

DISAPPEARING

ACCESS MACHINES

FEARRA
NEW ZEALAND



NZ's Best Manufacturing Engineers.

You'll find our access machines: hoists, cranes, and lifting devices on the top of skyscrapers, down in mines, in heavy industry and in energy generation.

We are home to the broadest range of engineering capabilities that you will find under one roof with expertise in craning, lifting and access machines going back to the 1960's.

Our long-standing history in Gantry Crane design, maintenance and repair has made Farra the perfect place to meld the minds of many. We combine our strengths and push the boundaries of applied innovation in our three areas of expertise: Access Machines, Maintenance, Repairs & Overhaul for Energy & Heavy Industry, and Contract Engineering for OEMs.

Known for our ability to reach tricky places, Farra have exported over 200 Access Machines for some of the worlds most aesthetically challenging buildings. This included contracts for five of the tallest and most complex towers in Barangaroo and for Quay Quarter Tower, the 2023 winner of the (CTBUH) Best Tall Building Worldwide. Our most recent completion featured here is the largest linkage Access Machines in the Southern Hemisphere!

Serving NZ and Australia since 1863, our manufacturing expertise has resulted in us being the most reliable and proven engineering name behind some of the Australasia biggest brands with exports to China, Hong Kong, UK, Canada and the Middle East.



GLOBAL EXPORTERS OF CUSTOM SOLUTIONS FOR:

- Building Maintenance Units.**
- Facade Replacement Remediation.**
- Vertical Plant Delivery.**
- Pit Maintenance Units.**
- Semi Permanent & Mobile BMUs.**
- Gantry Cranes & Lifting.**
- Accessories and Automation.**
- New Builds and Refurbishments.**

QUAY QUARTER TOWER SYDNEY, AUSTRALIA.





Where others see constraints, we see possibilities.

Limitless ambition in limited spaces.

Modern architecture, advancements in materials, increased demand for more great spaces and the way we live and work has greatly influenced today's high-rise buildings, towers, and skyscrapers. Over the last 40 years we have seen a rise in the use of glass, curved facades, green walls and green living, outdoor spaces cleverly integrated into the exterior creating recesses and overhangs, and decorative facades that add to the story and the beauty of the building. To protect your investment and your people, access is everything!

Building longevity is dictated by how well something is looked after, and having the right tools to do the job efficiently and safely is essential. To properly maintain your building you need the right building maintenance manufacturer that has innovative and proven solutions that can be customised to your unique environment.

That's where we come in. Designing and manufacturing easy and safe access to all those tricky-to-reach places for tradesmen, gardeners, window cleaners and other professionals, and in some cases robotic tools. These ensure the upkeep of facades, green walls and windows while being aesthetically sympathetic to the building and safe and reliable for years to come.

Farra's reputation has been built on our ability to integrate beautiful and smart engineering design into your structure, allowing you to reach the unreachable and disappear. All backed by proven performance and engineering that outlasts the rest. That's why we are an established New Zealand design and manufacturing engineering company for the Australasian and European markets supplying access machines, cranes and lifting solutions for some of the most complex, demanding and corrosive environments in the world.

Facade Access Solutions.

Every automated BMU unit is composed of a cage, hoist, jibs, and traverser module, which work to provide quick, safe, and convenient access to your building's exterior.

Our bespoke solutions enable you to choose from our growing portfolio of architecturally sympathetic facade access systems and machine modules which are manufactured here in New Zealand.

BMU ROOFCAR MODELS:

Telescoping Units.

Traversing Units.

Single and Multi-Slewing Units.

Fixed Pedestal Units.

Disappearing Units, Track Systems & Hatches.

Super Compact BMUs - move between buildings & floors via elevator.

INTERNATIONAL TOWERS, BARANGAROO, AUSTRALIA.



BUILDING
MAINTENANCE



INDUSTRIAL ENVIRONMENT
AND SMELTERS



POWER
GENERATION



WINDOW WASHING AND
GLASS REPLACEMENT



INFRASTRUCTURE

A SUSTAINABLE FUTURE
DELIVERING...

