

# CIVIL

Constructing complex infrastructure



# We live for the challenge

**SRG Global is an engineering-led specialist construction, maintenance and mining services group built to solve complex problems across the entire asset lifecycle.**

SRG Global was born out of Australia's greatest ever engineering and construction challenge, the Snowy Mountains Hydro-electric Scheme, in 1961. Today, we are an ASX listed company bringing a unique engineering mindset to every construction, maintenance and mining project we touch.

Our specialist technical capabilities, diversified services and global experience working on iconic skyscrapers, bridges, dams, structures, transport infrastructure, mining and oil and gas projects, means there is no complex challenge we can't resolve.

Working across the entire asset lifecycle, we provide bespoke engineer, construct and sustain solutions, meaning you only ever need one partner. We're also self-performers because our team incorporates every discipline and skill required to meet the challenges our customers set.

Few specialist services companies have amassed the same knowledge, developed as many innovations or worked on as many world-class projects as we have. As a result, we have some of the best technical minds and problem solvers, supported by a culture that encourages out of the box thinking and people working together to push boundaries on what's considered possible.

We are also relentless in the way we deliver. We know that people's lives depend on us executing with absolute precision, which is why we never compromise on our systems, processes and safety standards.

We are SRG Global and we're up for the challenge.



## Building

Vertically integrated solutions



## Civil

Constructing complex infrastructure



## Asset Services

Sustaining complex infrastructure



## Mining Services

Comprehensive ground solutions



## Products

Complementary products and technology





# Constructing complex infrastructure

## What we do

There are few infrastructure projects that can't be improved through our engineering-led thinking, combined with our ability to self-perform everything we do.

SRG Global's civil team specialises in the construction of road, rail and pedestrian bridges, wind farm foundations, cryogenic tanks, water tanks and silos, as well as dam strengthening, load handling, heavy lifting and bridge maintenance and restoration.

We deliver a lifetime of quality without sacrificing safety or cost-effectiveness. Decades of experience across all kinds of iconic infrastructures have allowed us to develop the innovative techniques and specialised tools needed to make any infrastructure project less complex.

**Bridge Construction**

**Dam Strengthening**

**Silo and Tank Construction**

**Ground and Slope Stabilisation**

**Slipform Construction**

**Wind Farm Foundations**

**Stay Cable Systems**

**Ground Anchoring**

**Heavy Lifting and Shifting**

**Scaffold and Access Solutions**

**Form Reo Pour**

**Design Engineering**

## Key projects



# Bridge Construction

## Optimising how complex bridge structures are constructed

Bridge projects where challenging terrain, difficult access, long spans or design constraints apply are our forte. We work out how to simplify the engineering, optimise construction methodology and apply it to complete simply supported and structurally complex bridge structures.

Our expertise includes the most effective and cost-efficient bridge solutions, from simply supported structures to incremental launching, balanced cantilever, cable stays, and match-cast segmental construction techniques.

We also strengthen existing bridges, bringing innovative design solutions in carbon fibre technology and post-tensioning. Our engineered applications are suited to the full spectrum of existing structures including timber, concrete and steel.

## Incremental Launching

SRG Global are leaders in incremental launching of bridges, having completed projects all over

the world. The incremental launching method combines the advantages of precast segmental construction with those of cast insitu methods.

## Cable Stay Systems

SRG Global provides strand, wire, bar or carbon stay cables for a wide variety of structures, drawing on both local and global expertise and resources of the BBR Network. SRG can provide strand (BBRHiAm Cona™), wire (Dina™ / HiAm™) or bar type stay cables for this specialist method of bridge construction which is especially suitable for medium to long span bridges from 100 metres to 1,000 metres.

## Segmental Bridges

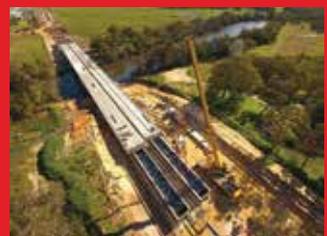
SRG Global has extensive experience in the construction of segmental bridges. Matchcast segmental bridges are made from precast concrete units which are stressed together with strand or bars. There are two normal methods of construction including balanced cantilever and span-by-span simply supported method.

