LIBERTY INDUSTRIAL

OIL & GAS

DECOMMISSIONING, DECONSTRUCTION & REMEDIATION CAPABILITY



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Our team has delivered some of the largest and most complex decommissioning, demolition and remediation projects in the world. Tap the play button above to learn more about what we do.

Liberty Industrial

We are an award-winning provider of specialist decommissioning, deconstruction, and remediation services across the globe.

Our team generate value by providing complete integrated solutions. Together, we have set a new benchmark for our industry, cementing our status as a contractor of choice for the delivery of large and complex projects near and far.



01 **Closure Consulting & Demolition Engineering**

02 **Demolition Simulation & Modelling**

03 **Decommissioning**

04 **Decontamination & Industrial Cleaning**

05 **Ground & Waste Water Treatment**

06 **Dismantling & Demolition**

07 **Asset & Resource Recovery**

08 **Site Remediation**

Future Proof & Fit-for-Purpose

As we transition to cleaner energy solutions, the reduced dependency on the oil and gas industry will require these facilities to pivot their purpose and enter into a new phase.

There is an increased need to responsibly decommission these facilities and ensure they adhere to the Circular Economy (Waste Reduction & Recycling) Act 2021. Therefore, closure of these facilities often requires comprehensive closure planning and subsequent decommissioning, decontamination, deconstruction and remediation.

WHAT WE DO

Liberty Industrial offers a comprehensive range of integrated capabilities, including consulting services such as early contractor involvement, decommissioning, decontamination and hazardous material removal, demolition and dismantling services, industrial cleaning and site remediation and rehabilitation.

THE BENEFITS

Continuity of works, an accelerated delivery schedule and cost savings are just some of the synergy benefits of our integrated services offering.





Thevenard Island Onshore Decommissioning & Remediation, WA for Chevron Australia

Accurate Closure Planning

We provide specialist decommissioning, demolition and remediation consulting services to complement our contracting division and deliver high-quality, objective advice.

As an industrial specialist, we can provide long term plant closure concepts, budgets, and redevelopment strategies for redundant site.

Years of experience enable us to expertly assess and engineer closure plans and provide advice compliant with International Financial Reporting Standards.

WHAT WE DO

- Decommissioning, Deconstruction & Remediation Planning
- Detailed Costing/Estimating
- Project Risk Register
- Early Contractor Involvement
- Quantity Take-off
- Detailed Methods
- Scheduling & Programming
- 3D Modelling & Structural Analysis
- Drone 3D Mapping, Thermal Imaging & LIDAR scanning

By understanding the client key drivers (including the end point or future site use) we are better equipped to provide fit-for-purpose, sustainable closure solutions.







Clyde Oil Refinery Demolition & Removal, NSW
for Shell Australia & Viva Energy

EARLY CONTRACTOR INVOLVEMENT

By understanding the client key drivers (including the end point or future site use) we are better equipped to provide fit-for-purpose closure solutions. This can include:

- De-energisation and decommissioning plans.
- Hazardous material audits.
- Identification of project risk items.
- Identification of salvageable infrastructure and equipment to maximise commercial benefit and lower decontamination costs.
- Initiating the diversion of services so that future demolition activities are not impacted.
- Developing best-practice demolition methodologies.
- Contaminated material management and licensing for potential on-site landfill.
- Providing cost-benefit analysis for transport and disposal/risk allocation/ on-site depository scenarios.
- Identifying environmental considerations and understanding sustainability drivers.
- Providing information and staging plans for scrap processing and laydown yards.
- Temporary power requirement.
- Early engagement with regulatory authorities - Guidance with local council and EPA.
- Providing certainty on programming and project timeframes.
- Development of accurate costings for budgetary purposes.



Bulwer Island Refinery Gantry Demolition, QLD for BP

Asset Decommissioning

Liberty Industrial has the capability to meet the specific needs of the offshore and onshore oil and gas asset decommissioning market.

Combining our expertise, capabilities and assets allows us to offer an end-to-end service focused on operational efficiencies and risk reduction. This includes:

- Offshore Project Consultancy Services - Early Contractor Involvement (ECI)
- Onshore Dismantling, Removal, and Recycling
- Cleaning, Management and Removal of NORM, Mercury, LSA, Asbestos and other Hazardous Materials
- Suitably Equipped Onshore Decommissioning Facilities – Our Decommissioning Hub



Onshore Capability

Our team has delivered some of the largest and most complex decommissioning, demolition, and remediation projects in the world, including the removal of entire refining facilities and process plants such as the Shell Clyde Oil Refinery.

Notable oil and gas clients include Ampol, BP, Caltex, Chevron Australia, ExxonMobil, Origin Energy, Shell & Viva Energy - to name a few.

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1. Clyde Oil Refinery Demolition & Removal, NSW for Shell Australia & Viva Energy
2. Port Botany LPG Terminal Early Works, NSW for Origin Energy

SAFETY

Our highest priority and the foundation of everything we do.

EXCELLENCE

Industry leadership, best practice and operational excellence.

INNOVATION

Challenging convention and leveraging technology to deliver expert solutions.

SUSTAINABILITY

Exemplary environmental performance and stewardship.

PEOPLE

Commitment to our people, social diversity, and our contribution to the community.



Dismantling & Asset Recovery

Liberty Industrial offers a complete dismantling and asset recovery service, covering all aspects of dismantling, resale and relocation.

We have demonstrated experience realising maximum value from a wide range of reusable plant, process equipment and scrap materials. We also have an extensive network of asset resale and resource recovery partners to negotiate the sale of unwanted or disused assets.

We provide all facets of the chain of custody to ensure structures are easily match-marked for reconstruction.





Gladstone Air Separation Unit (ASU) Plant Demolition, QLD for Air Liquide

Resource Recovery & Recycling

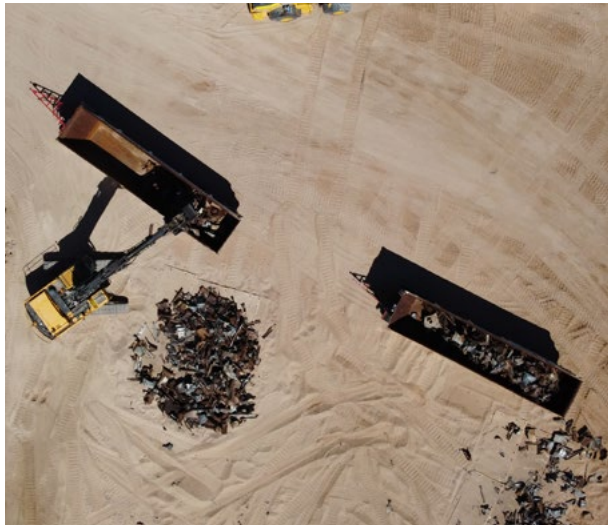
We take a resourceful and innovative approach to project delivery, ensuring waste is managed responsibly and sustainably.

