

Member Profile: Williams Metal Fabrications



Port Bonython Jetty Dolphins 2 and 3 Rehabilitation Project.

Since its beginnings in 1998, Williams Metal Fabrications (WMF) has served South Australia's mining, civil, manufacturing, marine, medical, defence and construction industries.

Staffed by a 35 person strong workforce, their workshop in Elizabeth South, Adelaide has a 2,000m² manufacturing area, complete with a 10 tonne overhead crane, shear and punch, lathe, mill, 1250A Submerged Arc Welder, and all your general day-to-day fabrication equipment.

WMF recently received funding via a Government Innovation Grant. This grant will see WMF undertake a workshop extension with existing column and truss strengthening for two new 5 tonne overhead cranes with simultaneous lift and carry. This will enhance business growth and local employment opportunities, giving WMF the capacity to take on more projects.

WMF attributes their success to the experience and broad knowledge of chief principles Craig Williams, Stuart Rogers and Peter Williams, and their collective ability to adapt to the ever-changing, and increasingly competitive, environment of Australia's steel industry.

According to Craig Williams (Marine and Construction Manager), "Our expert workforce and state-of-the-art workshop allow us to provide an end-to-end fabrication service for a diverse range of products in the commercial, mining, civil, marine, medical and resource industries. We support a large network of businesses for their major projects."

"We collaborate with designers who are highly experienced in the use of CAD and 3D modelling software. This delivers highly accurate structural calculations on all our projects, which ensures complete design integrity."

"Our trade certified coded welders and experienced site crews are highly efficient when it comes to installation, erection and repair of new and existing infrastructure, particularly for the marine and civil industries."

"Our people are team players and customer focused, continually trained and kept up-to-date with new and innovative techniques. Safety is paramount and all are encouraged to have their say and develop a working environment that satisfies both our customers and our team members. Our competitive edge is our people and the relationship between management and staff."

"We have provided services, materials and equipment for just about all the major infrastructure projects undertaken in South Australia—we were involved in the Northern Expressway, the Southern Expressway Duplication, the Urban Superway, the Adelaide Desalination Plant, the erection of the Prominent Hill Mine and the Adelaide rail revitalisation project. We also provide services to some of the largest companies operating within the state, including Lend Lease and McConnell Dowell."

"The team behind Williams Metal Fabrications are proud South Australians who are committed to securing the future prosperity of our state wherever possible," said Williams.

Accreditations

WMF was recently certified as a CC3 Construction Category entity via the ASI's National Structural Steelwork Compliance Scheme (NSSCS). WMF is also working towards ISO 3834-1:2005 certification.

"This will make us one of the only dual accredited fabricators in Australia. The dual accreditation will enable us to access new avenues such as high-profile defence projects and offshore LNG. It will also enable us to undertake both DNV and Lloyds Welding requirement," said Williams.

WMF also holds certifications in ISO 9001:2015 Quality Management, AS/NZS 4801:2001 Occupational Health and Safety Management and ISO 14001:2015 Environmental Management.



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Craig Williams (Marine and Construction Manager, Williams Metal Fabrication).

Projects

Marine Projects

WMF has extensive experience in the marine industry, having worked alongside clients such as Freyssinet Australia, Svitzer, Maritime Constructions, Boulderstone, Flinders Ports, and the Pilbara Port Authority.

For Boulderstone, WMF designed, fabricated and installed a swing stage and aluminium winching platforms for the Port Bonython-Santos Jetty. WMF has undertaken several projects on behalf of Flinders Ports. They provided design engineering, 3D modelling, fabrication and installation services for the Flinders Ports Slewing Gangway. This project had a strict installation deadline: the passenger vessel slewing gangway had to be installed in time for the arrival of the Queen Mary. This deadline was met with over a week to spare.

WMF also fabricated and installed four OH6 and four OH7 wharf tie down anchors for two new container cranes on behalf of Flinders Ports. It was discovered that the original design for the project would be very difficult to install. As such, WMF provided a new design that was much easier and more efficient to install. WMF also designed, fabricated and mobilised a wharf work box to help with installation. This proved to be highly innovative, and helped move the project forward.

For Freyssinet Australia, WMF fabricated and installed a temporary access structure for the Port Bonython Jetty Dolphins 2 and 3 Rehabilitation Project, along with the supply of two new fenders systems and a temporary fender whilst onsite works were underway. This was an extremely difficult project, given its location, weather conditions, and shipping implications.

During the tender stage of this project, WMF teamed up Aztec Engineering (WGA) to develop a construction methodology to present to the client and undertook some preliminary design to assist with the installation of the 2m below soffit access platforms which hang below the dolphins submerged majority of the time. The platforms would only be exposed for roughly four hours of the day subject to the strong tidal movements in the upper Spencer Gulf and the ever-changing weather conditions. The project was completed ten days ahead of schedule, within budget, and 100% LTI free.

Civil Projects

WMF provided services to Adelaide Aqua during the construction of the Adelaide Desalination Plant. They fabricated, supplied and assembled several components, including the rail platform, a cradle to launch the under-ocean Tunnel Boring Machine, a thrust frame for the tunnel Boring Machine, a slurry plug and a blast mat.

WMF is currently working on throw screens for the Northern Connector; false work for the Northern Connector; and 26 cantilevered and portal gantries for Gateway South for the Darlington Upgrade. Other major civil projects undertaken by WMF have included the fabrication and supply of: five VMS structures for Northern Expressway; five pedestrian walkway canopies for Lend Lease for the Southern Expressway; temporary and permanent works to nine existing bridges for Lend Lease for the Southern Expressway; and the handrails for the Mawson Lakes Bridge for Watpac.

Resources Projects

Some of the significant resources projects completed by WMF include the design, fabrication and installation of the Prominent Hill Control Tower Walkways for Built Environs, the construction of gas platform skid frames and water filtration platforms for Osmoflow, and the refurbishment of the salt stacker for Cheetham Salt.

Medical Projects

In recent times, WMF has joined forces with Staminlift International, becoming their Australian supplier and manufacturer for the 2100 Bed Mover, the TS5000, and the newly released 6000 Bariatric Transfer System. While the 2100 Bed Mover was developed for Australian Hospitals, the TS5000 and TS6000 are being used worldwide.

The partnership between WMF and Staminlift is the perfect example of a collaboration of South Australian design and local manufacturing expertise, which together is helping to put South Australian manufacturing on the map and gaining increased international interest.



A fender for the Port Bonython Jetty Dolphins 2 and 3 Rehabilitation Project.