## Balanced Cantilever Construction

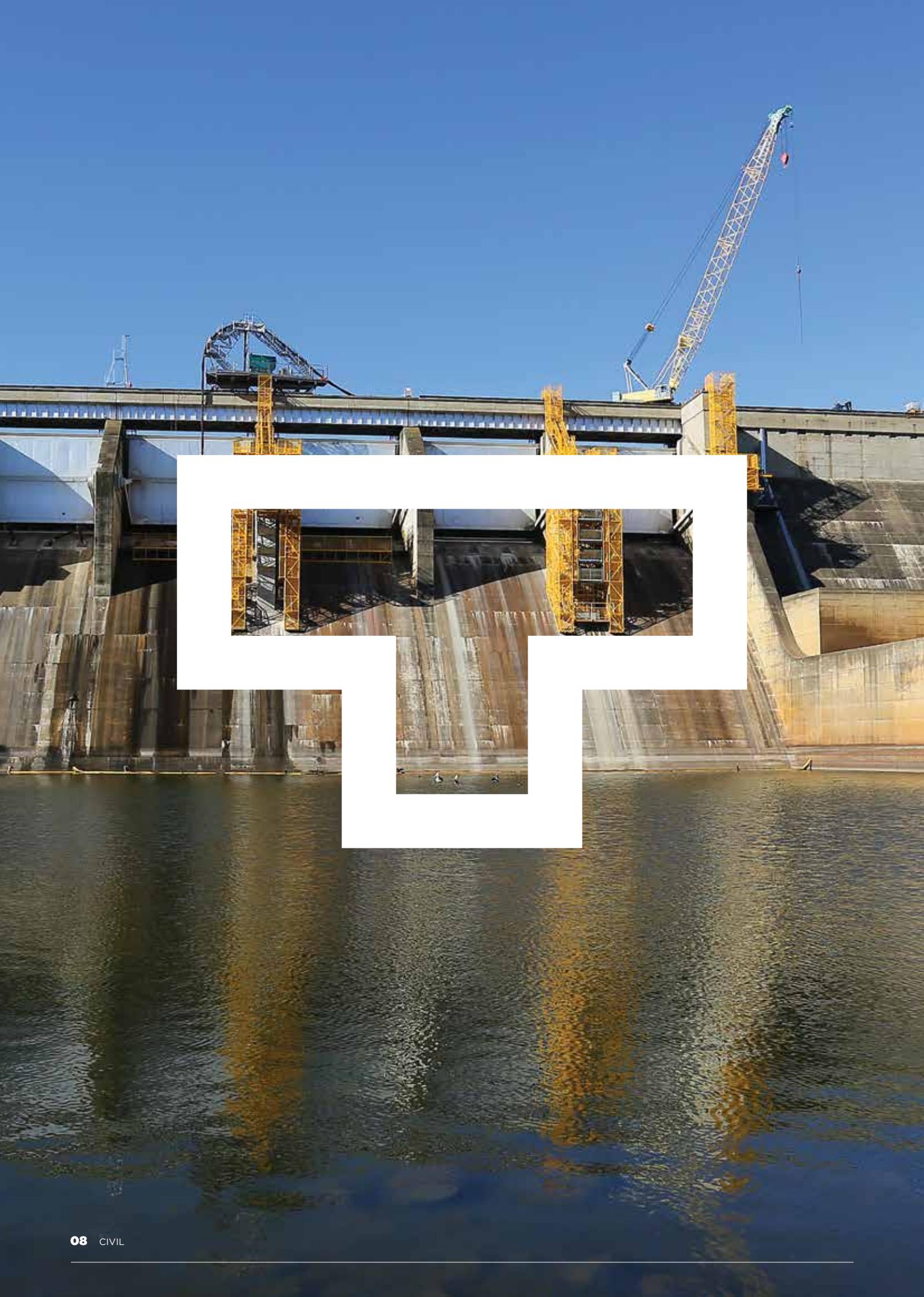
SRG Global undertakes balanced cantilever bridge construction which may be undertaken using cast in-situ segments or alternatively involve placing of precast segments. The scale and complexity of the project will determine the optimum solution. SRG's specialist teams using bespoke equipment for insitu construction have constructed bridges with spans exceeding 150 metres. This widely used form of construction is both economical and well proven.

