

## NWECC COMPANY PROFILE

Steel Pipework and Structure Fabrication & Mechanical Installation Specialists



[www.nwec.com.au](http://www.nwec.com.au)

*Delivering Superior Outcomes and Value*



## Welcome to NWECC

NWEC (New World Engineering & Construction) is a specialist steel fabrication, installation, construction management and welding resource supply company that has been providing first class fabrication and resource provision services to the petrochemical, rail, road, gas, process, mining and heavy industry sectors across Australia for over 40 years.

What sets NWEC apart is the extremely high and consistent quality of its steel fabrication and welding resource services backed up by its comprehensive Quality, Safety, Environment and Project systems & procedures matched to its flexibility and commitment to work in partnership with its clients and to always deliver on its promises. Our Management systems are accredited to ISO 9001: 2015 (Quality), ISO 45001: 2018 (Safety), ISO 14001: 2015 (Environment), AS/NZS ISO 3834 Part 2 (Welding) and PCCP (Painting) respectively. We are also accredited to TfNSW CC3 (conditional), SCA CC3 with compliance to AS/NZS 5131 & ASI fabricator member.

Today, the firm provides a full range of engineering and construction solutions to any location across Australia. Our expertise ranges from design management, through to fabrication of structural steel, pipework, platework, tanks, vessels and heat exchangers as well as site installation and commissioning including associated civil and electrical work. We are truly a one stop shop. Our willingness to invest in new technology and our constant search for better ways to do things has been a contributing factor for our continued success.

*“At NWEC we take pride in our workmanship and ability to always meet or exceed our client’s needs and expectations. We appreciate the trust and importance our client’s place with us on their projects and are committed to delivering superior outcomes and value”.*

Thank you for taking the time to read our Company Profile. Should you require any further information please do not hesitate to contact us at the numbers below or visit our website at [www.nwec.com.au](http://www.nwec.com.au) .



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## 1. Company Profile

### Background

NWEC first began providing high quality on-site welding and boilermaking resources and services to the Sydney/Brisbane/East Coast heavy industry market in 1976. In response to a growing need for off-site fabrication and associated project installation services by our clients NWEC opened a major fabrication facility in 1982. In the years following NWEC has continued to evolve its product offering and expertise in line with its clients needs.

Today the firm provides a full range of fabrication solutions to any location across Australia, incorporating construction management, the full range of fabrication services including structure, pipework, platework, tanks and vessels, transport and delivery, on-site installation, assistance in commissioning and handover and where required, ongoing operation and maintenance services.

### Our Expertise

NWEC's expertise spans both the provision of the following key integrated services:

- **All aspects of steel fabrication including supply, fabrication, NDT, surface protection, pre-assembly and delivery and where required, on-site installation**
- **Provision of highly skilled welder/boilermaker labour resources**
- **Full construction management of major projects including off-site fabrication and/or coordination, on-site installation, commissioning and handover**
- **Ongoing site operation and maintenance services**
- **Management and/or resourcing for shutdowns and major projects**

Most of NWEC's repeat work comes from the highly demanding Australian petrochemical, mining, gas, aviation and rail industries where standards of safety, quality, systems and procedures are paramount.

Complimenting this quality is our ability to work in with end-clients, EPC contractors and other major on-site contractors to provide those services in a safe, efficient and seamless manner where communication, flexibility and site harmony are all essential keys to success.

As a result NWEC are able to provide a flexible suite of services either in isolation or in any combination to suit the particular project requirements of our clients.

Our industry sector expertise includes:

- **Petrochemical**
- **Minerals Processing**
- **Pulp & Paper**
- **Power Stations**
- **Ship Maintenance**
- **CSG/LNG & Gas Processing**
- **Mining**
- **Food Processing & Packaging**
- **Airports & fuel lines**
- **Railways & Road transport**

## 2. Areas of Expertise

### Fabrication

NWEC has been providing first class fabrication services to its clients since 1982. Today the business provides the full range of major fabrication (and where required associated mechanical installation and project management services) to the full spectrum of industry sectors across Australia.