We have established a national network of waste recovery and recycling resources to ensure we optimise salvage and recovery value to deliver positive commercial outcomes for all.

SERVICES WE OFFER

- Scrap Metal Processing & Recycling
- Precious Metal Segregation & Salvage
- Screening for Waste Minimisation
- On-site Crushing for Reuse
- Resale Options for Recycled Materials
- Reuse of Recycled Materials for Engineered Remediation Solutions or Rehabilitation





ENVIRONMENTAL STEWARDS

We are committed to exemplary environmental compliance and stewardship, so our goal of environmental sustainability always underpins our business practices and guides our daily operations.

An enviable track record of environmentally sustainable practices and an uncompromising approach to environmental management has allowed us to routinely achieve upwards of **95% recovery**, delivering positive environmental outcomes and creating value for our project stakeholders.

Thevenard Island Onshore Decommissioning & Remediation, WA for Chevron Australia

Expert Delivery

Investment in the future is our priority.

Utilising the most advanced technology and equipment in combination with our ability to leverage the best minds in the business has ensured we deliver innovative, cost-effective solutions that maximise value for our clients and project stakeholders – every time.



Clyde Oil Refinery Demolition & Removal, NSW
for Shell Australia & Viva Energy

Diversity in Demolition

Strategically designed demolition methodologies ensure we can manage the risks associated with complex demolition events.

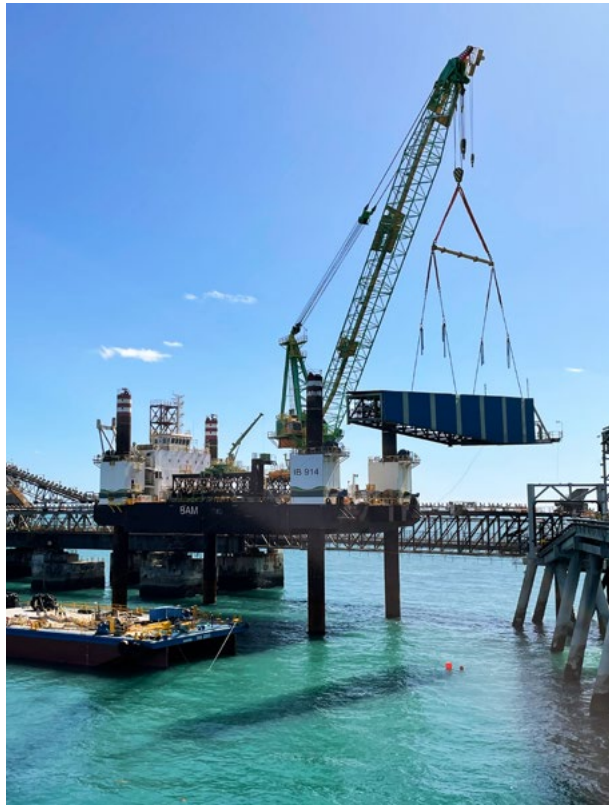
Liberty Industrial has extensive experience with a broad range of demolition methods. These methods include:

- High Reach Demolition
- Mechanical Demolition
- Explosive Demolition
- Cut & Pull
- Cut & Lift

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1. Thevenard Island Onshore Decommissioning & Remediation, WA for Chevron Australia
2. Hay Point Terminal - Disassembly & Disposal of Shiploader and Berth 2 Replacement Project, QLD for McConnell Dowell
3. Bulwer Island Refinery Gantry Demolition, QLD for BP

Responsive Remediation

To complement our core decommissioning, demolition and deconstruction activities, we provide innovative, sustainable and cost-effective remediation solutions to unlock the future potential of brownfield sites.

We have a comprehensive understanding of regulatory requirements to remediate contaminated sites. This includes designing engineered solutions, alongside technical and industrial service activities required to treat contaminated material in situ and/or remove contaminated material offsite for further processing.

WHAT WE DO

- Hazardous Waste Management & Removal
- Asbestos Management & Removal
- Contaminated Land Remediation
- Site Rehabilitation
- Groundwater & Wastewater Treatment
- In-ground Remediation
- Industrial Cleaning
- Emergency Response

1. Thevenard Island Onshore Decommissioning & Remediation, WA for Chevron Australia
2. Moorebank Intermodal Terminal Remediation, NSW for QUBE

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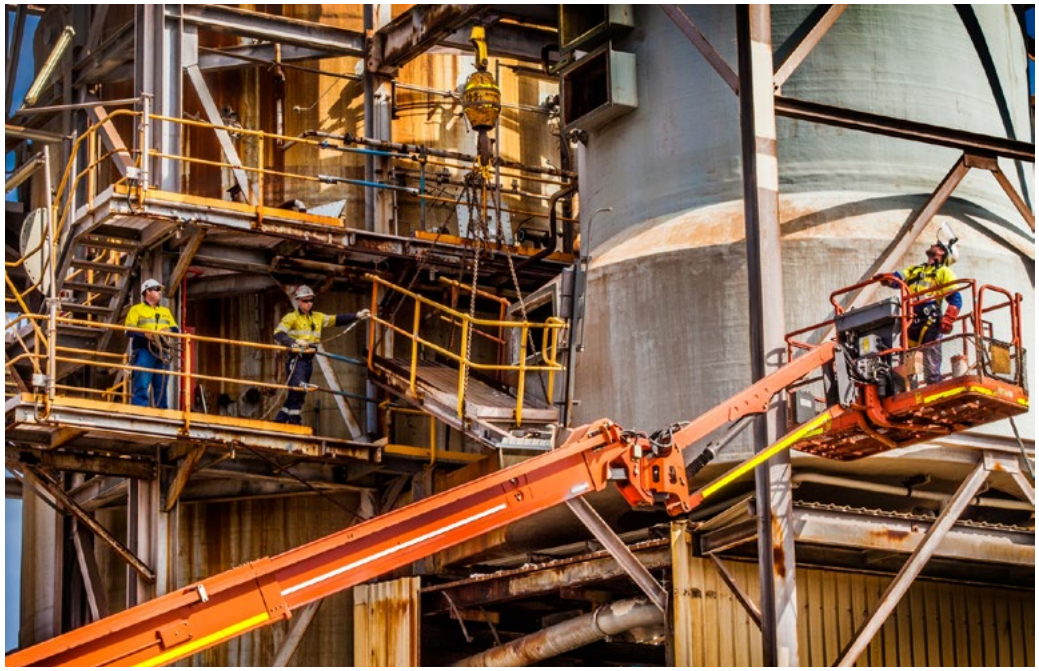


