance locations and manually carried up sets of stairs. In some locations the manual handling distance is significant. The planks need to be light enough for a 2-person carry which the longest (3.7m) plank was not.

TECHNICAL REQUIREMENTS

- 2-person carry
- Span 2.3m / 3m / 3.7m lengths
- Comply with relevant Australian and clients' engineering standards



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SOLUTION

Through intelligent redesign of the planks with a pressed plate section to reduce the deflection and a material substitution down to 5mm plate we were able to significantly reduce the weight across all three planks.

LENGTH	EXISTING DESIGN (6MM PLATE) KG	OUR DESIGN (5MM PLATE) KG	WEIGHT SAVES (KG / % SAVINGS)
2.3m	30	25	5 (17%)
3m	38	32	6 (16%)
3.7m	47	40	7 (15%)

Outside of the raw design and material upgrades to satisfy the weight and functional requirements we were able to further improve the process and maximise safety. We designed and engineered a forklift/crane able storage rack to reduce manual handling when loading the planks onto the transport ute.

The rack is also able to be craned to higher levels of the plant, meaning a significant reduction and in some cases elimination of manual handling.



RESULTS

Set comprises:

- 150kg WLL PLANK of 2300mm length & 25kg tare weight
- 150kg WLL PLANK of 3000mm length & 32kg tare weight
- 150kg WLL PLANK of 3700mm length & 40kg tare weight
- Comes with Storage Rack with forklift pockets & lifting lugs

WEIGHT REDUCTION SIMULATION PROJECT

Material substitution is an excellent way to reduce weight as well as improve functionality, performance, and economy. Our design team completed a material substitution simulation on a common workshop item – a workbench.

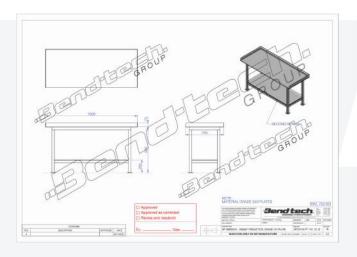
The parameters remained the same across the three materials and the safety and engineering outcomes had to be satisfied. The bench needed to be able to be certified and compliant with Australian Standards and have a working load limit of 750kg regardless of material and remain the same size dimensionally.

The goal of the simulation was to apply different materials to the same application to understand how much the overall tare weight of the bench could be reduced. The results are in the table below.

MATERIAL	SWL	TARE WEIGHT	WEIGHT REDUCTION
Grade 350 Steel Plate	750kg	220kg	
Strenx 700 Plate	750kg	192kg	13%
Aluminium	750kg	95kg	50%

The differences in weight between the materials are quite significant. Especially considering the dependent parameters remain the same. In isolation 1 bench may not be significant but if the same methodology was applied across a whole workshop or other structure the reduction in weight could be profound.

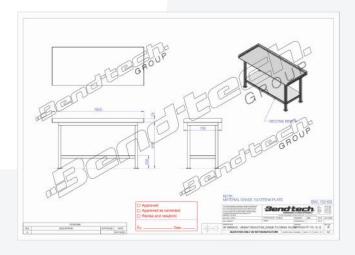
STANDARD DESIGN GRADE 350 STEEL PLATE - 220KG





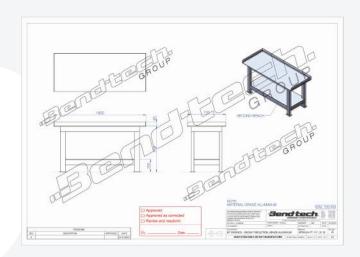
MATERIAL SUBSTITUTION

STRENX 700 PLATE - 192KG 13% WEIGHT REDUCTION





ALUMINIUM - 95KG 56% WEIGHT REDUCTION





CAPABILITIES (BEND-TECH)

Bend-tech is a bespoke design, engineering and fabrication firm that has been servicing the Defence industry for over 20 years. A family-owned operation which has now grown to over 75 people, Bend-tech specialises in providing innovative, engineered, and certified solutions for safety and efficiency problems to industry.