### Fabrication Services

Fabrication services include:

- **Pipework** – General, petro-chemical, high temp & pressure in all grades and sizes
- **Structural steelwork** for plant and building structures, pipe-racks, etc
- **Conveyor gantries & associated structure**
- **Pressure vessels (AS 1210)**
- **Tanks (API 650)**
- **Platwork** for bins, tankwork, hoppers and chutes
- **Railway Structure** for overhead traction structures & framing, bridges, signal structures, masts and railway stations (*ongoing experience spanning many years*)
- **Pre-assembly & Modularisation** including installation of ancillary items such as roofing, mechanical equipment, electrical & instrumentation and pre-delivery testing

### Steelwork

NWEC are experienced in the fabrication of all manner of steelwork from basic building structure through to complex integrated systems.

Areas of expertise include:

- Building structure including columns, beams, bracing and roof trusses
- Major structure and framing for process plants such as oil refineries, mines and gas plants
- Conveyor gantries including framing, roofing, rollers and full system installation
- Major bins, chutes and hoppers
- Piperacks and other framing including modularization and or pre-assembly
- Road, rail and pedestrian bridges and platforms
- Railway overhead wiring structure and framing
- Structure and framing for major signage and traffic management systems
- Modular skids for field equipment including assembly, testing and on-site commissioning
- Specialty items including site measure, design, fabrication and on-site replacement





## Piping

Fabrication, spooling and installation of critical process pipework is a key area of our expertise. This expertise stems from over 40 years of continual service to the petrochemical, gas, pulp and paper, mining and energy industries where productivity and reliability are paramount and standards for safety, quality and performance are the highest.

Key areas of expertise include:

- High temperature & pressure piping in all grades and sizes
- Pipework for steam, chemical, condensate, process slurry and hazardous materials
- Carbon steel, chrome molly, stainless steel, PVC, lined pipe
- Comprehensive pipe welding procedures including ability to work to client's procedures
- Off-site fabrication, spooling and testing
- Installation of valves, vessels, equipment, electrical and monitoring systems
- Pre-assembly into piperacks and or full modularisation
- On-site fabrication, running, testing and installation
- Critical tie-ins and commissioning including shutdowns and live-site conditions

## Tanks, Vessels & Heat Exchangers

NWEC have a broad range of experience in the fabrication and installation of vessels and tanks. Particular areas of expertise include:

### Tanks

- Tanks to API 650
- Shop fabricated tanks including high and or wide load delivery
- On-site assembly including heavy lift studies and placement
- On-site construction of major tanks
- Major storage tanks including oil, chemical, water and LNG
- On-site tank repairs including replacement floors, roofs, re-lines and patching
- Coordination of specialist subtrades incl: E & I, protective coatings, insulation, etc

### Vessels

- Pressure vessels to AS 1210
- Steam headers and condensers
- High, low and cryogenic temperature vessels including insulation
- Boilers including tubing (both new construction and repair)
- Blast furnaces including refractory (both new construction and repair)
- Major cooling towers (some requiring over 15,000 precision drilled holes)
- On-site placement, tie-ins and commissioning



## Heat Exchangers

- Mechanical Design
- Thermal Design and Heat Transfer Calculations
- Fabrication and Non Destructive Testing
- Hydrotesting
- Delivery, Site Installation and Commissioning



## Chutes, Ducts, Hoppers

NWEC have a broad range of experience in the fabrication and installation of one-off specialty items including chutes, ducts and hoppers.

Particular areas of expertise include:

- Chutes
- Ducts
- Hoppers
- Bins

NWEC can also provide complete mechanical assembly (motors, shafts, gearboxes, pistons etc) and testing services for these items. Combining this with our painting facility means that complete assembled and tested units can be provided by NWEC without the need for our clients to source various subcontractors.

## Shutdowns/Maintenance

The provision of highly skilled resources and or services for time critical Shutdowns and cost /productivity effective maintenance is a core area of NWEC expertise.

### Shutdowns

NWEC has over 40 years experience in providing critical resources and services to the Australian heavy industry shutdown sector. Today NWEC provides services in a range of ways and formats to suit our client's needs including:

- Providing highly skilled welding, boilermaking and associated trade resources to end clients and major shutdown contractors
- Provide specialist fabrication and shutdown installation services as a key subcontractor to a major contractor or EPC
- Provide integrated shutdown services under an ongoing maintenance contract
- Provide full shutdown services as a Head Contractor including planning, management and execution including fabrication and or coordination of subcontractors as required



### **Maintenance**

In recognition of NWECC's ability to deliver long-term value and maintain lasting relationships with its clients NWECC provide a range of ongoing maintenance services to a number of its clients.