## Cast Insitu Post-Tensioning

SRG Global offers post-tensioning services for bridge construction. Besides the situation where precast elements are joined to adjacent segments by post-tensioning, construction may be undertaken with conventional cast in-situ methodology. Our range of fully approved systems and specialist solutions is able to provide an optimal engineering and economical solution.







# Dam Strengthening

## World leaders in improving the stability of major dams

We are world leaders in the design, engineering and installation of ground anchors that improve the stability of dams. Our large-scale ground anchors are helping to secure major water reservoirs around the world. Our anchor technology has been developed over 50 years leading the industry in design and installation techniques, and SRG Global holds the world record for the largest anchors ever installed.

Our anchors are fabricated onsite using techniques to ensure the highest quality. Our plant and equipment is bespoke, designed and manufactured to unique specifications to provide safety, quality and productivity. Our dam teams are skilled not only in anchor installation but can combine anchoring with other support technologies such as specialist access systems and slipform techniques, to further enhance our capabilities in this sector. Our offering extends to precision monitoring and dam maintenance, providing the full engineer, construct, sustain solution for dam asset security.

## Ground Anchors for Dams

SRG Global are world leaders in dam anchoring with a proud and extensive history having completed projects throughout Australia, New Zealand, South Africa and Sudan. We have developed in-house the highest capacity permanent anchors and longest anchors ever installed in dam structures. Our proven success is a result of our technology and its continual development which enables SRG Global to provide a tailor made solution for every project, be it anchors of modest or extreme capacity.

## Monitoring

The design and installation of anchoring systems requires a high level of diligence if premature failure is to be avoided. Equally vital is testing and monitoring of any anchor system both before and after it enters service. SRG Global provide bespoke load cells for monitoring anchors to ensure effective performance throughout the life of the anchor.

## Ground Anchor Manufacture

SRG Global manufacture all anchors for dam strengthening projects in-house. Depending on the size of the project most anchors will be manufactured on site and transported via specialised equipment to the final install location reducing logistical issues and transport costs.

## Corrosion Protection

SRG Global has developed a robust corrosion protection method which is unsurpassed and ensures life expectancy of anchors is optimised.

## Temporary Access Solutions

SRG Global can design, manufacture, optimise and install temporary access solutions for any project to ensure each or access and safety for all stakeholders.



# Silo and Tank Construction

## Using our post-tensioning smarts to build better silos and tanks

Adapting our extensive post-tensioning experience to the specialised construction of tanks and silos, SRG Global has developed a single-contractor solution for customers seeking safe but cost-competitive fabrication.

Our innovative concrete design and construction techniques can be adapted to steel or glass infused tanks, including cryogenic tanks. For clients with existing structures that need reinforcement or strengthening, we offer a range of SRG Global products and materials, expertly applied by our own teams.

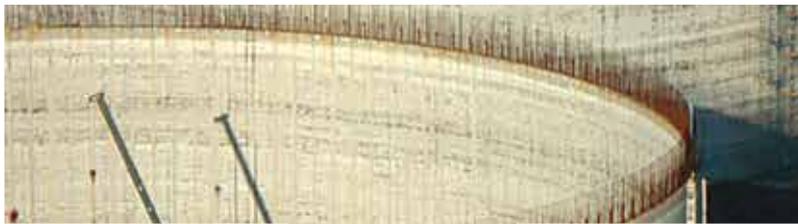
## Slipform construction

The slipform technique for silo and tank construction is a rapid and economical method that can achieve considerable cost savings when compared with the cost of conventional formwork. SRG Global has extensive experience in the slipform construction of tanks and silos throughout Australia and internationally.

