







## **About** Us

In 2023 Deacon Engineers merged with McDowall Affleck.
Our new increased capacity allows us to deliver Civil, Structural,
Mechanical and Electrical and Control Systems services across
a wider range of industries Australia-wide.

We collaborate with key suppliers and partners to provide exceptional quality turn-key definition, design, production, installation, and commissioning services. In addition, we provide fixed plant and equipment asset support and integrity assessment.

Our track record of delivery ranges from Foundations Design for Wind Farm developments, to Finite Elements Analysis of mechanical equipment and headframes for the Mining Industry.

### Headquarters

Perth, Western Australia

### Regional offices

Melbourne, Sydney

### Partner companies in

Lucca, Italy Cape Town, South Africa

### **Sectors We Service**

Mining and Minerals Temporary Works Wind and Solar Oil & Gas Infrastructure Government

#### **Certifications**

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018



### **Key** stats



McDowall Affleck (MAPL) founded in **1978** 



MA Deacon Engineers (MADE) founded **2009** 



**\$8 million**2023 combined revenue



**20,000+** projects delivered



**41** permanent staff



## **Core** Markets

### **Mining & Minerals**

Process Plant Infrastructure, Non-Process Infrastructure, Mobile Plant, Ports. Conveyor design and verification, crushing plant integration.

### **Civil Engineering**

Earthworks, roadworks, sewerage and water reticulation. Wastewater pumping stations. Drainage and catchment investigations and reports, Urban Water Management Plans, Superintendence of Works, Construction Project Management.

### **Temporary Works**

Civil and Structural NPI to enable permanent works construction. Past work examples include lifting beams for steel bridge erection and pipe rack module for Tunnel Boring Machine ducting.

### **Utilities Infrastructure**

Water/Wastewater, Electricity Transmission, Solid Waste and Recycling. Water Hydraulic design.

### **Energy**

Wind Farm foundations, pads, roads. Solar PV implantation studies, Oil&Gas infrastructure engineering.

### **Heavy Industry**

Original Equipment Manufacturer (OEM) Support, Machinery Design, Manufacturing, Chemicals, Processing, Cement.

### **Specialist Services**

## **Advanced Computational Mechanical Analysis**

Finite Element (FEA), Fatigue, Dynamic, Fracture, Computational Fluid Dynamics (CFD).

### **Registered Plant Engineering**

Pressure Vessels, Dangerous Goods tankers. Cranes, Winching & Lifting, Fitness for Service Assessment.

### **Design Engineering**

Plant and Plant Equipment, Non-Process Infrastructure, Prototyping. Piping and Pumping Systems, P&IDs. Risk Mitigation, Safety and Environment. Safety and Environment. Electrical Systems and Controls.

LV Switchboard design, Control System Design, PLC and HMI selection, telemetry. SCADA system design and programming. Arc Flash Studies.

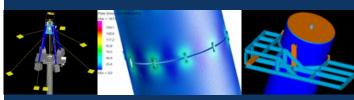
### **Data Acquisition**

In-house: 3D Terrestrial and Metrology Scanning, Strain Gauging, Condition Monitoring.



### Tier 1 miner, Nickel. Wind Farm Stage 1, WA 18x 4.2MW WTG

Foundations, Pads, Access Roads Design for Construction Contractor, 2022. Value added: optimised size of foundations and segmental reinforcement.



### Tier 1 miner, Copper/Gold. Head frame Erection Contractor. SA

Review of the winch rope loads, lug loads, and leg support reactions to validate lifting plans, 2022.



### World-class grain producers group, WA

Initiative to improve efficiency of port bulk storage and reception infrastructure. Challenge to modify rail due to land ownership, and existing conveyor systems unable to achieve targets.

# **Key** Personnel

Meet some of the dedicated individuals who make up our talented and passionate team. Our staff are the key to our clients' success. We are committed to their training and development, so we can continue to deliver fantastic results.



Michael Ferritto

Managing Director & Principal Civil Engineer

Proficiency in road, earthworks and local traffic management design. Involved in planning, managing tenders, construction cost estimates, management of contractors and client-contractor liaison. Superintendent of Contracts under either AS4000 or AS214. Michael has delivered successful projects for clients since 1992.



Nathan Jansen Van Doorn

Lead General Mechanical/ Materials Handling & Principal Mechanical Engineer

Engineering design and fabrication, requiring expert understanding of material handling, machining, fabrication and manufacturing processes. Specialist in root-cause analysis. Design of vehicle dynamics and suspension components and automated packaging equipment. Proficient in audits for AS 4024 Safety of Machinery.