Our flexible service offering includes the following:

- Provision of highly skilled resources including welders, boilermakers and associated trades
- Provision of major maintenance fabrication and installation services to the owner/operator or maintenance contractor
- Provision of integrated ongoing maintenance, fabrication and shutdown services working in close association with the clients operation and maintenance personnel

### **Skilled Labour Hire**

NWECC has been providing high quality Welders, Pipefitters and Boilermakers to the Australian heavy industry since the late 1970's with a particular focus on the provision of highly skilled welders for shutdowns, turnarounds and major project on-site installation. Today the business carries a database of more than 1,000 first class Welders, Pipefitters, Boilermakers and associated resources providing critical welding resource solutions to major contractors and end-users.

### **Our People**

Our people include:

- First Class Coded Welders & Boilermakers
- Associated support personnel including: Welding Supervisors, Riggers, Fitters, Dogman, TA's, etc
- Proven Shutdown performers with relevant sector experience
- Ability to integrate seamlessly into the client or contractors shutdown team
- Weld procedures for all situations plus OHS&E qualifications & experience
- Method/material (MIG, TIG, Chrome Molly, SS, ABS, Nickel Alloy, PVC, etc)
- Professional work ethic and behaviour (*both on and off shift!*)

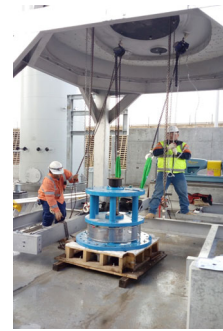
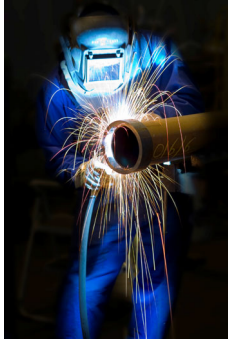
### **Our Services**

Our services include:

- Guaranteed resources for planned Shutdown and/or Project Installation events



- Standby resources for short notice call-outs
- Ability to work to any shift pattern or duration
- Remote site and difficult conditions a specialty
- Flexible rate structures to suit your business
- Hands-on monitoring and liaison to ensure your complete satisfaction



## Major Project Work

NWECC can also provide a full range of major project management services in line with our clients needs. Our roles on major projects range from:

- Head Contractor responsible for the full delivery of a major project
- Major Contractor responsible for the full delivery of critical whole areas or packages of works as a key member of a senior multi-company project delivery team
- Key Nominated Subcontractor providing specialist services across the project to numerous major contractors

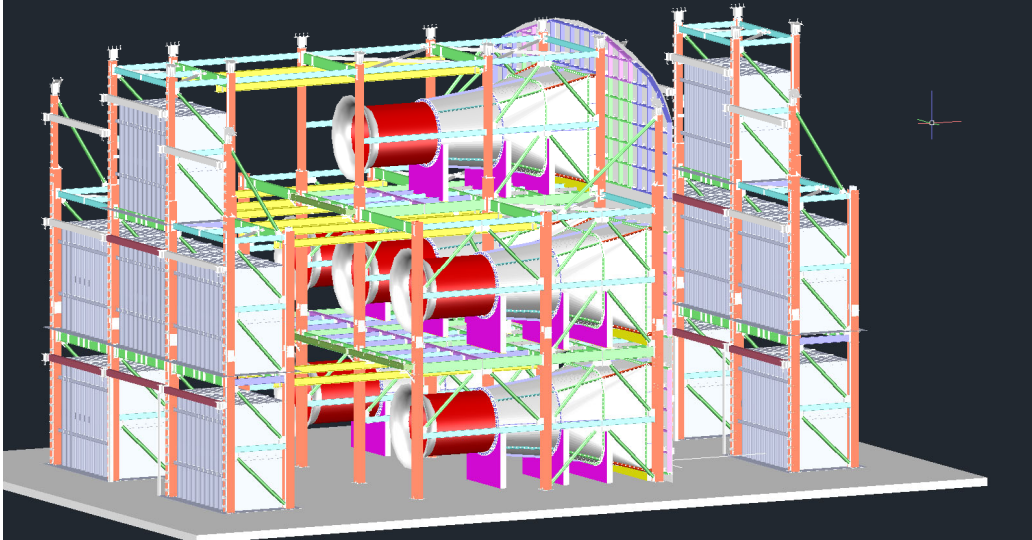
Our expertise includes:

- Full project management and delivery
- Full Construction management including mechanical installation and coordination of sub-trades
- Supply, fabrication, testing, painting, delivery and installation of all steelwork and piping
- All aspects of fabrication management including coordination, delivery, pre-assembly and installation of overseas product and equipment
- Erection of all structure and associated elements
- Installation of major equipment and systems
- Project scoping and planning
- Design management and shop detailing
- Management and or Coordination of all associated trades such as civil, E&I, insulation, testing, specialist coatings, etc
- Subcontractor selection, management and coordination
- On-site marshalling, Installation, tie-ins and commissioning
- Full site management including utilities, security, safety, Quality, IR, HR and approvals
- Project programming, reporting, quality and cost control
- Project handover including operator training, maintenance scheduling and documentation

## Current & Recent Major Projects

### **JHCPB JV Rozelle Interchange Ventilation System**

NWECC was engaged by JHCPB JV for shop detailing, fabrication, supply, delivery to site and installation of the Ventilation System Structure and associated mechanical equipment within the Rozelle Interchange 3B tunnel ventilation system.



### **Puma Energy Australia, Botany Bay PMB Production Facility**

NWECC were engaged as Principal Contractor for the Construction of a modern, efficient, state of the art PMB production facility in the Botany Bay, selling into markets in the NSW. Works include civil, structural, mechanical, piping and electrical.



### **Design and Construction of Crude Oil Tank T1006**

NWEC was engaged by Viva Refining in Geelong to design and construct an 84 metre diameter x 20 metre high external floating roof crude oil tank including civil works, external piping with pipe supports, insulation and platforms.



### **WestConnex Parramatta Road Ventilation Facility**

NWEC's scope included fabrication drawings, supply, fabricate and install of Supply ducts, Exhaust ducts, transition ducts etc. as well as free issues items such as Exhaust fan, Acoustic Attenuators etc.





## Sydney Port Botany T3 Expansion

NWECC has been engaged to supply, fabricate, deliver and install Reefer Gantries, Signage and Substation structures for the Port Botany Terminal T3 Expansion project (Stages 1 & 2).

In order to achieve revised timelines for the overall terminal the installation of the Reefer Gantries had to be done in just 4 x days per gantry. NWECC achieved this by re-engineering the design to allow for off-site modularised assembly and thus fast on-site installation.

Specific scope of work:

- Fabrication, delivery & installation of 4 x 24m high Reefer gantries & walkways
- Fabrication, delivery and installation of a Seaside and Landside Signage Gantries
- Fabrication, delivery and installation of Substation structures

Key issues to success:

- Re-engineering for modularisation
- Integration of equipment & electrics
- Safe lift planning and execution
- Shutdown planning & resourcing
- Flexibility to absorb late design changes
- Close integration with other works





### Ichthys LNG Project (Darwin, NT)

NWEC was engaged to fabricate, surface coat and deliver approximately 8,500 carbon steel pipe spools and 3,000 stainless steel pipe spools including pipe support structures for the Ichthys Combined Cycle Power Plant (CCPP) and the Ichthys onshore LNG facilities.





### Transfield's CSG Well Head Pipe Spool Sets (S/E, Qld)

NWECC fabricated, packaged and delivered over 600 Well Head Pipe Spool sets in just 3 months to the QCLNG Coal Seam Gas project in the Surat Basin in southern Queensland.

Specific scope of work:

- Fabrication, NDT, hydro-testing, painting, packing and delivery to staging camp for easy distribution to field well sites
- Producing multiple set types
- Delivery Schedule: Avg 700 x spools/wk
- Over 7,500 spools

Key issues to success:

- Stringent Material Control & QA
- Effective Planning, Scheduling & Reporting
- Coordination between different phases (i.e. Fabrication, NDT, Hydro-test, Blasting, Painting, Packing, Loading and Delivery)
- Optimised crating for maximum loading
- Hands-on Logistics and HR management
- 24/7 Manufacturing



## WCX, SHBT, NCX, M5, M2, Legacy Way & NZ Motorway Tolling Gantries

NWECC has fabricated, assembled and installed sophisticated cashless tolling gantries at numerous sites across NSW, Qld and New Zealand including the WCX, SHBT, NCX, M2 and M5 in Sydney and Legacy Way in Brisbane and NZTEL and NZTRK gantries in New Zealand.