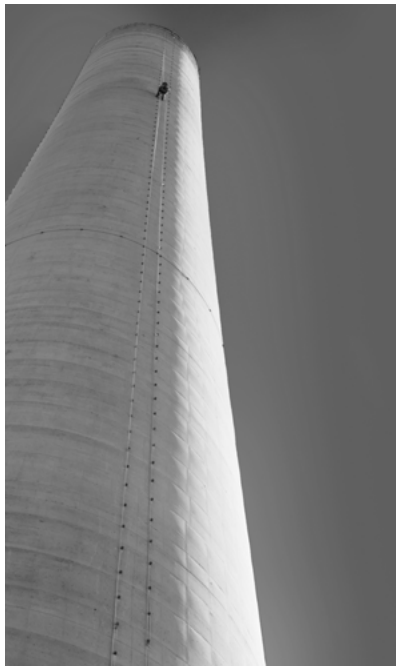
Our experienced personnel have a proven track record of working in this highly skilled environment and are backed by state-of-the-art plant and equipment alongside leading-edge technology to execute highly complex projects safely and efficiently.

Our team boast a range of additional qualifications that complement the removal of hazardous material works, including:

- Rope Access
- Rigging
- Scaffolding
- Oxy Cutting / Hot Works
- Confined Space
- Cold Cutting
- Elevating Work Platforms
- Working at Heights

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1. HIsmelt Kwinana Closure, WA for Rio Tinto
2. Boodarie Hot Briquette Iron Ore Plant Closure, WA for BHP Billiton


LIBERTY INDUSTRIAL
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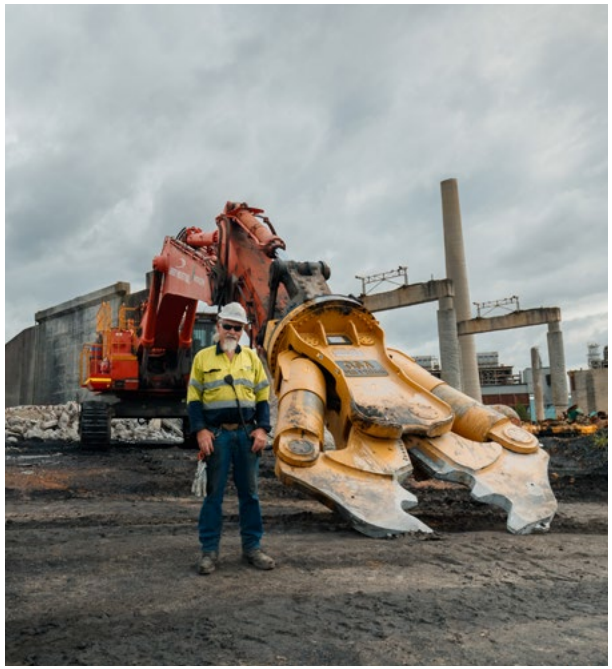
Past Experience, Present Expertise

We thrive on a challenge and have built a strong reputation for delivering some of the toughest decommissioning, deconstruction and remediation projects in the world.

OIL & GAS HIGHLIGHTS

- Altona Refinery Facilities Decommissioning
- Ampol Five Site Demolition Program of Works
- Bulwer Island Refinery Gantry Area Demolition
- Bulwer Island Refinery Queensland Clean Fuels Plant Demolition
- Caltex Fuel Station Program of Demolition Works
- Caltex Kurnell Refinery Tank Demolition & Remediation
- Caltex Townsville Terminal Demolition & Remediation
- Clyde Oil Refinery Demolition & Removal
- Clyde Oil Refinery Bioremediation
- Clyde Oil Refinery Waste Treatment & Recycling Trial
- Clyde Oil Refinery Terminal Phase 2 Demolition
- Gladstone Air Separation Unit Plant Demolition
- Gobe End of Field Life Front End Engineering Design Study
- Hay Point Terminal – Disassembly & Disposal of Shipload and Berth 2 Replacement Project
- Newcastle Shell Fuel Terminal Demolition
- Newport Terminal Tank Demolition
- Port Botany LPG Terminal Demolition Early Works
- Port Kembla Gas Terminal Demolition & Remediation
- Port Stanvac Oil Refinery Demolition & Remediation
- Thevenard Island Onshore Decommissioning & Remediation





WE PRIORITISE

- Rigorous thinking and project development
- A collaborative and considered approach
- Focus on driving commercial returns
- Efficient and safe project delivery
- Maximising commercial viability
- Accessing industry insights and best practice

Thevenard Island Oshore Decommissioning & Remediation

LOCATION Thevenard Island, WA

CLIENT Chevron

DURATION 24 Months

VALUE AUD 20,000,000

STATUS Underway

TAP, WATCH & LEARN
vimeo.com/628564278

OUR PROJECT

Liberty Industrial was engaged by Chevron Australia to deliver the Thevenard Island Onshore Decommissioning and Remediation Activities located 22km off the coast of Onslow in Western Australia. The 550-hectare nature reserve and Chevron's on-island facilities are located at the north-eastern end and cover 25 hectares.

The decommissioning scope includes demolition of storage tanks and vessels of up to 58m in diameter, 24m in height, and up to 32mm thick steel plate. Other structures to be demolished include a 38m high communications tower, utility pipework, jetty and barge landing infrastructure, and other facilities.

THE CHALLENGES

Due to the sites remote location, the team have had to overcome several challenges concerning logistics, medical assistance, the COVID-19 pandemic, water supply, weather, and flora & fauna.

ROBUST SOLUTIONS

The movement of personnel, plant and equipment are limited to sea travel and tide times. Barges are being utilised for plant and equipment transfers including the movement of a fully-assembled custom-built 120t High Reach Excavator, waste material removal, and fuel supply. To optimize the tide times, we ensure material movements are done by drive-on/off methods or seabed levelling instead of container loading.