Our 10,000 sqm facility in Welshpool houses our team and local manufacturing. Our extensive capability and embedment in the resource sector has taught us that what we provide is unrivalled and is primed for the betterment and support of the Defence industry.

CAPABILITY

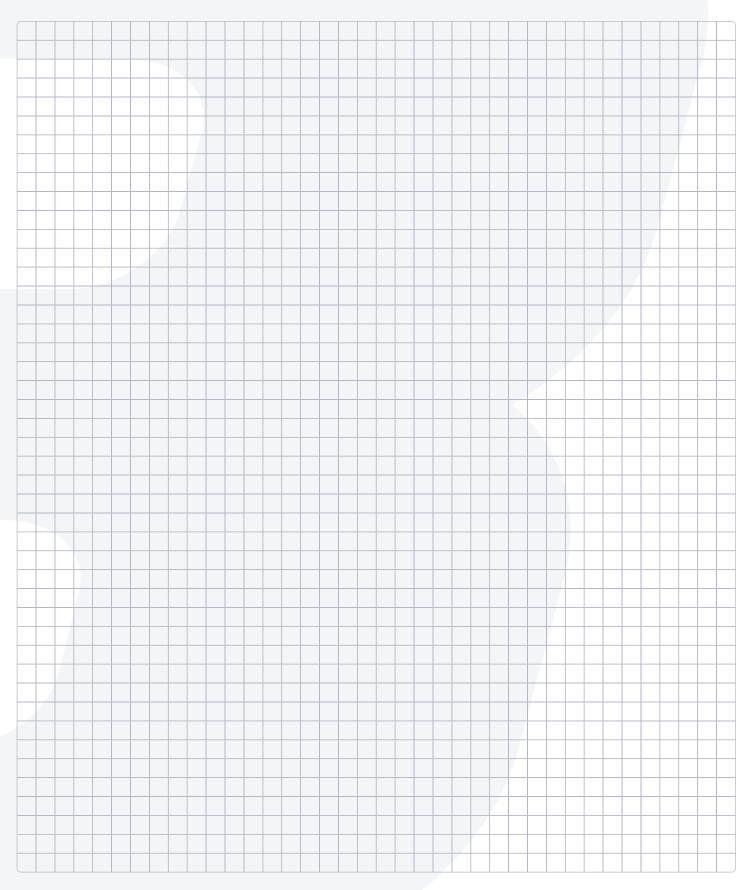
- Design, engineering, and fabrication
- On-site consulting and 3D scanning to enable intelli gent design
- Access platforms and scaffold elimination
- Weight reduction and space saving
- Manual handling elimination
- Work stands
- Equipment and material storage and handling solutions
- Workbenches and tool storage
- Site maintenance and upgrades
- Container fitouts