Flowing on from gantries installed over the M2 the M5 scope of work involved the fabrication and assembly of a totally new design incorporating all of the required equipment (lights, sensors, telemetry, etc) in a single gantry instead of the old two gantry design.

Specific scope of work:

- Fabrication, delivery & installation of 1 x 35m long gantry installed during a coordinated full M5 night shutdown
- Fabrication, delivery and installation of a further 7 x gantries installed across various on-off ramps

Key issues to success:

- Coordination of stakeholders
- Integration of equipment & electrics
- Shutdown planning & resourcing
- Safe lift planning and execution
- Shutdown & Live-site expertise
- Development of high finish and yet cost effective cladding solution
- Fabrication to within finite dimensions





**Amcor Recycled Paper Plant (Botany, NSW)**

NWEC have been providing a comprehensive range of major and minor project, shutdown and ongoing operation and maintenance services to its client Amcor at its Sydney Recycled Paper plant at Botany for over 10 years. Across 2011 - 2012 Amcor have been undertaking one of the largest industrial projects in Sydney being the installation of a new 240m long *state-of-the-art* high speed recycled paper machine provided by global paper machine supplier, Metso of Denmark.



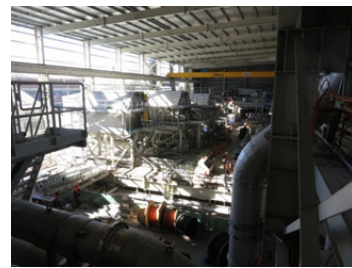
**Amcor B9 Paper Machine Project (Sydney) – Major Tanks Package**

Working directly for the global Paper Machine supplier, Metso NWEC was awarded the on-site assembly and installation of all 54 tanks and associated structure and pipework for the new 240m long *state-of-the-art* high speed recycled paper machine. *Works included the receipt and assembly of tank materials dispatched from Europe including the off-site fabrication and pre-assembly and on-site erection of 2 x 30m high, 4.5m diameter stainless steel starch tanks.*



**Amcor B9 Paper Machine Project (Sydney) – Major Piping Package**

Based on its strong performance on the Tank package, NWEC was subsequently awarded the major Piping package. This package involved the on-site spooling and installation of process pipework associated with the new paper machine. *This scope of work required a full-time site workforce of between 70 – 100 highly skilled boilermaker/welders and Pipefitters for a period of 8 x months.*



**Ongoing Project, Shutdown, Operations & Maintenance**

In addition to the B9 Paper Machine project, NWEC have provided ongoing site services for minor projects, scheduled and emergency maintenance including planned and unplanned shutdowns. *This also included preparatory works in advance of the B9 project.*



**Sydney Desalination Plant (Sydney, NSW)**

Role: Mechanical Contractor to overall EPC for procurement, fabrication, construction and commissioning of a range of buildings and process piping systems.

Services: Buildings, Piperacks, Cooling Water, CIP, IPT and Vent Line Systems



**Shell R&R Rejuvenation Project (Sydney, NSW)**

Role: Fabrication Subcontractor to overall Shutdown Contractor (Transfield Services) for fabrication, installation (replacement) and commissioning of main Catalytic Cracking Unit at Shell Clyde Oil Refinery.

Services: Off-site fabrication of piping structure and special items. On-site shutdown installation and maintenance works (50,000+hrs)





## Pipe Spooling, Painting & Installation

NWEC has over 40 years' experience in the spooling/fabrication, surface treatment, NDT and installation of critical process pipework and its associated structure.

Experience includes:

- All grades of pipework
- Gas, Fuel & Petroleum expertise
- Valve and other equipment fitting
- Heat Tracing and jacketing
- Skid-mounted pre-assembled Units
- Pipe-stands, Shoes & other structure
- Shutdown & Live-site installation

Services include:

- Shop detailing & drafting
- In-house blasting & Painting
- Off-site galvanising
- E&I Coordination
- Radiographic NDT & Hydrotesting
- Modularisation & pre-assembly
- Site spooling & installation
- Field commissioning & handover





## Coal Mine & Associated Infrastructure

NWECC has over 40 years' experience in the fabrication, delivery and/or installation of steelwork for coal mines and their associated infrastructure.

