REX J ANDREWS PTY LTD

ENGINEERED TRANSPORTATION



www.rja.com.au

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Company Depots



The Sydney Depot houses the design & manufacturing hub for the company, enabling the technological advances for clients design needs to implemented to meet project timeframes.

- Total Area 12,407m2
- Undercover secured area 3060m2
- Concrete hardstands to Class G Loadings
- Parking for 38 light vehicles & 40 trucks onsite
- Industrial perimetre fencing
- electronic gates

The Beresfield Depot located in a suburb of Newcastle which is conveniently located for another major shipping Hub, Mayfield Wharf, where we have a permanent leasehold for convenient storage solutions for our clients, upto 150,000m2. The Beresfield Depot consists of:

- Total Area 6,700m2
- Undercover secured area 700m2
- Parking & storage 6000m2
- Perimetre fencing

The Adelaide Depot is situated in the suburb of Burton, heading up our operations in South Australia & Western Australia Equipped with a workshop area for repairs & servicing

- Total area 5,600m2
- Under cover secured area of 600m2
- Parking & Storage area 5,000m2
- Perimetre fencing

The Portland yard is conveniently located in the proximity of the Port of Portland.

That yard boasts 43,000m2 of an area for our customers to store their goods from the time of discharge until the deliveries are required .

The yard is equipped with 62 tonne reach stackers for easy loading & unloading & an amenities block with lunchroom.



COMPANY OVERVIEW

Rex J Andrews Pty Ltd (RJA) specialises in the transport of oversized overmass (OSOM) cargo.

Our team has been providing engineered transportation solutions for over 30 years.

A family owned business: Rex & wife Helen at the helm, with their 3 sons: Carl, Warrick & Howard working along side them to build the successful business it is today.

RJA prides itself on the capacity to assess customers' requests & develope the engineered solutions to get the load to its destination.

The team of experienced staff comprising of: engineers, drivers, maintenance personnel, boiler makers, machinists, project managers & administrations staff; all work tirelessly to ensure the job is done.

Our services include transport, storage, customs clearance, route assessments, detailed traffic management plans (TMP) & the convenience of 4 locations in Australia to service our clients. RJA services all of Australia, mobilising our team where ever the project requires. The RJA NZ branch services the projects in New Zealand.

Our Sister company BRYSTOCK INDUSTRIES offers all our manufacturing needs, from simple trailer configuration to more complex systems. This leading edge allows RJA to reduce lead times when design changes are needed to be implemented to meet customer needs.

Brystock has state of the art equipment, plasma cutters, CNC machines, profile cutters & welding processes to manufacture the equipment designed by our engineering team.

If a client needs specialty items, RJA/Brystock can deliver.





Why Rex J Andrews??

- √ Certified in ISO 9001, ISO 14001, AS4801
- √ 30+ years experience in the design & manufacture of mechanical equipment
- ✓ Specialising in High strength steels, Hydraulics, electro-mechanical & electronics
- √ Specialised Transport, Crane & Storage solutions.
- $\checkmark~$ Proven Record, Reliability of Delivery
- √ Recognised Industry Leader
- √ Modern Fleet with GPS Tracking
- $\sqrt{}$ NHVAS Accredited Fleet
- ✓ IPAD electronic entries for servicing, repairs & Job reporting
- \checkmark Firewalls, Servers, Seperated WIFI Networks





Australian Family Owned Business

WINDFARM LONGEVITY

Rex J Andrews Pty Ltd's longevity in the space of specialised transport for wind turbines across Australia & New Zealand has extended from the first job being Starfish Hill 2003, through to the current running project in Cairns, Kaban 2022 & preparing to mobilise to other projects in 2023 & beyond.

The crucial element of our ongoing service to the industry has been the evolving engineering undertaken with each new challenge rising from the changing turbine size.

It has been imperative to service our clients with a modern fleet with the most technological advancements to cater for he extra length & weight of the components now being installed on windfarms today.

The extensive experience in the industry has enabled Rex J Andrews Pty Ltd to meet the complexitities of the changing demands from clients, having the knowledge & understanding of the requirements to meet deadlines for a successful project handover.

In comparison to Starfish Hill which had a blade 32m long & delivered in two sections of a 27m body & 5m tip. The blade delivered in 2022 at Kaban WF was 80m long and tranported as a single unit. Rex J Andrews Pty Ltd is committed to continue to have a fleet of modern trucks & specialised equipment, offering various solutions.