DISCRIMINATORS

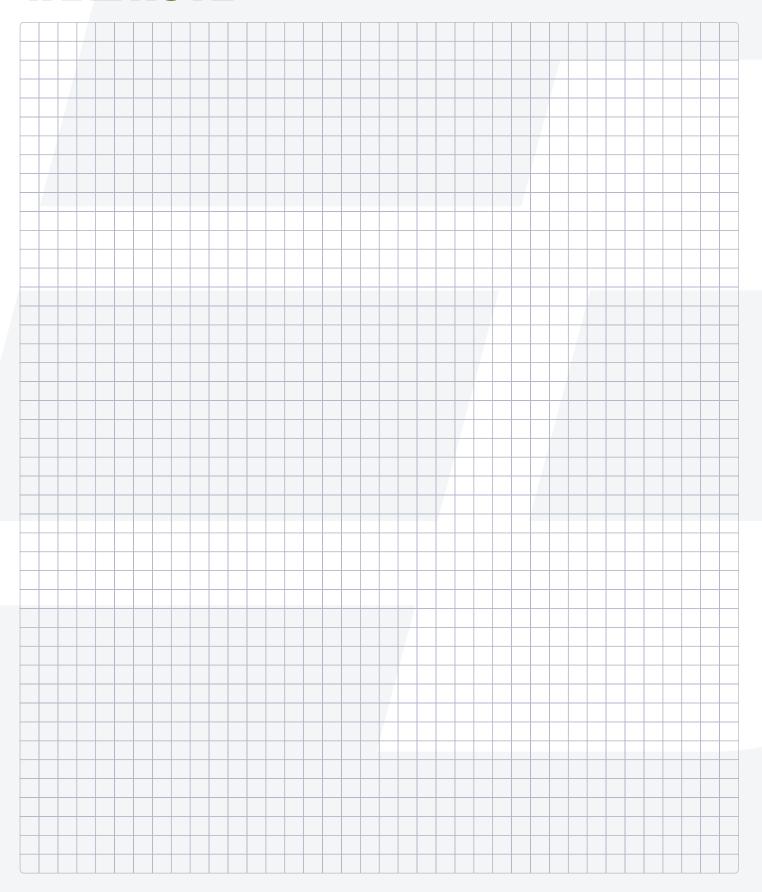
- In-house design, engineering team with over 15 inter nal team members
- 3D scanning, scoping, and pr ocessing capabilities
- 10000 square metres of fabrication facilities
- 80 tonne lifting capability, 20 metre underhook lift
- Our Australia-wide consultation team and pr ocesses with over 10 team members
- Dedicated research and development department and 3D printing capabilities

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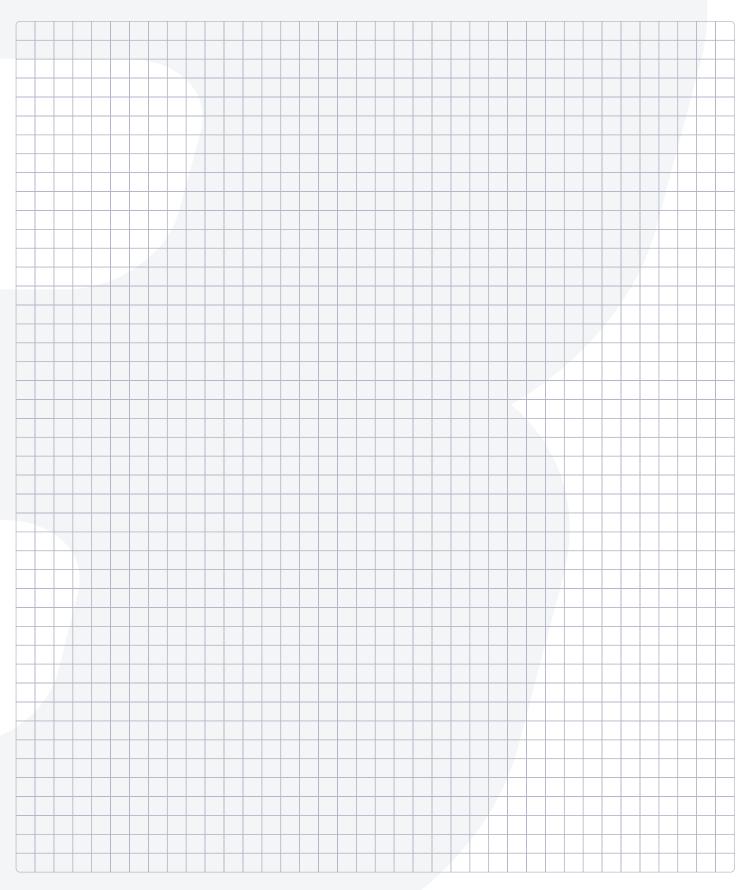
B|BIGGER THAN BUSINESS