**Ben Galvin**Senior Structural Engineer

Site inspection experience in Newman, Port Hedland and Karratha, as well as Perth metropolitan. Design and managing temporary works for Snowy Mountain 2.0 in NSW, and WA Eliwana Rail Bridges. Ample experience in design with timber, steel and concrete, ranging from residential to large scale, complex infrastructure projects.



**Dave Wyer**Principal Electrical, Instruments and Controls Engineer

20+ years in electrical and control system design across mining, water and manufacturing. Former director of UK a systems integrator with switchboard manufacturing, Engineering Manager at a WA electrical contractor and supervisor in multi-disciplinary engineering. Special interest in pragmatic application of functional safety.



**Atefeh Davarpanah**Senior Structural Designer/ Modeler

3D and 2D design in variety of platforms including Revit, ArchiCAD, Sketch up, MicroStation, Tekla and AutoCAD. Highly skilled in BIM Modelling and Coordination.



**Alberto Puccini**Director of Client Services & Principal Structural Engineer

Founding partner of Studio Techné SRL in Italy in 1997. Design and construction of Pilbara power plants for BHP, Rio Tinto and Horizon Power. Involved in all our major projects including Dampier Salt, Matagarup Bridge and Forrestfield Airport Link in WA, Snowy 2.0 in NSW, and solar and wind farm projects Australia-wide.



**Rob Smith**Principal Civil Engineer

Civil, hydraulic and structural design, superintendence on civil and land development projects, client liaison, project design and management, regulatory requirements, negotiations with councils. Drainage, road, sewer, water supply. Mining camps and associated infrastructure, infrastructure extensions and reports, flood studies.



**Tim Elkington**Principal Mechanical Engineer, Certified AICIP Inspector.

25+ years career producing boilers, pressure vessels, rolling stock and mining equipment. Experience in heavy plate fabrication, welding, non-destructive examination, and heavy machining. Advanced design and assessment, fitness for service assessments and specialist inspection.

## **Our** Values



### Responsive

We seek to anticipate our clients needs



### Reliable

We do what we say we do



#### Results

We are passionate to deliver beyond our client's expectations



#### **Practical**

We perform competently to provide practical solutions



### **Personable**

We communicate effectively and in a friendly manner



### **People**

We seek to create a full and happy life for the community and ourselves

# Why Us?

### An employee-owned business

Established in 1978, McDowall Affleck has diversified to become a multi-disciplined enterprise, offering design, project management and construction for Mechanical, Structural, Civil and Subdivisional Engineering.

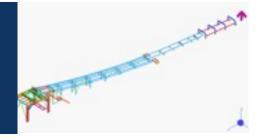
#### Our team

The success of MAPL and MADE has been built around repeat and referral business.

- 41 staff employees.
- Personnel with up to 30 years of continuous service.
- Part of our commitment to training is ensuring that we build adequate redundant capacity in our business.

#### Tier 1 miner, Iron Ore, WA

Conveyor structural and mechanical verification and design of modifications (1,500 tph, 1,200mm belt width, 56m travel).



### **Grid-connected Solar Farm PV, NSW**

96 MW solar farm

Hydrological/ Hydraulics flood risk study, 2019 Value added: Joint work with International Construction Contractor and Studio Techné within very limited timeframes.



# **Key** Clients

### Some of our key clients include:

### **Civil Engineering**

- ARC Infrastructure
- CBH Group
- Dampier Salt Limited
- Discovery Holiday Parks
- Eastcourt Property Group
- Perth Airport
- Strandline Resources Limited
- UGL
- Westforce Construction

### **Electrical Engineering**

- UON
- Westwater
- Valmec

### **Mechanical Engineering**

- Alcoa
- Fortescue Future Industries
- BHP
- CITIC Pacific
- Metso:Outotec
- Mineral Resources Ltd.
- Newcrest
- Newmont
- Rio Tinto
- Sandvik
- South32
- Water Corporation
- Westrac

### **Structural Engineering**

- Advanced Energy Resources
- Aurizon
- Fnel Green Power
- Future Generation JV
- Hitachi Rail STS
- Lendlease
- NEWest Alliance
- NRW
- Soltec Australia
- Webuild (formerly Salini Impregilo)



Tier 1 miner, Nickel. Wind Farm Stage 1, WA

18x 4.2MW Vestas WTG
Foundations, Pads, Access Roads Design
for Construction Contractor, 2022
Also substation and O&M pads, Site
Compound and Batching Plant Compound.



### Tier 1 Global Lithium Hydroxide Producer, WA

2x Belt Feeder Design, Supply, Fabrication and Assembly for OEM, including existing hopper modifications, 2020.

## **Get in** Touch

Get in touch and find out how we can work together today.



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