Engineering that makes a difference.

Our proven approach to Innovation,
Design, Quality and Manufacturing.

Farra solutions have a record of outlasting the rest. We have been engineering large scale crane solutions since the 1960s, and have delivered over 190 vertical access solutions since 1989. We have no doubt this is a testament to our people-first design approach.

We put people first. Always. We kick off the design process by listening to and understanding your goals, and by reviewing the key data and constraints so the end solution delivers without compromise on quality, safety, or aesthetics. Our brand and people are recognised and respected as a trusted partner to the leading consultants, architects, property developers, construction companies, and building owners.

Our clients rely on our design solutions that consider aesthetics, structural and decorative challenges, cost and feasibility, longevity, quality and safety optimisation, installation and code requirements and government regulations. Our Innovation and Design team are never short of ideas and are the powerhouse behind customised solutions and complex problem-solving. They cover the full engineering stack from advisory services and concept design right through to execution. The team are a mix of registered engineers, draughtspeople, project managers and procurement officers. Our engineers' expertise comes from decades of successfully solving unique engineering problems around the world. Bespoke solutions are our specialty and are kitted out with the latest 3D, CAD modeling and FEA software so your solution is seamless integrated.

ENGINEERING DESIGN:

Consultancy.

Design for New High Rise Builds.

Design for Manufacture (DFM).

Engineering Calculations.

Design for Refurbishment & Upgrades.

Feasibility & Product Optimisation.

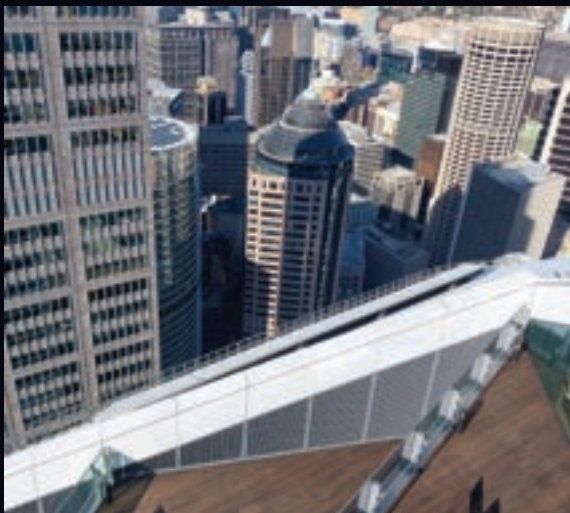
Finite Element Analysis.

Draughting.

Project Management.

Product Development.

Manufacturing & Fabrication.





QUAY QUARTER TOWER.

SIZE: 200m tall, 50 storeys, 8,268m²
Sustainable tower conversion.

ACCESS SOLUTION: Two disappearing BMUs with telescopic moving counterweights mounted on different levels. Farra's innovative smart opening hatch seamlessly intergrates into the architecture and improves the smooth operation of the BMU reveal.

MAX REACH : 37m.

MAX CAPACITY: 1,500kg Glazing Replacement Unit load.

CAGES : Two fixed cages.

KEY TECHNICAL CHALLENGE : Architectural building with twisted layers, many angles and no roof space. The BMU must compress below the facade and be complimentary to the refurbishment from the old building to a new, much larger and more architectually complex sustainable high-rise.



ONE CENTRAL PARK TOWERS.

HEIGHT: 2 Towers, Tallest 117m.

ACCESS SOLUTION: Three-stage telescopic BMUs on rails.

One double slewing unit.
One single slewing unit.
Lowered parking bay.
Interchangeable cages.

MAX REACH: 24.5m

CAGES: One extending, one fixed cage, two personal cages, and vegetation bins.

KEY TECHNICAL CHALLENGE: The buildings architectural facade consisted of 38,000 indigenous plants and garden boxes.



Green Walls and Gardened Facades.