Thevenard Island is classified as a nature reserve and as a preemptive measure to protect the flora species, strict separation and cleaning procedures are followed for mobilisation of plant and equipment to mitigate the potential spread of seedlings and soil. The island is also home to several species of fauna including Turtles, Ospreys and Caspian Terns, who use the shore to nest and more frequently, decommissioned areas around the project site. To protect these species, we conduct inspections at the start and conclusion of each day and use drone surveys for high structures and seasonal monitoring.

Previously established water wells and RO plants onsite were found non-operational which created a shortage of freshwater supply. The team set up a seawater intake RO plant to convert ocean water to potable water along with a self-erecting storage tank with a 60,000 litre capacity.

EXCEPTIONAL OUTCOMES

Work is on schedule to be completed by the fourth quarter of 2022.







Hay Point Terminal - Disassembly & Disposal of Shiploader and Berth 2 Replacement Project

LOCATION Mackay, QLD

CLIENT McConnell Dowell

DURATION 14 Months

VALUE AUD 4,400,000

STATUS Underway

OUR PROJECT

McConnel Dowell commissioned Liberty Industrial to disassemble and dispose of the existing wharf and ship loader associated with the Shiploader and Berth Replacement (SABR) project. We will provide specialist demolition supervision, labour, and equipment for the separation of berth structures.

The existing wharf sections and ship loader will be taken to the Australian Marine Complex in Henderson, WA via a heavy lift vessel for processing of approx. 5000t and transportation to a recycling facility. A secondary processing area will be established at Half Tide Tug Harbour, QLD for the processing of the remaining approximately 1500t of berth structures.

THE CHALLENGES

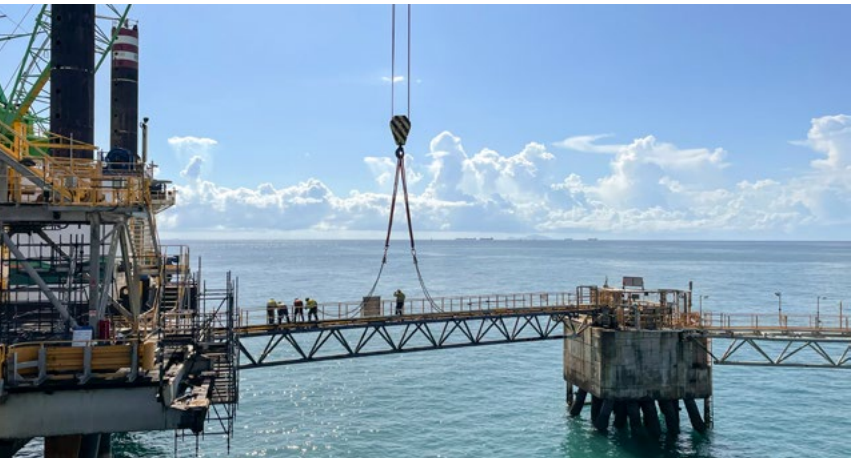
- As North QLD's cyclone season extends between November-March each year, there is a restricted window for successful project completion.
- Our team identified several key project challenges including limited availability of heavy lift vessels and jack-up barges; and the over-water location of the berth and shiploader which presents a high-risk environment that requires several HSEQ parameters to be taken into consideration.
- The disassembly works will be carried out close to several other live coal loading assets that are key to the QLD economy.
- Disassembly and disposal activities are scheduled to be completed within a strict berth shutdown period.
- With two key processing areas – one in Queensland and one in Western Australia, active stakeholder management involving the state government is critical.
- Operating in an environment with COVID-19 restrictions.

ROBUST SOLUTIONS

- Our team liaised with BHP and McConnell Dowell for an extensive 4-months of engineering and planning phase. Face-to-face workshops, issue management, and stakeholder engagement created a collaborative working environment to allow the seamless flow of critical information and minimisation of HSE risks.
- Our team established two processing areas for the structures - the existing wharf and ship loader will be transported to the Australian Marine Complex in Henderson, WA via heavy lift vessels for processing and transportation to a recycling facility, and a second processing area is established at Half Tide Tug Harbour, QLD for the loads that are not transported to Henderson.

EXCEPTIONAL OUTCOMES

The project team is on schedule to deliver to the project by December 2022.







Port Kembla Gas Terminal Demolition & Remediation

LOCATION Port Kembla, NSW

CLIENT Australian Industrial Energy

DURATION 8 Months

VALUE AUD 17,000,000

STATUS Completed 2021

AWARDS

2022 World Demolition Award Shortlist
Civils Demolition

TAP, WATCH & LEARN
vimeo.com/700703470

OUR PROJECT

Australian Industrial Energy engaged Liberty Industrial to undertake the demolition, remediation, and earthworks at Port Kembla Gas Terminal Early Works project in the Illawarra region of NSW, 8km from the Wollongong CBD.

Our team was instrumental in the demolition and removal of the former Berth 101 including extraction of 499 steel piles and 71 turpentine fender piles. The piles at over 25m long were embedded through sand and stiff clays, terminating in sandstone bedrock.

THE CHALLENGES

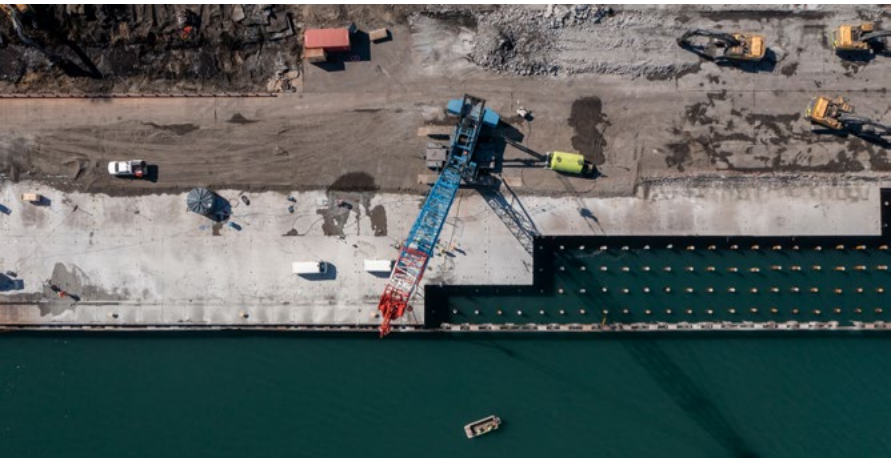
- Approximately 10,000m^3 of concrete and 30,000m^3 of heavily bound slag was demolished and crushed for sustainable re-use. 76,000t of excavated sand were transported across our own, trade approved, weighbridge to the outer harbour for construction works associated with the wider scheme.
- 66 unexpected finds were encountered during the works. Over 9000m^3 of asbestos impacted soils were managed and segregated, and over 100t of asbestos pipes, conduits and associated materials were disposed of offsite.