## Post-tensioned tanks and silos

SRG Global has been designing and installing post-tensioning for tanks and silos, including cryogenic containment structures since 1982. Our innovative design, advanced construction techniques, effective project management skills and previous track record of projects make SRG Global a leader in post-tensioning for these structures across the world.







# Ground and Slope Stabilisation

## Bringing any ground under control

Our highly effective ground stabilisation techniques, technologies and materials have been developed for mining and civil applications. We supply a diverse range of complementary skill sets tailored to our clients' needs, offering a solution for almost any slope stabilisation scenario. Our services range from rock scaling and meshing in open cut mining, to ground anchors.

In civil we have extensive works with government authorities, stabilising slopes adjacent to roads, rail and water assets. We are on call for emergency works after seismic or extreme weather events, despatching rapid response teams to site to solve and make slopes safe after failure or elevated risk.

We can develop both short and long-term solutions using an in-house engineered combination of ground anchors, soil nails, rock bolts, cable bolts, dowels, mesh, rock fall fences, shotcrete and buttress walls.

When public safety is at risk, our experience and mobility can mean all the difference.

SRG Global undertake a range of ground and slope stabilisation projects for civil works including embankment and slope stabilisation, road and rail cuttings rockfall protection, debris and erosion control, excavation support for infrastructure and temporary and permanent ground anchors.



# Slipform Construction

## Reducing construction time utilising slipform

SRG Global provide a complete slipform service and maintain experienced teams of personnel available to assist in all aspects of construction including design, planning, programming and construction techniques relating to the slipforming and formwork methods.

The slipform technique is a rapid and economical construction method which can achieve considerable cost savings when compared with the cost of conventional formwork. The slipform construction system becomes viable on regular shaped structures generally four storeys or greater in height, although multiple uses on shorter structures has been achieved economically in the past.

## Silos and Tanks

The slipform technique for silo and tank construction is a rapid and economical method that can achieve considerable cost savings when compared with the cost of conventional formwork. SRG Global has extensive experience in the Slipform construction of tanks and silos throughout Australia and internationally.

## Dams

SRG Global are specialists in slipform technology for concrete faced / lined dams with construction being completed on either a constant or variable grade.

## Tapered Slipform

Tapered slipform is required for the construction of conical chimneys, cooling towers, piers and other tall concrete structures involving constant or changing thicknesses in walls, diameters and / or shapes. SRG Global has been involved in the construction of tapered towers and chimneys from 50m to 275m high, with diameters changing from 25m to 6m, and wall thicknesses changing from 700mm to 250mm.







# Wind Farm Foundations

## Pioneering the way wind farms are built

Saving time and money is critical in developing large-scale wind farms. Our pioneering ground anchor engineering and technology can substantially save customers in concrete foundation costs.

SRG Global can provide a complete solution, from redesigning foundations to supplying and installing cost effective anchors and bases, to grouting hold-down assemblies and providing ongoing maintenance. Our New Zealand division operates a mobile team of highly experienced rope access technicians specialising in tower and blade maintenance.

## Foundation Construction

SRG Global can offer the complete end-to-end solution for the construction of wind farm foundations including design, form reo pour and ground anchoring solutions enabling smaller foundations and less concrete.

## Foundation Anchors

SRG Global can install ground anchors on existing wind farm foundations to provide extra stability or as part of foundation construction enabling smaller foundations and less concrete.

## Wind Farm Maintenance

SRG Global has highly skilled technicians available with a particular focus on the coatings repair of towers, nacelles, blades and kiosks using a combination of rope and non-rope access technicians and specialist platforms for blade access. We also offer mechanical teams for bolt tensioning and skilled technicians for asset condition surveys.