Experience includes:

- Structural steelwork
- Framing & cladding
- Platforms, stairs & handrails
- Conveyor framing & equipment
- Pre-assembled gantries
- Tanks & pipework
- Bins, chutes & hoppers
- Wear liners (plate & tile)
- Dump stations & Transfer towers
- Coal sizing & sampling buildings
- Underground conveyor components

Services include:

- Shop detailing & drafting
- In-house blasting & Painting
- Off-site galvanising, NDT
- Modularisation & pre-assembly
- Flat-rack packing & bundling
- Site assembly & erection
- Commissioning & handover



## Tank Construction & Maintenance

NWEC has over 40 years' experience in the fabrication and maintenance of a wide range of tanks and vessels including workshop and site work in both greenfield and brownfield "live site" environments.

### Tank Construction services include:

- All grades of pipework
- Gas, Fuel & Petroleum expertise
- Valve and other equipment fitting
- Heat Tracing and jacketing
- Skid-mounted pre-assembled Units
- Field commissioning & handover
- Site spooling & installation



### Tank Maintenance services include:

- Shop detailing & drafting
- In-house blasting & Painting
- Off-site galvanising
- E&I Coordination
- Radiographic NDT & Hydrotesting
- Modularisation & pre-assembly
- Field commissioning & handover





### 3. Facilities & Capacity

NWECC has recently relocated to new purposely fit-out facilities more than doubling its previous capacity. As a result NWECC now has the capacity and facilities to cater to all of its clients' needs from the fabrication and delivery of minor items through to the full project management and installation of multiple major projects anywhere across Australia.



#### Facilities

NWECC's new and purposely fit-out facility is conveniently located at Villawood in western Sydney (just 10 minutes from previous location). This purpose designed facility sits on a massive 1.8 hectare site incorporating the following:

- Secure and level 1.8ha campus layout,
- 10,000m<sup>2</sup> 8 x bay main workshop (each bay with at least if not two one overhead cranes)
- Separate 900m<sup>2</sup> heavy lift workshop with 100T crane
- Separate 2,000m<sup>2</sup> indoor paint shop including state of the art blast chamber & ventilation control
- Ability to fabricate and/or assemble multiple projects simultaneously incl. separate areas for SS.
- Substantial, secure hard-stand and undercover storage spaces for separate project storage, pre-assembly, modularization, NDT and pre-delivery
- Comprehensive staff support facilities including secure on-site parking, training & meeting rooms, crib, canteen & ablutions
- 2,000m<sup>2</sup> office complex including separate space for clients, consultants and separate project teams
- Comprehensive fleet of vehicles including Trucks, Hoists, Franna's, & site vehicles



#### Capacity

With a massive 10,000m<sup>2</sup> 8 x bay main workshop, separate 2,000m<sup>2</sup> indoor paint & blast shop, heavy lift capacity to 100 tonnes and ample secure hardstand NWECC is able to accommodate a throughput fabrication of around 200 tonne per week.

## 4. Personnel

NWEC has a comprehensive range of corporate, project and field personnel with the unique flexibility to increase numbers in line with our clients needs. The ability to source and provide large numbers of highly skilled project and shutdown resources to any location is a key strength of NWEC and has been the cornerstone of its skilled labour resource business. Given that we keep only the best for our own operations ensures NWEC not only has the best personnel but the ability to quickly bring on additional proven resources as necessary.

Indicative numbers for NWEC staff, project and field personnel include:

- **80 – 100 permanent personnel** including head office, workshop, project and permanent maintenance crews.
- **Corporate support staff** include: IT, IR, HR Managers, Business Development Managers, Project Engineers, Estimators, Purchasing & Expediting Managers, Design Managers & Draftsman, Superintendents & Supervisors, technical & clerical support.
- **Up to 500 field personnel** (Welders, boilermakers, specialist welders, welding supervisors, riggers, pipe-fitters, TA's, etc).

NWEC field personnel are drawn from an existing “live” database of over 1,000 proven contract workers, many of whom have worked previously for NWEC for many years.

## 5. Systems & Procedures

NWEC operate and maintain a comprehensive suite of systems and procedures in accordance with all Australian, state and international requirements including accredited Quality Assurance System to ISO9001:2015, Safety Management System to ISO45001:2018 and Environmental Management System to ISO 14001:2015.