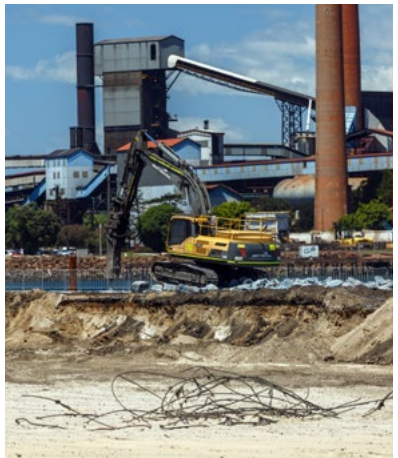
ROBUST SOLUTIONS

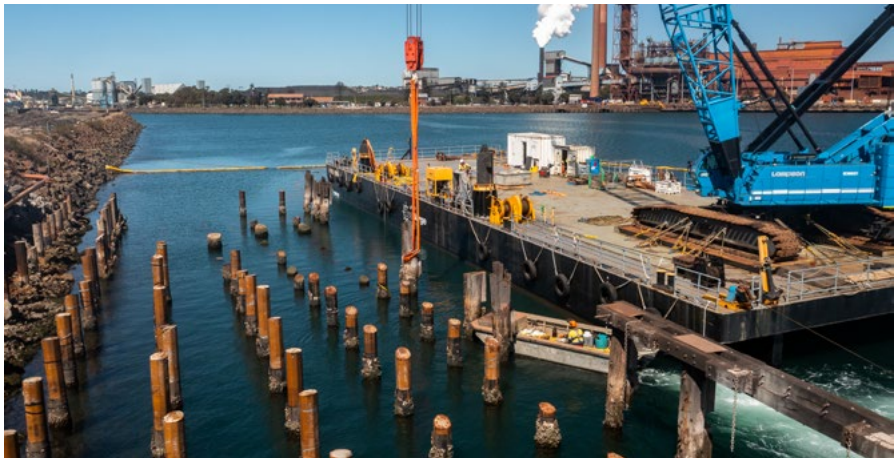
- Our team completed the successful commissioning of one of Liberty Industrial's two owned-and-operated high flow rate Chemically Enhanced Dual Media Water Treatment Plants. Capable of treating contaminants such as heavy metals, PFAS, and organic and inorganic pollutants to levels below laboratory reporting limits, the plant added confidence to meet the site's strict Environmental Protection Licence.
- All marine works were conducted within the sensitive marine environment of the third-largest port in NSW. Daily water sampling during pile extraction was conducted to meet the DPI requirements and a 400m silt curtain was installed and maintained for the duration of the project.

EXCEPTIONAL OUTCOMES

- The extraction of the steel piles was never attempted on such a scale and involved various techniques. By far the most successful and innovative technique for extraction of the land-based piles was achieved by welding 40mm steel plates onto the pile head using skilled boilermakers and a 300t crawler crane, fitted with the largest single pile clamp available in Australia.
- With Liberty Industrial's work complete, the project will pave way for the development of Australia's first liquefied natural gas regasification terminal – a landmark project being delivered by Australian Industrial Energy, which will see the Port Kembla Gas Terminal have the capability to supply more than 75% of NSW's energy requirements.







Clyde Oil Refinery Demolition & Removal

LOCATION Clyde, NSW

CLIENT Shell & Viva Energy

DURATION 20 Months

VALUE AUD 8,400,000

STATUS Completed 2016

AWARDS

2016 World Demolition Award Shortlist
Contract of the Year over USD 1M

TAP, WATCH & LEARN
vimeo.com/175652237

OUR PROJECT

Shell Australia & Viva Energy Australia commissioned Liberty Industrial for the demolition and removal of all redundant refinery infrastructure at the former Clyde Refinery including refinery processing units, plant and pipework, chimney stacks, storage tanks and buildings, as well as the removal of significant amount of friable and bonded asbestos.

THE CHALLENGES

- The Refinery was identified as State Significant Infrastructure.
- Works were conducted in an operational oil terminal facility.
- The scale and size of the chimneys required personnel to work up to 14 storeys high to set up scaffolding and fix polythene sheeting.

ROBUST SOLUTIONS

- Extensive consultations with WorkCover NSW, Department of Planning and Environment, the Environmental Protection Agency and Parramatta Local Council and assistance with preparation of documentation to obtain development consent from NSW Department of Planning & Environment.
- Meticulous planning and use of 3D modelling simulation software.
- Comprehensive inspection to identify hydrocarbon associated hazards in order to develop risk mitigation strategies and implement adequate control measures.
- Construction of a framework on which Liberty Industrial's Asbestos Removal crew would follow up encapsulating the various columns and structures to create a negative pressure tent.
- Application of innovative controlled wetting injection technology to remove friable asbestos safely and efficiently.
- Use of a combination of techniques from traditional mechanical demolition, to oxy cutting, mechanically induced collapses and controlled explosives implosions.
- Provision of state-of-the-art equipment.

EXCEPTIONAL OUTCOMES

The project was completed on budget, to schedule and without incident.

- 500-tonne of hard set limpet asbestos was removed.
- 1,640,000 litres of transformer oil including approximately 100,000 litres of Polychlorinated Biphenyl contaminated mineral oil was removed and recycled.
- The 60m tall Platformer Reactor and 65m tall 1,500-tonne Reactor & Stripper structures were demolished.
- Five 80-100m reinforced concrete chimney stacks were demolished through controlled use of explosives.
- 93% of waste material was recycled with only 7% going to landfill.







Bulwer Island Refinery Queensland Clean Fuels Plant Demolition

LOCATION Brisbane, QLD

CLIENT BP

DURATION 6 Months

VALUE AUD 2,900,000

STATUS Underway

OUR PROJECT

BP Australia has engaged Liberty Industrial to demolish and dispose of the redundant processing units and associated equipment that was part of the Queensland Clean Fuels Project (QFCP) at Bulwer Island Refinery - a 120 hectare site located in Brisbane.

The detailed scope of work includes the demolition of various processing units, pipe racks, equipment rooms, a control building and a hydrogen compressor. The works require six (6) induced collapses and the demolition of a 75m Flare Stack. All foundations will be removed, and the site graded and levelled to provide a future development platform.