# Stay Cable Systems

## Elegance and strength

SRG Global provides strand, wire, bar or carbon stay cables for a wide variety of structures, drawing on both local and global expertise and resources across the BBR Network. Stay cables may be plain strand / wire unsheathed for temporary applications. For permanent stay cable applications – galvanised, waxed and individually sheathed strands which are enclosed in an external sheath are adopted. Alternatively, wires enclosed in a sheath with the voids then filled with a flexible corrosion protection compound are also used.

## Bridges

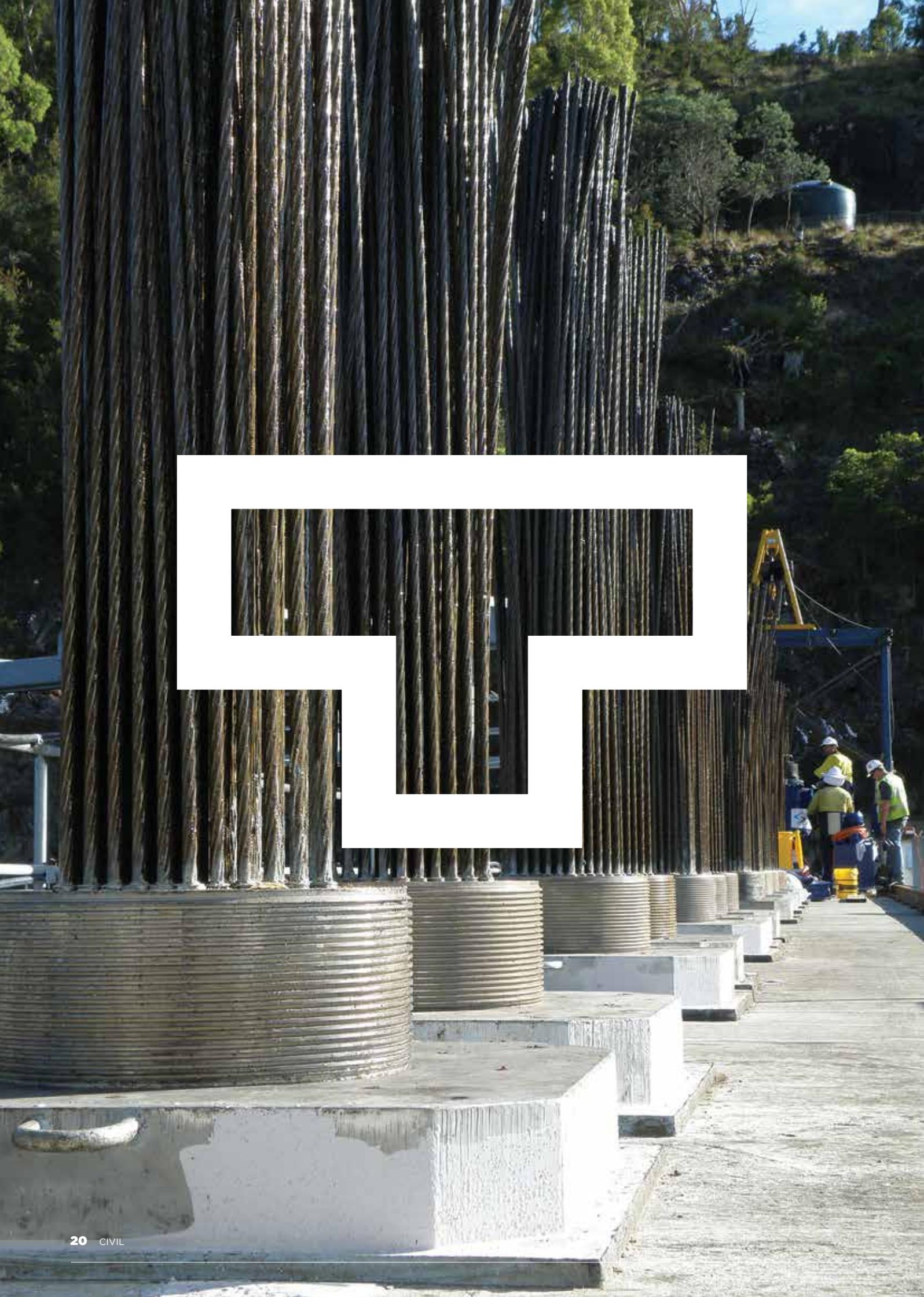
Cable-stayed bridges have the ability to meet the increasing demand for long span structures. Their advantages lie mainly in their elegance, increased aerodynamic stability, reduced costs for abutments and faster, easier construction delivering a lightweight structure. SRG Global can provide strand (BBRHiAm Cona™), wire (Dina™ / HiAm™) or bar type stay cables for this specialist method of bridge construction which is especially suitable for medium to long span bridges from 100 metres to 1,000 metres.