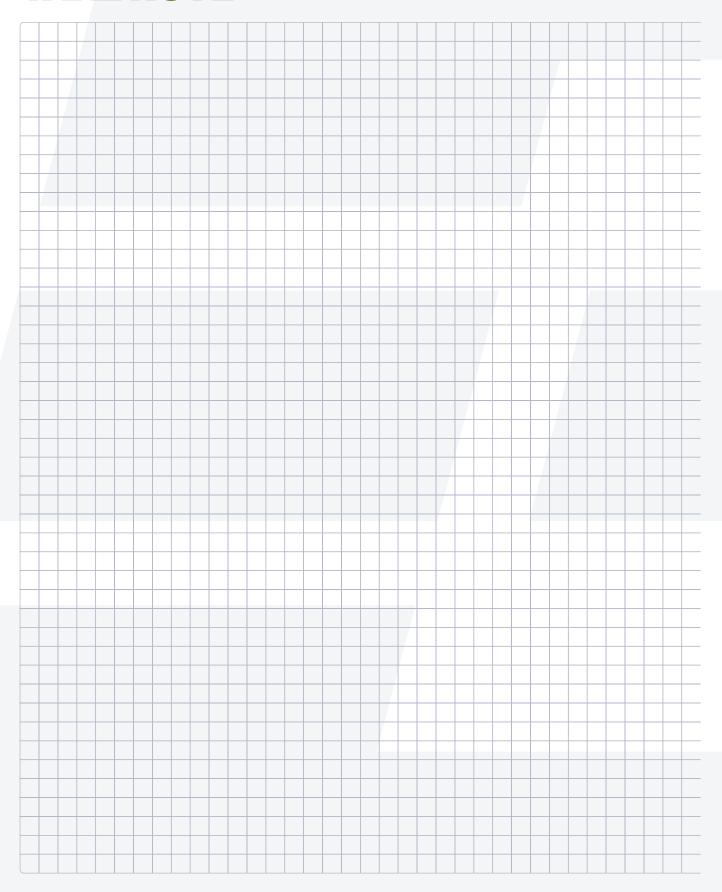
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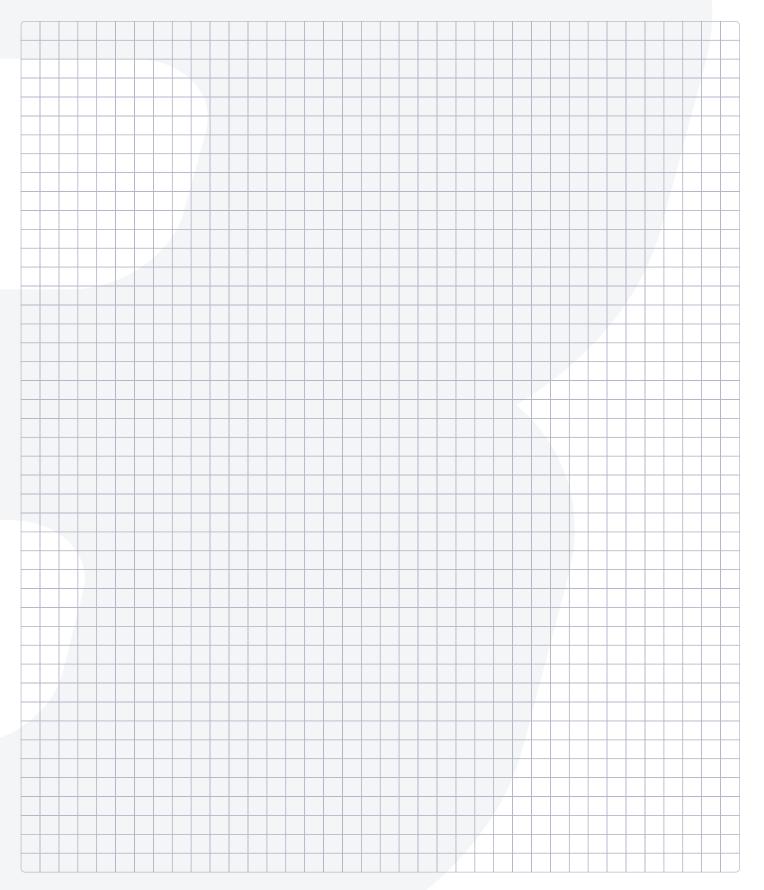
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