THE CHALLENGES

- The main structures to be demolished required separation from very dense and interwoven infrastructure.As a result of the site layout, there was a requirement for the induced collapse methodology to be used on several structures that were adjacent to the operational fuel storage facility.
- Presence of buried utilities, and possible ground contamination due to previous refinery operations.
- Working adjacent to an operational fuel storage facility.

ROBUST SOLUTIONS

- Detailed work instructions have been developed to allow high-risk activities to be conducted around live and operational process areas.
- Processing units have been grouped to form 'demolition zones', to allow the team to work in a staged and controlled approach based on the classification of these zones.
- Our team have adopted a combination of induced collapse and mechanical demolition methodologies to remove the structures – safely and efficiently. This includes utilising a combination of Liberty Industrial's 38, 48 and 70t excavators with shear, grab, and hammer attachments.
- All excavated areas will be backfilled with clean soil and graded to allow stormwater runoff to be directed to existing site stormwater drains within the demolition zones.
- A Materials Tracking Plan is being utilised to track materials from the site to a licensed off-site facility.

EXCEPTIONAL OUTCOMES

Liberty Industrial's project team is on schedule to complete works by the fourth quarter of 2022.





Port Stanvac Oil Refinery Demolition & Remediation

LOCATION Port Stanvac, SA

CLIENT EDS/EXXON MOBIL

DURATION 18 Months

VALUE AUD 15,000,000

STATUS Completed 2013

OUR PROJECT

EDS/Exxon Mobil commissioned Liberty Industrial to demolish the entire Port Stanvac Oil Refinery, including the process plant and piping, storage tanks, chimney stack, flare stacks and other associated above ground facilities such as office buildings, electrical substations, warehouses, maintenance workshops and control rooms.

The Project also included removal of all pipework and other oil handling facilities located on the wharf structure.

THE CHALLENGES

- Ensuring minimal environmental impact on the surrounding coastline of the Gulf St Vincent.
- Never before had an entire refinery demolition project been attempted and it was left to Liberty Industrial to pave the way for others to follow.

ROBUST SOLUTIONS

- Meticulous planning and extensive consultation to assess and mitigate asbestos exposure to environment and crew.
- Development of a detailed hydrocarbon containment and asbestos removal logistics program.
- Liberty Industrial mobilised a highly specialised crew alongside state-of-the-art plant and equipment.
- Provided an arsenal of excavators ranging from 36 to 120t, alongside a selection of demolition attachments.

EXCEPTIONAL OUTCOMES

The project was masterfully executed as planned to client's complete satisfaction, on budget, on schedule and without injury or incident.







Bulwer Island Refinery Gantry Area Demolition

LOCATION Brisbane, QLD

CLIENT BP

DURATION 3 Months

VALUE AUD 1,000,000

STATUS Completed 2019

TAP, WATCH & LEARN
vimeo.com/339460226

OUR PROJECT

Liberty Industrial was engaged by BP to demolish several decommissioned units within the old Bulwer Island Refinery site. The demolition scope comprised of five Bitumen Blowing Units, an Alkylation Unit, Alkylation Acid Risk Reduction Project Unit Modules, East Flare, and Fire Water Tank & Pumping Equipment. Works also included demolition of all remaining above-ground infrastructure, demolition of all footings, slabs, piles, and pavement to 1m below grade and all pipe and electrical ground penetrations to 500mm below grade, the removal of asbestos and disposal of residual bitumen within the tanks and pipes.

THE CHALLENGES

- The area on which the refinery stood was originally a tidal mangrove swamp that was reclaimed using sand.
- The nature of the Bitumen was unknown.
- Disposal of residual bitumen included an estimated 550m^3 of bitumen sitting at the bottom of the tanks and 25m^3 of bitumen contaminated piping.
- Demolition of a 86.6m East Flare triangular structure.

ROBUST SOLUTIONS

- Due diligence confirmed most of the residual product was found to be brittle and bitumen was loaded into plastic-lined trucks and sent to an approved landfill.
- The East Flare triangular structure was strategically demolished in the following three stages:
  - For the first stage, slings and lugs were used to support the flare pipes and secure them to the main structure before pre-weakening. Welding angle irons were used to strengthen two braces and the main column pre-weakened and removed.
  - The second stage involved further pre-weakening of the structure and removal of structural members.
  - Owing to unsuitable weather conditions, the second stage was crucial and had to be performed a day before the drop day (third stage). A 170m radius exclusion zone was implemented during the drop, separate entry points set up and some lead-in roads were briefly closed.
- Mechanical demolition of other infrastructure was executed using our 120t High Reach Excavator, several 38 and 25t Volvo excavators, and attachments including the Fortress 95-R shear, OSA RS 6000 Concrete cracker, two Genisis GPX 660 shears, grabs, buckets, and a magnet.

EXCEPTIONAL OUTCOMES

The project was completed as per the program, with zero safety incidents, and received outstanding client feedback.







Port Botany LPG Terminal Early Works
Marine Loading Arm Relocation

LOCATION Port Botany, NSW

CLIENT Origin Energy

DURATION 6 Months

VALUE AUD 1,600,000

STATUS Completed 2022

OUR PROJECT

As part of the Port Botany LPG Demolition Early Works Project, Liberty Industrial was contracted to relocate Origin Energy's Marine Loading Arm (MLA) located at Port Botany – Bulk Liquids Berth 1 (BLB1). Measuring 17.5m long, 4.2m wide and 2.6m in height, the MLA was required to be decommissioned, lifted and transported to Origin Energy's LPG depot in Pinkenba, Queensland for storage and future use.

THE CHALLENGES

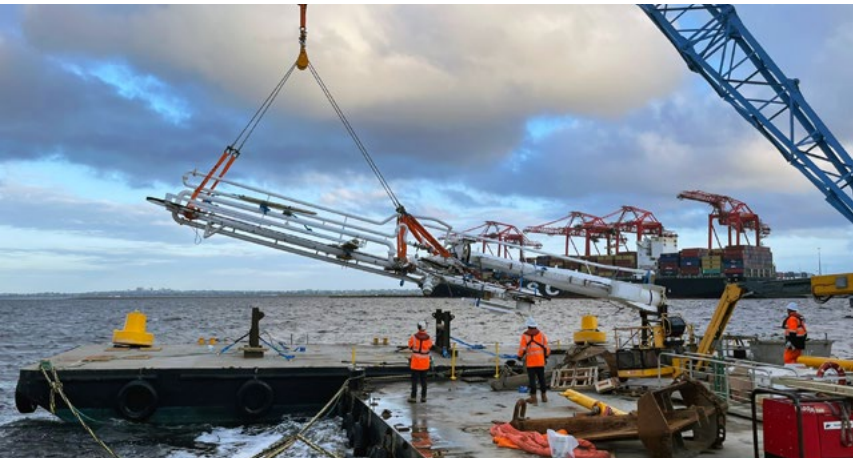
- Work was to be completed within a limited timeframe, with access granted during a 5-day shutdown period by NSW Ports.
- Utilising land-based cranes to lift the MLA was not feasible due to access restraints.