## Roofs and Buildings

SRG Global has supplied cable-stay systems not only to bridges but to stadium roofs and buildings such as the famous Sydney Tower.







# Ground Anchoring

## World leaders in ground anchoring technology

SRG Global are one of the world's leading ground anchor specialists. Our skills in permanent anchoring technology are unsurpassed. We have been developing, designing, installing and monitoring ground anchors throughout Australasia since the 1960's. Our expert team is continuing to develop the next generation in anchoring technology and have designed and installed the largest and longest permanent anchors ever used in the world.

## Dam Walls

SRG Global are world leaders in dam anchoring with a proud and extensive history having completed projects throughout Australia, New Zealand, South Africa and Sudan. We have developed in-house the highest capacity permanent anchors and longest anchors ever installed in dam structures. Our proven success is a result of our technology and its continual development which enables SRG Global to provide a tailor made solution for every project, be it anchors of modest or extreme capacity.

## Slope Stability

SRG Global utilise ground anchor technology for ground and slope stabilisation projects for civil and mining customers across Australia and internationally.

## Wind Farm Foundations

SRG Global can install ground anchors on existing wind farm foundations to provide extra stability or as part of foundation construction enabling smaller foundations and less concrete.



# Heavy Lifting and Shifting

## Putting massive structures perfectly in place

When it comes to dealing with massive loads or complex handling of structures or elements, we have the solutions available to solve such challenges.

Although we are renowned for our incremental launching of many bridges – including the worlds’ third longest – our team has undertaken many other iconic projects. These include reconfiguring Sydney Olympic stadium post the 2000 games, where we precision slid seven grandstand elements up to 2,000 tonne over 16 metres. Items such as stadium roofs have been lifted and positioned by us on projects where normal construction methods are uneconomic or less safe.

## Heavy Lifting

Heavy lifting could be defined as the erection or relocation of any significant structure without the use of cranes. Typically, such works will involve one or more of cable-based lifting, bar-based lifting and hydraulic jacking. All of SRG Global’s lifting projects have the same number one priority – safety. Our track record of successful lifts is second to none. We pride ourselves on our quality execution from initial concept right through to on-site works and project completion.

There is no real limit to the size of the load that can be lifted. Successfully relocating a fragile, single-piece structure weighing 2,000 tonnes – we like to think that “the sky is the limit”.

## Load Handling

Load handling relates to the shifting, sliding, lifting or lowering of heavy loads using jacking equipment instead of cranes. SRG Global has extensive experience in the field of load handling and can provide all of the required services for design as well as supply and operation of equipment.

## Incremental Launching

SRG Global are leaders in incremental launching of bridges, having completed projects all over the world. The incremental launching method combines the advantages of precast segmental construction with those of cast insitu methods.





# Design Engineering

## Solving your complex problems

SRG Global's design department ensures sound engineering consideration in order to maximise the benefits for all stakeholders in a project. We can offer design input from initial advice to fully detailed design for construction drawings.

SRG Global provide the complete package, from solving problems around how to construct more efficiently and in less time, to specialist technical expertise, innovative technology and equipment. This means you can leave us to get on with delivering the finished structure.

## Post-Tensioning

We are world leaders in post-tensioning technology.

SRG Global can offer design input from initial advice to fully detailed design for construction drawings.