With the move towards more sustainable living environments, construction practices, and greater connection with outdoor spaced green walls, Farra's numerous interchangeable cage and tool accessories are the optimum product for servicing gardened facades and terraces.

29 GRESHAM ST, LONDON.



Garages and Parking Bays with Retractable BMUs.

To protect the building aesthetics and maintain accessibility we have produced many disappearing machines capable of extending, luffing, retracting, slewing, traversing, and articulating into minimal parking spaces, ensuring maximum facade access. As designers and manufacturers of the largest linkage BMU in the Southern Hemisphere we will make sure you benefit from our knowledge of parking bays and pits, retraction and expansive reach, and curved surface traversing.

Glass Roofs.

Glass offers architectural flexibility to architects when it comes to curves, shapes, and transparency. We offer that same flexibility in our Access Machine design. Traversing gantries mounted with a double slewing BMU offers easy movement from one end of the building to the other, over transparent and glass roofs that offer limited structural fixing options.



MOOR HOUSE, LONDON.

SHAU KEI WAN, HONG KONG.



Tall Parapets and Parapets for Transparent Applications.

Compact and elegant linkage style jibs often suit parapets best, allowing the cage to project up over the parapet, making use of full height cables on the facade for restraint. Extendable wheels on the BMU cage are a popular addition that protect delicate features such as sunblades as the cage traverses the building.

Roof Signage and Terraced Roofs.

Roof space often gets optimised to the extreme, limiting the available space for access equipment. One of our earlier articulating jibs was 25m long and maneuvered around a 30 metre high neon advertising hoarding while reaching the entire perimeter of the tower. At the time the Dragon BMU was the first of its kind in the world.



DARLING PARK, SYDNEY.

Complex Facades.

Whether you are challenged by little to no roof space, decorative architraves, multiple overhangs, recesses, green walls, sloping or curved surfaces, or maybe you want to include automation or have the equipment just disappear. Straight up, we've got you sorted.

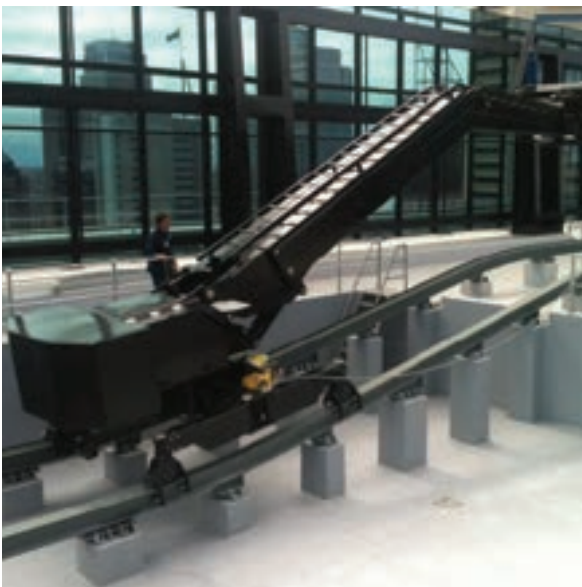
INTERNATIONAL TOWERS.

SIZE:	3 Towers. Tallest tower 208m.
ACCESS SOLUTION:	9 BMUs, 3 per building. Two traversing single telescoping. Four traversing single slew. Two fixed pedestal double slewing. One traversing single telescoping.
MAX REACH:	Slewing Crane 21m.
MAX CAPACITY:	Slewing Jib Crane 8.2T.
CAGES:	3 extending frame, nine interchangeable.
KEY TECHNICAL CHALLENGE:	The buildings architectural facade consisted of a variety of facade types, including blades and recesses.



Glass Delivery and Glazing Replacement.

Our task specific attachments are all about making the job way more efficient. Our units and accessories are perfect for accessing randomised stepping facades with challenging angles, whether it be for glazing replacement or green wall maintenance. Our units and accessories include interchangeable cages, glazing replacement unit attachments, personal cages, tool bins and green wall maintenance platforms.



Tracks and Rails.