ROBUST SOLUTIONS

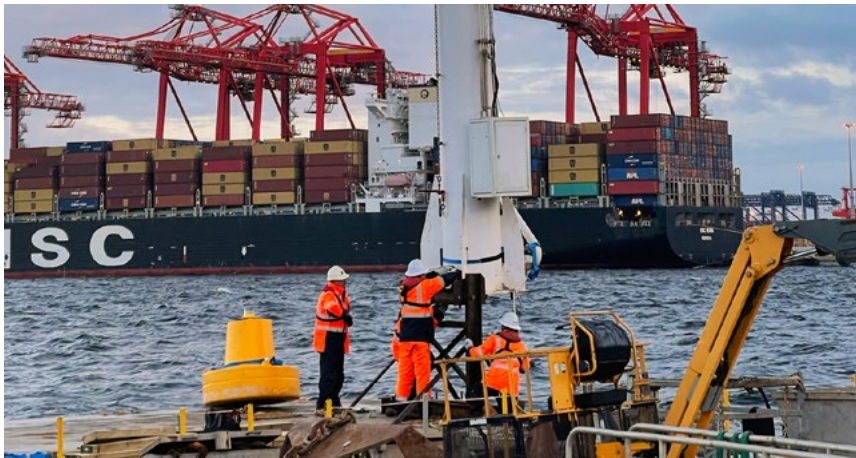
- Our team completed thorough engineered calculations in combination with detailed work methods to ensure the barge crane had enough capacity to safely lift the MLA.
- A specialist marine contractor - Polaris Marine Construction (Polaris) was engaged to assist our team with the removal of the MLA and place it on a dumb barge. The team at Polaris utilised their 35t crane barge to lift the MLA and place it on a dumb barge for transportation.
- Our team in collaboration with Polaris developed a creative solution to safely lift and place the MLA - as the MLA was laid on its side, the loading arm was secured to a cradle with a rotating hinge to avoid a slip that would result in an unstable lift causing shock on the jib of the crane.

EXCEPTIONAL OUTCOMES

- Liberty Industrial's trusted heavy haulage contractor transported the loading arm via road, which resulted in a significant cost saving for Origin Energy.
- The MLA was lifted and removed within the timeframe provided and successfully transported to its final destination without incident.







Community and Indigenous Participation

We understand the importance of supporting the communities in which we operate.

Our business strategy focuses on mutually beneficial initiatives for engaging communities. This is realised through procurement policies and procedures that reflect our long-term commitment to ensuring locally owned and operated businesses and individuals share the economic and capacity building benefits projects bring to the regions we work in.

INDIGENOUS INCLUSION

We welcome the opportunity to work with Indigenous individuals, businesses, organisations, and communities to maximise participation and engagement across our business.

We support initiatives that assist and encourage Indigenous people in the transition from education and training to the workforce and the broader local economy.

Liberty Industrial's framework for indigenous engagement comprises the following elements:

- Direct employment
- Entry-level employment, training, and development
- Subcontractor and supplier relationships and indigenous supply and partnerships
- Joint venture participation with Indigenous businesses
- Cross-cultural awareness and diversity training program



Liberty's long standing relationship with **IWIMRA (Indigenous Women in Mining & Resources Australia)** sets out a partnership in which IWIMRA will help to provide a structured approach towards creating a vision of cultural inclusion, cultural safety, and best practice within the operational confines of all liberty Industrial's upcoming projects.

Through this Community Engagement Strategy IWIMRA and Liberty will focus on deeper engagement across all areas of the business and its processes including;

- Community commitment to all areas and sites Liberty Industrial currently service
- Workforce investment
- Indigenous procurement policy
- Cultural capability training

Quality Assurance

The safety and wellbeing of our people is our highest priority and the foundation of everything we do – from the decisions we make right down to our daily operations.

We pride ourselves on being a safe and reliable contractor who is accustomed to working to stringent compliance requirements for the management of occupational health and safety, quality and environmental performance.

Our achievements in safety and training have received:

Shortlisting at the **2022** and **2019 World Demolition Awards** in the Safety & Training Award category.

Shortlisting at the **2022 WHS Foundation** in the **WHS Promotion & Program** category.

Highly commended at the **2019 National Safety Association Excellence Awards** for the development of our Oxy Cutting and Excavator Operator training program.



SAI GLOBAL CERTIFICATION

Our accredited Business Management System is independently certified by SAI Global Certification and includes:

- ISO 9001:2015
  Quality Management System
- ISO 45001:2018
  Occupational Health & Safety Management System
- ISO 14001:2015
  Environment Management System

ISO 9001 ISO 45001 ISO 14001

Internationally Acclaimed

Liberty Industrial has received local and international recognition, most notably at the World Demolition Awards, winning five awards in the last nine years including the inaugural overall World Demolition Award.