Dedicated systems and procedures also exist for the following:

- **Safety**  
All aspects of site and project safety including Confined Space, Working at heights, Working with flammable materials, Heavy Lifting, etc
- **Weld Procedures**  
Comprehensive range to cover all likely scenarios and materials
- **Environmental Management & Controls**  
Including hazardous materials storage, waste water mgt, spill containment and rectification and recycling
- **Procurement, Expediting & Materials Management**  
Full supply sourcing and expediting including management and coordination of long lead-time materials and equipment
- **Project Management**  
Including contract administration, project tracking, communications, document control, etc

## 6. Current & Completed Projects

Examples of current and completed projects include:

- **Systems Connect Sydney Metro City & South West Line Wide Works**  
Supply and installation of Tunnel Ventilation System (TVS) steelwork for 6 Sydney Metro stations and dives.
- **JHCPBJV Rozelle Interchange Ventilation Facility (Rozelle, NSW)**  
Shop detailing, fabrication, supply, delivery to site and installation of the Ventilation System Structure and associated mechanical equipment within the Rozelle Interchange 3B tunnel ventilation system.
- **Puma Energy PMB Production Facility (Botany Bay, NSW)**  
Construction of a modern, efficient, state of the art PMB production facility in the Botany Bay, selling into markets in the NSW. Works include civil, structural, mechanical, piping and electrical.
- **Koppers Tank Construction & Repair (Newcastle, NSW & Portland, Vic)**  
Shop fabrication of SS316 horizontal tank T211H and tank bayonet heaters. Site civil and mechanical refurbishment works on various tanks such as T145, T191, T192, T792, T871, etc.
- **CPB-Samsung-John Holland JV, Parramatta Rd Vent Facility & Sign Gantries**  
Fabrication, supply, delivery and installation of ventilation station equipment at Parramatta Road vent facility as part of WestConnex M4 East project. Subsequent works such as supply and install ITS gantries and sign structures on Wattle Street.
- **CPB-Dragados-Samsung JV, Ventilation Steelwork & Fans (Sydney, NSW)**  
Supply, manufacture and installation of ventilation steel work and fans as part of the WestConnex New M5 which runs from the existing M5 east corridor at Beverly Hills via twin tunnels to St Peters improving access to airport, South Sydney & Pt Botany.
- **Lendlease-Bouygues JV, NorthConnex Pkg 2814, 2815 & 2816 (Sydney, NSW)**  
Detail design, supply, fabrication, testing and installation of the jet fan support frames and tunnel ventilation system equipment within the portal ventilation stations including secondary steelwork for NorthConnex linking the M1 and M2 Motorway.
- **Aus Group Alliance, ITS Gantries for WestConnex New M5 (Kingsgrove, NSW)**  
Detail design, supply, fabrication, testing, galvanise and delivery of Seven ITS Gantries as part of the WestConnex New M5 project in Sydney.
- **Puma Energy Tank Construction & Repair (Bulwer Island, Qld & Altona, Vic)**  
Shop fabrication of Three new carbon steel Crumbed Rubber vertical tanks for Bitumen plant. Site civil (Foundation) and mechanical refurbishment works on various Bitumen tanks such as T-3130 in Queensland and ALB-207 in Victoria.
- **RMS, Sign Structures and Related Steel Works (NSW & SA)**  
Supply, fabrication, testing, galvanise / painting and delivery of various cantilever sign structures and gantries including reinforcing cages in NSW and Darlington, South Australia. Various CS & Aluminium brackets for school zone sign structures.
- **Lendlease, Western Sydney Stadium (Parramatta, NSW)**  
Detail design, supply, fabrication, testing, protective coating and delivery of structural steel manufacture (Bowl Steel) scope of works.