We often use track systems to access various points of a structure that have recessed or overhanging facades, sloped roofs, and glazed atriums. Paired with platforms and trolleys they provide access to facades beneath pitched roofs and areas with ground obstructions. If you don't have room for tracks or require greater flexibility, our collapsible and mobile Super Compact BMU can be a useful alternative in these situations.



Working Platforms & Scaffold Alternatives.

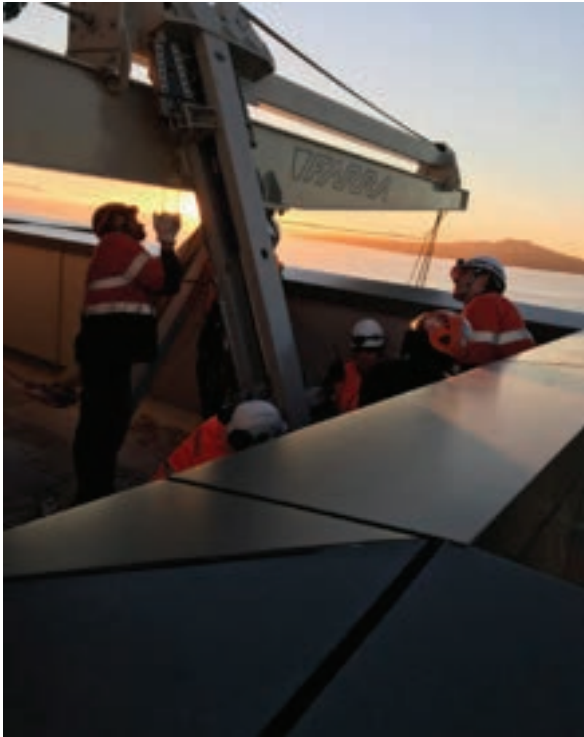
First of its kind in the world, our fully enclosed High-Riser platform creates safer work environments, increases efficiency, and minimises tenant disruption while blending seamlessly into your building exterior. While the platform is in place, only two floors will be affected by refurbishment at any one time. Because the suspended platform has no footprint (unlike scaffolding), the building occupants will not notice any disruption, particularly at ground level.

The High Riser is suspended from davits and leaves behind a clean and finished facade without the requirement to remedy the infills of conventional access solutions during dismantling.



MOOR HOUSE.

SIZE:	84m, 18 storeys, 3,700m ² floor space.
ACCESS SOLUTION:	Custom traversing gantry with a double slewing BMU with parking garage. Tilts from the tower as it rises.
MAX REACH:	30m. Unit is 10m tall at full height.
MAX CAPACITY:	820kg GRU load.
CAGES:	Fixed cage.
KEY TECHNICAL CHALLENGE:	The large curved glass roof provided no structure for a BMU to be fitted. An integrated BMU allowed for access to the whole building exterior.



Gantry Cranes.

Farra has a long-standing history in gantry crane design, maintenance and repair. Many of New Zealand's gantry cranes in industrial, construction, and hydro environments are Farra manufactured going back as far as the 1960s and still are in perfect working order today.

Davit Cranes.

Davits and powered platforms are a popular cost effective reach solution when traversing is not required. The davits permanently stay in place but are invisible from ground level. The platforms are easily stored away when not in use in most cases. Farra have options from smaller personal cages to multi-storied work platforms that can be moved to other buildings and locations.



Extending Rail Transformer Cranes.

Our transformer cranes take care of your heavy lifting of plant equipment up to 6 tonne into towers and high-rise buildings. Great for lifting transformers, HVAC equipment and internal building infrastructure.

INTERNATIONAL TOWERS, BARANGAROO, AUSTRALIA.



Innovation that leads. Quality that outlasts.



Recognition & Certification.

AWARDS

GRAND BUSINESS SOUTH
EXPORTER OF THE YEAR 2022.

HERA 4.0 WELD
TECHNOLOGY & EDUCATION.



CERTIFICATIONS

QUALITY ISO 9001 REGISTERED.

