SPIN

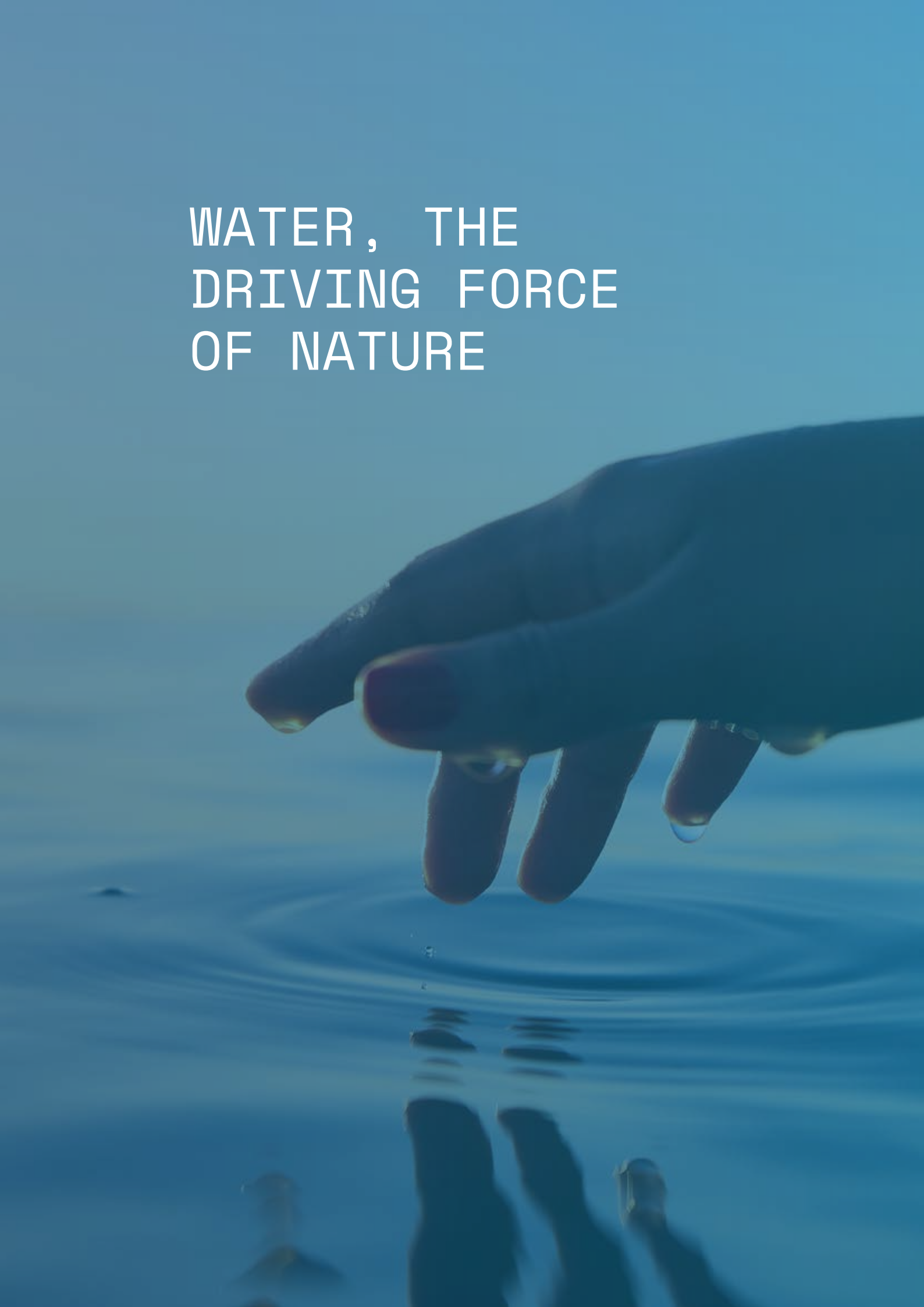
www.SPINgroup.global

EMPOWERING INTEGRATION

SINCE 1981

PERTH | KUALA LUMPUR | BARCELONA | WORCESTER

WATER, THE DRIVING FORCE OF NATURE



SPIN GROUP

Since 1981 SPIN Group provides innovative control engineering services that consistently minimise project implementation risks and enhance the performance of any process optimisation endeavour.

Over the years SPIN Group has grown to become a respected multinational successfully delivering water projects around the globe and establishing presence permanently in different countries including Australia, Malaysia, Spain and the United Kingdom.

EMPOWERING INTEGRATION

SPIN Group is a cutting-edge technology company in the Industrial Automation sector, as well as a pioneer in the design and development of control systems for the manufacturing and process industries.

SPIN Group has a proven track record of successfully delivering both greenfield and brownfield water projects, as well as providing the highest-quality support and maintenance.

