RIX™

Providing end-to-end Engineering Solutions
for the Renewable Energy Sector

CELEBRATING 25 YEARS

As the global demand for renewable energy increases, so does the need for innovative engineering solutions.

The RIX Group provides a comprehensive end-to-end engineering service from design and construct to extension of life.

The RIX Group comprises of RIX Specialist Contracting, RIX Asset Maintenance, and RIX Ground Engineering, and is the largest and most diversified ground engineering company with over 400 people employed across Australia.

RIX has capacity to take on large-scale projects and provides the flexibility to scale operations as needed, giving clients the advantage of a well-supported and highly capable team.

We've built a reputation for excellence by delivering comprehensive and unique ground engineering solutions including ground anchoring, slope stabilisation, shotcrete, architectural shotcrete and simulated rock, retention & foundation piling, specialist civil contracting, ground improvement, rope access and steel fabrication services. These are undertaken completely in-house by skilled and experienced crews and are delivered to the highest quality.

RIX Asset Maintenance (RAM) who are IRATA Accredited have multiple in house licenced and trained operatives specialising in WTG Maintenance Inspections & Repairs covering the following activities: Blade inspection; Lightning protection; Grinding skills; Sanding; Laminate repairs; Filling surface repairs; Trailing edge repairs; Sandwich panel repairs; Bond line repairs and Painting.

RAM's operatives have recently worked on Boco Rock Wind Farm and Goyder South Wind Farm.

RIX provides complete engineering solutions, from design and construct to ongoing maintenance:

Geotechnical Investigations
Windfarm foundations
Tower foundations
Foundation anchors
In-house fabrication
Rope access technicians
WTG Maintenance
Blade Inspections & Repairs

Cover image: Talbingo intake excavation and Talbingo adit. Credit: Snowy Hydro Limited

Wind turbines at the Albany Wind Farm, Western Australia.

Our Process

1. Geotechnical Investigation
2. Design
3. Construction
4. Maintenance
5. Extension of Life

With the increasing hub height and rotor diameter of wind turbines, foundations are becoming more complex and costly. The RIX Group specialise in unique designs to increase the foundation lifetime and minimise budget impact while having minimal environmental impact.

In-house Fabrication

Our in-house manufacturing and fabrication facility is certified to ISO 3834 and services all states in Australia. Providing specific tailor-made ground engineering solutions to our client's specific project thus providing certainty in terms of quality, budge and schedule.

Anchoring Manufacturing and Fabrication Facility services include:

- Planning, drafting, design & 3D modelling
- Temporary and Permanent Strand Anchors
- Hold Down Anchors
- Soil Nails of all specifications
- Rock Bolts
- Anchor Brackets
- Waler Beams
- Structural Steel Bracing
- Structural steel supply, fabrication & installation.

Foundations of wind turbines with concrete and steel, Wörrstadt, Germany

Talbingo intake excavation and Talbingo adit. Credit: Snowy Hydro Limited

Windfarms - Turbine Foundations

New Build

The RIX Group offer a complete end-to-end solution for the construction of wind farm foundations including design, formwork, reinforcement, installation and ground anchoring solutions enabling smaller foundations to be constructed efficiently and economically.

Mass Soil Mixing, Permeation Grouting, Anchoring and Proplate Mixed Secure is the ideal anchoring solution where versatility is required in undesirable ground conditions.

Existing Structures

The RIX Group install ground anchors and other unique ground engineering solutions on existing windfarm foundations to provide extra stability or as part of foundation construction enabling cost saving solutions.

Transmission Lines - Tower Foundations

Factors to consider:

- Tower Geometry
- Soil conditions
- Access
- Environment
- Cost

Offering one of Australia's most niche construction techniques, The RIX Group counter these factors with unique solutions saving time, money and environmental impact.

Pumped Hydro

New Build's and raising / maintenance on existing dams

The RIX Group provide a range of ground anchoring and stabilisation solutions including, rock bolting, grouting, shotcreting and rockfall mesh as well as deep geotechnical investigations to enable large scale works in remote and challenging locations.

PV Solar - Foundation Solutions

In Australia, solar farms have become an integral part of the country's energy transition mix, contributing significantly to both the national grid as well as standalone micro-grids. The RIX Group use industry specific ground engineering and automated drilling to reduce labour cost.

Key benefits:

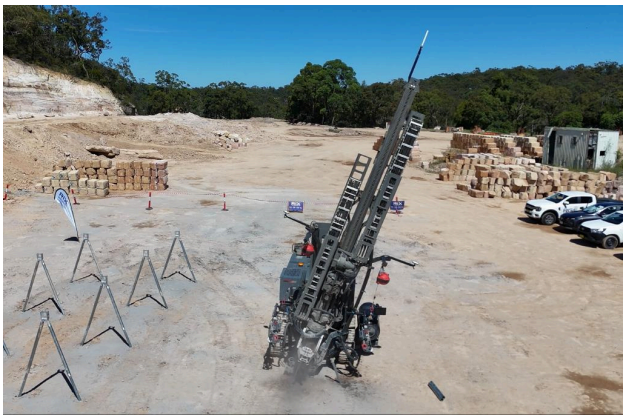
- Eliminates the need for pre-drilling
- Reduce cost and construction time
- Improve long term stability

Solar Farm Installation

The RIX Group offer a fast, continuous and accurate solution for solar farm installation. Using GPS driven plant and a unique hollow bar installation all provided by one contractor. At the end of the farm's lifespan, The RIX Group can dismantle all footings leaving the ground in the same condition as it was preconstruction with no stabilised sand or grout left behind. This gives The RIX Group the environmental and sustainability advantage helping to deliver a greener and more reliable energy source.

Key Advantages:

- Minimise disturbance
- GPS accuracy installation
- Environmentally friendly
- Build on any ground
- No imported backfill



RIX Method	Traditional Method
Precision Installations via GPS	Delayed Handover
One Continuous Installation	Silica Exposure
Fast Production	Curing and Testing Delays
Minimise Grading	Greater Rectification Risk
Simple, Safe and Reliable Delivery	Higher Environmental Impact
One Reliable Contractor	High Logistics and Compliance Burden

RIX™

RIX Group is Australia's Largest Ground Engineering Contractor, operating throughout Australia, New Zealand, and the greater Asia-Pacific region.

RIX™ SPECIALIST CONTRACTING

RGE RIX GROUND ENGINEERING

RAM RIX ASSET MAINTENANCE

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Accredited to:

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
AS/NZS ISO 3834 – Part 3