2022 WHS Foundation, WHS Promotion & Program – Shortlist
Subcontractor Improvement & Subby Buddy Initiative

2022 World Demolition Awards, Civils Demolition – Shortlist
Port Kembla Gas Terminal Early Works

2022 World Demolition Awards, Safety & Training – Shortlist
Subcontractor Improvement & Subby Buddy Initiative

2021 World Demolition Awards, Explosive Demolition - Shortlist
Remote Demolition of a Wind Turbine

2020 World Demolition Awards, Industrial Demolition - Shortlist
Iluka Program of Demolition Works

2020 World Demolition Awards, Contract of the Year Under US$1M - Winner
Blackwattle Bay Batching Plant Demolition

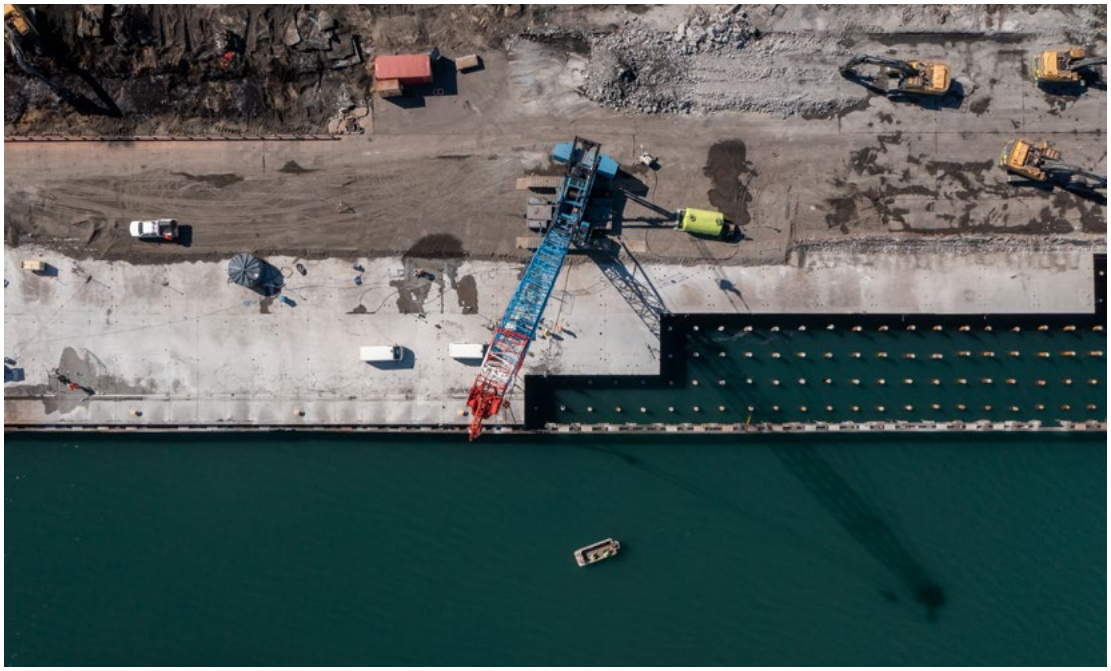
2019 World Demolition Awards, Industrial Demolition - Winner
Munmorah Power Station Removal

2019 World Demolition Awards, Contract of the Year Over US$1M - Finalist
Port Kembla Coal Terminal Stacker and Reclaimer Demolition (Stage 2)

2019 World Demolition Awards, Contract of the Year Under US$1M - Finalist
Port Kembla Gateway Crane Project (Stage 2)

2019 World Demolition Awards, Safety & Training - Finalist

2019 National Safety Awards of Excellence - Highly Commended
Best WHS Training Program



Port Kembla Gas Terminal Demolition & Remediation, NSW for Austalian Industrial Energy

WORLD DEMOLITION AWARDS2022 SHORTLISTED CIVILS DEMOLITION AWARD

WORLD DEMOLITION AWARDS2022 SHORTLISTED SAFETY & TRAINING AWARD



2019 CCF Earth Awards, Excellence in Civil Construction Over $75M - Finalist
Moorebank Intermodal Terminal Remediation

2018 ALGA Excellence Awards, Best Remedial Project Over $1M - Winner
Moorebank Intermodal Terminal Remediation

2018 World Demolition Awards, Industrial Demolition - Finalist
Port Kembla Gateway Coal Terminal Project (Stage 1)

2017 World Demolition Awards, Urban Demolition - Finalist
Sydney Harbour Control Tower Demolition

2016 World Demolition Awards, Contract of the Year Under US$1M - Winner
Duck River Bridge Dismantling

2016 World Demolition Awards, Civil Demolition - Finalist
Hamilton Wharves Demolition

2016 World Demolition Awards, Contract of the Year Over US$1M - Finalist
Clyde Oil Refinery Removal

2015 World Demolition Awards, Contract of the Year Over US$1M - Finalist
Garden Island Hammerhead Crane Deconstruction

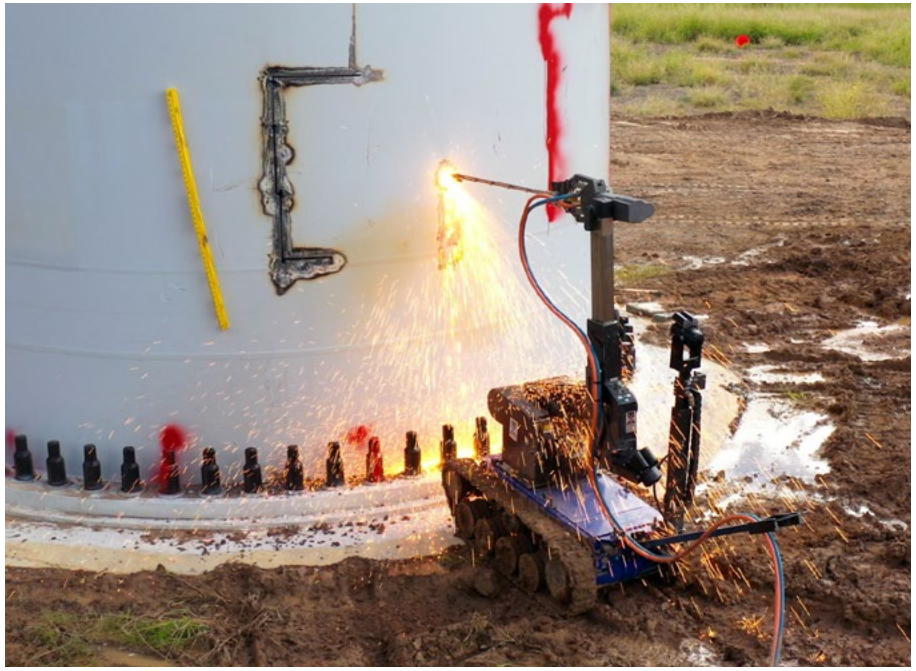
2015 World Demolition Awards, Explosive Demolition - Winner
Omega Tower Demolition

2014 World Demolition Awards, Industrial Demolition - Winner
Rio Tinto's HIsmelt Kwinana Closure

2013 World Demolition Awards, Industrial Demolition - Shortlist
BHP Billiton's Boodarie Hot Briquette Iron Plant Closure

2012 World Demolition Awards, Industrial Demolition - Shortlist
BHP Billiton's Boodarie Hot Briquette Iron Plant Closure

1.



WORLD DEMOLITION AWARDS2021 SHORTLISTED
EXPLOSIVE DEMOLITION AWARD



WORLD DEMOLITION AWARDS2020 WINNER
CONTRACT OF THE YEAR UNDER US$1 MILLION

2.

1. Remote Demolition of Wind Turbine, QLD for General Electric
2. Blackwattle Bay Concrete Plant Demolition, NSW for Hanson

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