HERA ISO 3834-2 PART 2
No 018NZ/2015.

HERA SNNZ AS/NZS 5131 CERTIFIED.

SFC CERTIFIED FABRICATOR.

SITewise 100% 2022/23.

+IMPAC PREQUAL H&S ASSESSED.

**WE DON'T STOP AT
CONSTRUCTION...**

Serving heavy industry for over 160 years.

We design and manufacture access platforms, hoists, cranes and lifting devices for the most demanding industrial environments in the world!

Energy and Heavy Industry.

Farra has a long reputation for delivering safe, high quality reliable outcomes in machining, fabrication and site fitting. With the largest and most proven contract machine shop in NZ, Farra provides a diverse range of cutting-edge mechanical, production and on-site solutions. Servicing heavy industry is where we cut our teeth. Keeping mission critical plant running and supporting it through business-as-usual to business improvement is our bread and butter.

Pit Maintenance Units for Smelters.

Farra is a world-renowned provider of access equipment for aluminum smelters. We specialise in the design and manufacture of purpose-built, safer and more efficient pit maintenance platforms for carbon bake furnaces. With over 25 years of experience in the aluminum industry we have exported to the Middle East, Africa, Asia, North America and Australasia.



MACHINING AND MANUFACTURING:

Precision Engineering.

Bespoke On-Site CNC Machine Manufacturing.

Turbine Refurbishments.

Crane Maintenance Repair & Upgrade.

Component Manufacturing.

Production Machining.

Turning & Milling.

Horizontal Boring.

**Fabrication and Machining of Large Scale
Components and Assemblies.**

Welding, Assembly, Fitting & Field Services.

Access Machine Manufacturing, BMUs / PMUs.





MOZAL ALUMINIUM SMELTER.

PIT SIZE: 13m x 6m

ACCESS SOLUTION: 2 Pit Maintenance Units.
Double Gantry.
Brushing Units.
Trackless relocation.
Gantry moves lengthways.
Crab moves sideways.
Cage moves up and down with auto-brushing functions.

MAX CAPACITY: 650kg.

CAGES: 2 separate cages.

KEY TECHNICAL CHALLENGE: Synchronised vertical platform lift.
Pit Cleaning. Carbon Bakehouse
Furnances are hot, confined and challenging environments from both a safety and corrosion point of view.

CONTRACT MANUFACTURING

The engineering name behind some of Australasia's biggest brands.

Your components are produced and backed by solid quality assurance and made with care by the most experienced engineering team in New Zealand.

Contract Manufacturing.

Farra is known for its contract manufacturing capabilities delivering **design, machining, sheetmetal, fabrication, powder coating, and an ISO9001 quality system**, which supports the most comprehensive suite of manufacturing capabilities in New Zealand.



Our sub-assemblies and manufactured products can be found in the aerospace industry, light rail and public transport, government and commercial infrastructure environments, telecommunications and electronics, and even in appliances all over the world. Every year Farra manufactures hundreds of thousands of parts and sub-assemblies supporting New Zealand and Australia's industries.

EXPORT QUALITY CONTRACT MANUFACTURING

Mechanical Sub-Assembly Manufacturing.

Short-Run to High-Volume Manufacturing.

Design for Manufacture (DFM).



PASSENGER RAIL, AUSTRALIA.

Alstom, the leading end-to-end rolling stock manufacturer in Australia has invested in market leading solution to light rail and passenger vehicles, (LRV) including modern light rail and high-speed trains. Farra supplies components to Alstom on various rolling stock projects. Farra offers best-in-class reliability by manufacturing sub-assemblies and ensuring stringent quality standards are met and upheld. Farra's ISO 9001 Quality System and award-winning weld education program for staff training is one we are very proud of. It was recently recognised by Hera, our engineering industry body. Farra has manufactured and exported on average 15,000 stainless steel sub-assemblies a year for Adelaide and Sydney.



FARRA NEW ZEALAND
www.farra.co.nz | 0800 1 FARRA