## Form Reo Pour

SRG Global offers customers specific design and engineering services for formwork and concreting. We can provide in-house design schemes specific to each project including engineering for final certification and approval, where required.

## Facade

SRG Global's Facades division has experienced industry professionals and design engineers who are multi-disciplined and can offer innovative construction solutions.

## Scaffold and Access

SRG Global offers customers specific design and engineering services for scaffold. We can provide in-house design schemes specific for each project including engineering for final certification and approval, where required.



# Form Reo Pour

## **We're the one contractor who can do it all**

Our form reo pour service includes all facets of modular formwork systems, including wall formwork, column formwork and falsework that can be complemented with reinforcement placement, post-tensioning, concrete pumping and placement.

## **Formwork contracting**

We work in partnership with our clients to understand their needs and allocate the appropriate resources to deliver the best outcome. By providing customised solutions, we ensure cost effective savings without compromising on quality and safety. Our wide-ranging experience and result-driven strategies makes us the supplier of choice and a reliable industry partner.

By offering equipment, contracting, and sub-contracting services, SRG Global can supply an all-inclusive formwork and concreting package. Our mix of Australian and International equipment coupled with both our experienced on-site workforce and innovative work practices enable us to complete structures faster, safer, and more cost effectively.

## **Concrete Pump & Place**

SRG Global's services include the supply of concrete to site, along with the provision of our on-site concrete finishing teams. These teams are fully proficient in the workability of various concrete mixes and specialised aggregate finishes. Our concrete delivery personnel work hand in hand with our formworkers to ensure pour rates never exceed the design of the formwork system.

## **Wall Formwork**

SRG Global provide a range of wall formwork systems including, but not limited to, Peri, Acrow and similar systems, depending on the application.

## **Falsework & propping**

SRG Global provide a range of falsework and propping products including peri skydeck, shoring frames, multi props and giant jacks.

## **Column Formwork**

SRG Global provide a range of column formwork products including modular systems and plastic forms in all shapes and sizes.

## **Timber & Formply**

SRG Global can provide both the sale and hire of various timber and formply solutions to suit your project needs.





# Scaffold & Access Solutions

## Overcome any access challenge

As a leading supplier and contractor of scaffolding and access solutions, we have the engineering skills, qualified and experienced personnel, and material resources to tackle even the most complex access challenge.

We can design and supply scaffolding to any type and scale, as well as swing stages and mechanical access, and provide rope access as an alternative to fixed scaffold. Large scale management packages for major projects in the oil and gas, resource or industrial sectors, include supply, storage, stock management, transport and maintenance of scaffold material at remote offshore and onshore locations.

## Rope Access

SRG Global has a team of experienced and trained rope access technicians who are available to provide a range of services on difficult to access structures or locations where scaffolding and other access solutions are too costly or not practical.

Aligned to internationally recognised standards through membership of IRATA, SRG Global employs comprehensive safety and quality management systems for the use of rope access techniques across drilling, geotechnical, industrial and construction projects.

## Temporary Access Solutions

SRG Global can design, manufacture, optimise and install temporary access solutions for any project to ensure each or access and safety for all stakeholders.

## Scaffolders

SRG Global provide an on-site workforce of experienced scaffolders and riggers, wherever your project may be.

## Scaffolding

SRG Global can provide modular scaffolding system (Kwikstage), A-frames, Ring Lock system, stair access and accessories.

Aluminium scaffold includes altrex rolling towers, folding units and spandek.

A-frame scaffolding includes A-frame system, ladder access and accessories.

Swing stages provided are Altrex swing stages with flexible configurations and accessories.

We also provide a range of hoists from 100kg to 3 tonne including material hoists, combi lifts and winches.





# Our global footprint

[srgglobal.com.au](http://srgglobal.com.au)

**CORPORATE HEAD OFFICE**  
Level 1, 338 Barker Rd  
Subiaco WA 6008  
+61 8 9267 5400  
[info@srgglobal.com.au](mailto:info@srgglobal.com.au)

**MAKING  
THE  
COMPLEX  
SIMPLE**