« With global experience in providing unique and highly innovative technical solutions for a wide range of sectors, SPIN Group is leading the way within the water industry. »

THE WATER CONTROLS EXPERTS

SPIN AU Pty Ltd, SPIN Group's subsidiary in Australia, became a proud member of the Water Corporation's Process Control System panel.

The stringent financial, technical, occupational health and safety, environmental and quality assurance management systems and certifications that the Water Corporation require before a company can become an approved and certified system integrator reflects SPIN Group's expertise, professionalism and success.

Furthermore, it's no small challenge to provide automation services to the principal supplier of water, wastewater and drainage services throughout the state of Western Australia. Its services, projects and activities span 2.6 million square kilometres and include an asset base of over AU$37 billion.

Being accredited by this selective panel illustrates SPIN's proven processes, outstanding technical skills and invaluable knowledge within the water sector.

SERVICES PROVIDED

With global experience in providing unique and highly innovative technical solutions for a wide range of sectors, SPIN Group is leading the way within the water industry.

Having delivered numerous projects for the water industry over the years, SPIN has effectively addressed challenges, employed state of the art technology and achieved outstanding results within an array of specialised areas. These include:

CONTROL SYSTEMS AND NETWORKS

- Control systems architecture design
- Standard, failsafe and high availability control systems
- Development of functional specifications
- Software development, implementation, testing and commissioning
- Fieldbus and Ethernet network design, configuration and audits.

ELECTRICAL AND INSTRUMENTATION

- Design and manufacturing of control panels
- Installation and commissioning of instrumentation.

OPERATIONS INTELLIGENCE AND INDUSTRY 4.0

- Cybersecurity
- Process historians and reporting
- SQL and non-SQL databases
- Cloud system solution design
- Virtualisation and data centres for high volume data traffic
- Simulation and operator training systems
- Energy consumption monitoring an optimisation.

OPERATIONS AN MAINTENANCE SUPPORT

- Provision of training
- Remote assistance
- Ongoing maintenance and optimisation
- Asset management.

SIGNATURE WATER PROJECTS

« As a result of SPIN's ongoing commitment to the water sector, the company consistently demonstrates exceptional performance in the implementation of control and automation services in water infrastructure on a global level. »

OVERALL HIGHLIGHTS

As a result of SPIN's ongoing commitment to the water sector, the company consistently demonstrates exceptional performance in the implementation of control and automation services in water infrastructure on a global level.

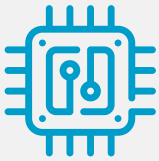
The following projects are just some of the many milestones SPIN has achieved within the water industry. Overall highlights include:

50K

Over 50,000 process objects treated.

500K

Over 500,000 digital and analogue input and outpu channels.



5K

Over 5,000 field bus instruments connected to our controllers using all brands and fieldbus technologies.

75K

More than 75,000 hours of commissioning support with zero safety incidents.

Compliance to strict industry standards.

The undertaking of commissioning activities under harsh and demanding climatic conditions.

Overseas and remote locations project management.

AUSTRALIA

Southern Sea Water Desalination Plant

« The expansion project doubled the capacity of the plant to 100GL and involved tie-ins to the existing control system infrastructure. »

SOUTHERN SEAWATER DESALINATION PLANT PROJECT HIGHLIGHTS

A joint venture of Técnicas Reunidas, Valoriza Water, AJ Lucas and WorleyParsons (SSJV) nominated SPIN in 2012 as a leading subcontractor for the entire Plant Control System package for the Southern Seawater Desalination Plant Expansion at Binningup (WA).

This nomination reflects SPIN's skill, professionalism and success as an innovative and sustainable company within the water industry.

The expansion project doubled the capacity of the plant to 100GL and involved tie-ins to the existing control system infrastructure.

This is another example of SPIN's successful projects, which was completed in early 2015. The company also established a services contract with the O&M Alliance for ongoing maintenance and support.

SPIN successfully performed commissioning activities while the existing plant was in operation, which resulted in both control systems being seamlessly integrated into a single platform.

AUSTRALIA

Beenyup Advanced Water Recycling Plant

« The project required the plant to produce 14 GL/year of recycled water, providing a new independent water source to boost much-needed drinking water supplies in Perth, Western Australia. »

BEENYUP ADVANCED WATER RECYCLING PLANT PROJECT HIGHLIGHTS

CH2M Hill and Thiess (CHT Joint Venture) were awarded the design and construction of the Beenyup Advanced Water Recycling Plant (BAWRP) Stage 1 in alliance with the Water Corporation.

Nominated with a great responsibility in March 2015, SPIN was chosen as the subcontractor to undertake the Control System Integration package.

This project included the crucial supply of hardware and complex design services. The nomination is a reflection of SPIN's extensive experience as well as its industry expertise.

The project required the plant to produce 14 GL/year of recycled water, providing a new independent water source to boost much needed drinking water supplies in Perth, Western Australia.