	Starfish Hill 2003	Kaban 2022
Blade Length	27m Body + 5m Tip	79.35m Single Component
Generator / Nacelle Weight	43T	181.25T
Hub Weight	29T	62.8T
Hub Height	68m	149m
Total Turbine Weight	220T	836.24T



One major solution is our Crane services for loading in the storage facility & unloading on site, our team holding the neccessary qualifications to offer the seamless process.

Historically saving the client time and money by adopting this service.

Our project management team has combined experience within the company of more than 50years, having worked in all aspects of the industry. Contact any of our team for any of your transport needs



<u>Year</u>	WINDFARMS	<u>QTY</u>
2003	STARFISH HILL, SA, 2003	23
2004	LAKE BONNEY CANUNDA SA	46 23
2003	WATTLE POINT, SA	55
2005	YAMBUK, VIC	20
2004	CATHEDRAL ROCKS, SA	33
2004	MOUNT MILLAR, SA	35
2006	ALINTA, WA	54
2003	WOOLNORTH 1 TAS	40 20
2004	WOOLNORTH 2, TAS	20
2007	STUDLAND BAY, TAS	25
2007	LAKE BONNEY 2, SA	53
2007	HALLETT 1, SA	45
2007	SNOWTOWN, SA	29 48
2008	CAPITAL, NSW	67
2008	CAPE NELSON, VIC	22
2008	HALLETT 2, SA	34
2008	CULLERIN RANGE, NSW	15
2008	LAKE BONNEY STAGE 3 SA	27
2009	WAUBRA STAGE 2 VIC	40
2009	WATERLOO STAGE 1 SA	37
2010	COLLGAR WA	111
2010	GUNNING, NSW	31
2010	MT BARKER, WA	3
2010	Mahinerangi, NZ	12
2011	ALBANY STAGE 2, WA	6
2011	DENHAM, WA	1
2011	HOPETOUN, WA	1
2011	KALBARRI, WA	2
2013	MUSSELROE BAY. TAS. 2013	2 56
2013	SNOWTOWN 2, SA	90
2013	GULLEN RANGE, NSW	17
2013	BOCO ROCK, NSW	67
2014	TARALGA, NSW	51
2014	COONCOFE BRIDGE, VIC	с 6
2015	ARARAT, VIC	75
2016	WHITE ROCK, NSW	70
2017	SALT CREEK, VIC	15
2017	HORNSDALE STAGE 1, SA	32
2017	HORNSDALE STAGE 2, SA	35
2018	BODANGORA, NSW	33
2018	SAPPHIRE, NSW	75
2018	MT EMERALD, QLD	37
2018	MT EMERALD, QLD	16
2018	YAWONG, VIC	2
2018	TIMBOON, VIC	2
2018	LAL LAL, VIC	60
2018	BULGANA, VIC	56
2018	CATTLE HILL, TAS	48
2019	CHERRYTREE, VIC	16
2019	BERRYBANK, VIC	43
2019	DUNNDONNEL, VIC	80
2019	PORTLAND WANNON WATER, VI	1
2019	COLLECTOR. NSW	5 54
2020	WAIPIPI, NZ	31
2020	CRUDINE RIDGE, NSW	37
2020	FERGUSON, VIC	з
2020	DAIPUR, VIC	2
2021	MORTLAKE SOUTH. VIC	35
2021	Port Augusta, SA	50
2021	LINCOLN GAP STAGE 2, SA	24
2021	ESPERANCE, WA	2
2021	BERRY BANK 2, VIC	26
WINDT	URBINES DELIVERED TO AUGUST 2022	<u>243</u> 3

Case Study: Burrinjuck Dam

SUPPLYING TRANSPORT SOLUTIONS

Burrinjuck Dam is a heritage listed major gated concrete walled gravity hydro electric dam in the Yass Valley Shire, New South Wales, Australia.

The original transformer for the dam was installed in 1939 & the upgrade began in 1999.

Rex J Andrews Pty Ltd extracted the 2 original 38T transformers in 1999, replacing them in 2000 with a 42.5T Transformer. The mammoth trip from Rocklea QLD, navigated throough narrow difficult roads to its new home in the hydro-electric power station by the dam wall.

The accessories were transported from Port Kembla, the stator housing/winding load was the largest load measuring 6.0m x 3.2m & 39.8T. The combined weight of the load with the trailer prime movers exceeded the weight resricted wooden bridges onroute to Burrinjuck, their capacity was a maximum of 44T.