- **Downer, Gas Pipe Spools Fabrication (Kooragang Island, NSW & Orbost, Vic)**  
Supply, fabrication, testing, surface protection and deliver pipe spools and structural steel works as part of the Orica Ammonia pump skid piping package in NSW.  
Subsequent works in piping shop fabrication for APA Orbost gas plant upgrade.
- **Viva Geelong T1006 Tank Design and Construction**  
Design and Construction of 84m dia. x 20m high external floating roof Crude tank and assoc. civil works including ext piping with heat tracing, platforms & insulation.  
Subsequent works including CS & Cement lined pipe spools for Gasoline tank.
- **Port Botany T3 Project (NSW) (Stages 1 & 2)**  
Fabrication, surface treatment, delivery and installation of 3 x storey Reefer gantries, signage gantries and substation structural steel
- **WCX, SHBT, NCX, M5, M2, Legacy Way & NZ Motorway Tolling Gantries (NSW, Qld & NZ)**  
Supply, fabrication, surface treatment, assembly and installation of cashless tolling gantries (including single spans up to 35m installed in pre-scheduled night closures)
- **Ichthys LNG Pipe Spools Project (Darwin, NT)**  
Fabricate, surface coat and deliver approx. 8,500 CS pipe spools and 3,000 SS pipe spools including pipe support structures for the Ichthys CCPP and the Ichthys onshore LNG facilities.
- **Transfield - QCLNG Coal Seam Gas Upstream Well-site Pipework (Qld)**  
Fabrication, NDT, surface treatment & delivery of 600+ well-site pipework sets
- **Arcor Paper Mill – B9 Paper Machine Project (Botany Bay, NSW)**  
On-site fabrication and installation of 54 x tanks and vessels plus all on-site pipework spooling and installation for a new 240m long high speed paper machine
- **Mangoola, Ravensworth North & Ulan West Coal Mines (NSW)**  
Fabrication, NDT, painting and delivery of a range of conveyor and other structures including Transfer Towers, CHPP buildings, bins, gantries, etc (over 1,000 tonne)
- **Caltex Kurnell Refinery Shutdown (NSW)**  
Off-site fabrication of CrMo pipe elements then the provision of skilled welders for the on-site welding (*inside a major vessel*) during a critical whole-of-plant shutdown.
- **Transfield's Westcliff Colliery Expansion Project (Appin, NSW)**  
Flotation Building Structure including. process sumps, tanks and conveyor plus Coarse Coal Building Fitout including structure, tanks, chutes and bins (500T+) Major elevated conveyor gantries & numerous pipework packages
- **Transfield - Shell R&R Rejuvenation Project (Clyde, NSW)**  
Major Plant Rejuvenation project involving over 700T of Structure and 5km of Piping. Work included new Critical Flow and Bottom Entry Feed Systems.

## 7. Key Beneficial Qualities of NWEC

The key beneficial qualities and services that NWEC provides to its clients include:

- **Safety Comes First**  
NWEC is dedicated to ensuring that all work is done in the safest possible manner. Our first class safety record has been developed and proven through years of working in the most difficult construction and live-site shutdown environments. Our Safety Management System is accredited to ISO 45001 : 2018.
- **Care for the Environment**  
NWEC is committed to ensuring that the process, products or any by-products produced by the company shall be as environmentally friendly as possible as the regulations and by laws shall allow. Our Environmental Management System is accredited to ISO 14001 : 2015.
- **Highest Quality**  
What sets NWEC apart is the extremely high and consistent quality of its fabrication welding work. This means that our clients can rely on hassle free installation and thus achievement of program. This quality has further been enhanced due to our new 2,000m<sup>2</sup> fully indoor separate blasting and painting workshop. Our Quality Management System is accredited to ISO 9001 : 2015.
- **On Time Delivery**  
NWEC has the capacity, flexibility and commitment to always deliver on time no matter what the challenges. Having recently relocated to new purposely fitout facilities, NWEC has doubled its output capacity to more than 200 tonne per week.
- **Best Value for Money**  
NWEC's mix of safety, high quality/productivity and on time delivery at the lowest possible cost guarantees that NWEC represents the best value for money. That is why we have number of repeat clients.
- **Comprehensive Systems and Procedures**  
NWEC's ability to consistently deliver safe, high quality work on time and within budget is due to its comprehensive systems and procedures. This includes our ability to mould these to seamlessly work in with those of clients.
- **Relevant Sector Experience**  
NWEC has over 40 years of accumulated experience in the fabrication and or installation of complex plants and systems across a broad range of relevant sectors including CSG & LNG, petrochemical, mining, minerals processing, gas processing, pulp & paper, power generation, water treatment, rail, transport and infrastructure.
- **Remote Site Expertise**  
Proven ability to safely and cost effectively deliver complex remote site installation projects anywhere around Australia.
- **Pre-assembly and Modularisation**  
NWEC can also provide pre-assembly and modularised fabrication (including E&I and equipment fitout) for fast effective delivery and installation on site.
- **Complex Major Project Team Experience**  
Proven ability to work harmoniously in complex project teams including EPC and multiple process providers, head contractors and specialist subcontractors.