This challenge was overcome by the ingenuity of RJA, "BUILDING A BRIDGE & GETTING OVER IT". The installation of the temporary bridge was achieved by using a tank transporter with a specialised self-loading/unloading legs. The temporary bridge had a 14.5m span & 3.6m wide opening.

This ingenious solution enabled the delivery to get to site without delay or extra cost of a longer re-route.

Unloading the transformer onsite was another challenging task, the area had limited space, so cranes were not an option. Unloading was done by the RJA team with a method of jacking & skating the unit into place.

This one project showcases the diversity of services offered by RJA to source the solutions for their clients to get the job done

Installation of Original Transformer 1939



Removal of original transformer 1999





New Transformer being installed 2000



Jacking & Skating Transformer into position





Crossing the Temporary Bridge





Portable Bridge Load





Crossing the Temporary Bridge

ENERGY INFRASTRUCTURE Power Distribution

Rex J Andrews Pty Ltd has been a major participant in the supply chain of components for energy infrastructural upgrades across Australia since establishment in 1988.



Electrical transformer transport has shown the extensive ranges of transportation configurations required for the different transformer sizes. RJA has used platform & beamset configured trailers to move these loads, enabling the transport of oversized awkward loads.

The beamset configuration is completed by two header types & three trailer types, including mechanical beam suspension trailers & hydraulic suspension platform trailers, the increase in tyre rows increase the weight capacity.



One of our most memorable loads was a 200T transformer, travelling 2200kms from Bribane Via Bourke to Sydney. Traversing Mount Victoria in the Blue Mountains, grossing 450 Tonnes. The coastal route was not accessible due to road works, therefore an alternative route was planne and executed. As the load came over the mountain range there were 4 x Prim movers pulling the beamset load & 2 x prime movers pushing from behind, it was a sight to behold.

Jacking & Skating



Confined Space Heavy Placement

The service of jacking & skating goes hand in hand with many of our over dimensional loads.

Due to space confinement this service enables Rex J Andrews Pty Ltd to move the component ready for loading or delivery into place. Many situations do not allow the space for any crane set up or boom operation. Particularly the constraints of power substations with numerous power lines and sources, where a crane operation has many safety variables associated with it.

Once at site the load is loaded/unloaded adjacent to its location, using a proprietary jacking & skating system or the companies walking machine, placing the load into position or on the trailer for transport.

RJA has performed this method for items such as:

Generators, Turbines, transformers, rectiformers, Stators, Duct 'T' sections, rotators, machinery etc..



TRANSPORT ENGINEERING Brystock Industries Inhouse Engineering & Transportation



Brystock Industries Pty Ltd is consistently investing in the development of the 2016m2 workshop, keeping up with current technological advancements to have the leading edge with the design & manufacture of equipment.





Brystock Industries has the advantage of being able to custom make components for the equipment for RJA, i.e: hydraulics, braking systems, prototypes for new designs, enabling millimetre adjustments.

Machining parts enables efficiencies of not relying on suppliers for parts & avaiods stock issues



20T Eilbeck Roof Crane



Plasma Cutter 260A ART 6m x 1.5m



Jigging Bench • 13m x 3.5m



Plasma Cutter/Oxy Cutter • 300A ART 10m x 2.5m



Bending Rolls



CNC Vertical Press Brake

- 160T 3.5m x & 60T 2.5m
- Dies to 40mm



MIG Welding

- Welding Steel Alloys (high Strength steel to 700MPA)
- Aluminium Alloys to 250A

Brystock Industries Pty Ltd maintains the Rex J Andrews Pty Ltd fleet in the modern state of the art undercover workshop, comprising of 4 work bays 24m x 24m & an additional high pressure bunded cleaning by 20m x 6m.



20T Eilbeck Roof Crane 2020 Model.













MACHINING SHOP

Onsite there is storage for Bars & Sections upto 30T.

The machining shop has high tech equipment that enables the cutting perfomance to be optimised & milling accuracy to be acheived on every component produced.

The manual centre lathes to spindle Dia 130mm & 4 m long.

- Some of our machines onsite are:
- Doosan DNM 650 Doosan Puma 240
 - Doosan DNM 750 Doosan Puma 5100
- Doosan Lynx 300







Our Commitment is to provide high quality transport services.

This quality of service uses innovative specialised equipment, competent operators & management to achieve successful project completion.



REX J ANDREWS

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