Stage 1 was effectively completed in 2016. Following this, the Water Corporation awarded the expansion, to double the capacity of the plant, to the Clough Suez joint venture in 2018.

Thanks to the outstanding performance during Stage 1, SPIN was awarded the Control System Integration package for the project's second stage by the joint venture.

OMAN

Sohar Sea Water Reverse Osmosis Desalination Plant

« The desalination plant, employing reverse osmosis technology, is one of the most significant investments ever made in the desalination of seawater in Oman. »

SOHAR SEA WATER REVERSE OSMOSIS DESALINATION PLANT PROJECT HIGHLIGHTS

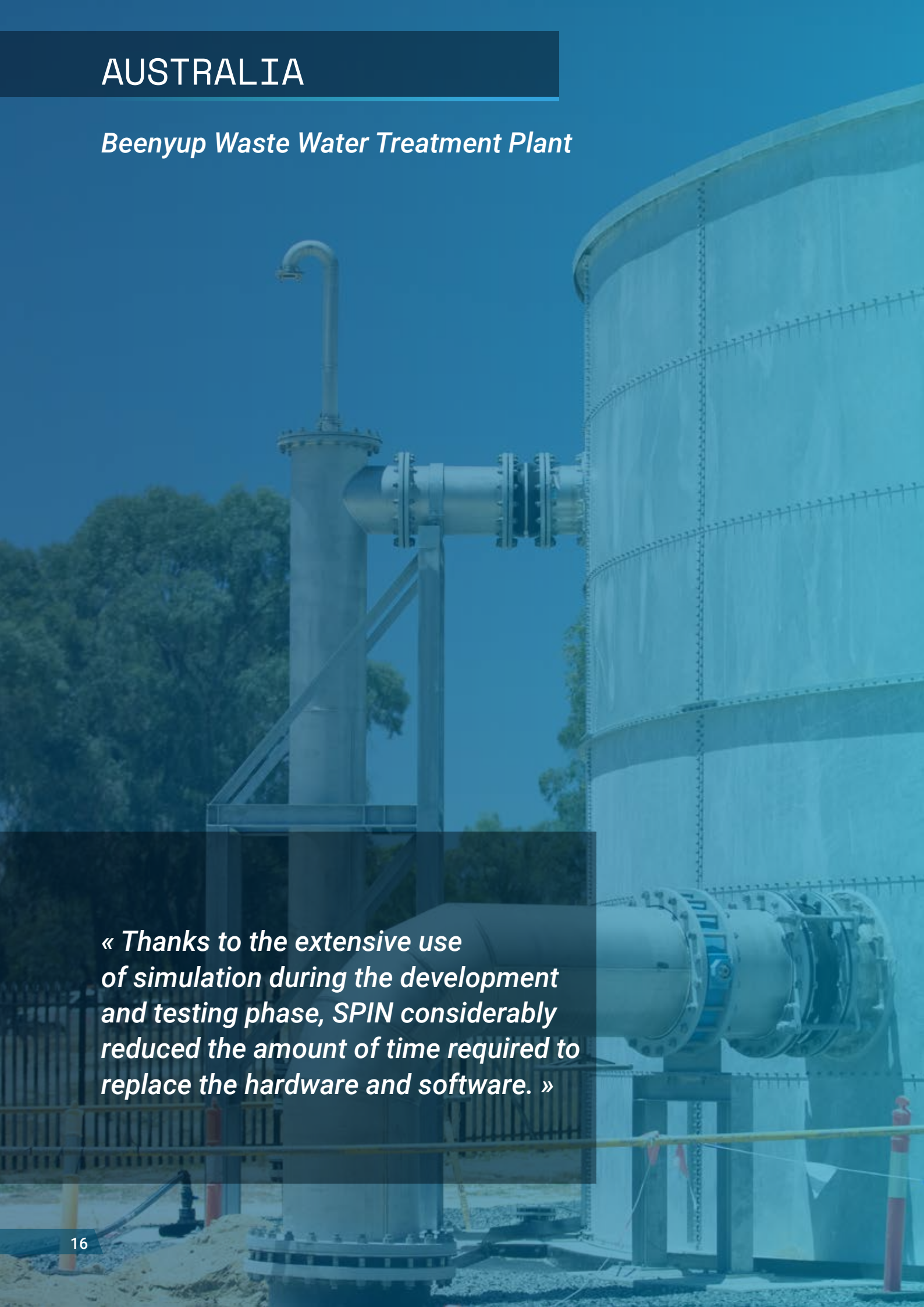
Sacyr, via its subsidiary, Valoriza Agua, was awarded the design, construction, operation and maintenance of a US$1.2 billion seawater desalination plant in Sohar in 2018.

The desalination plant, employing reverse osmosis technology, is one of the most significant investments ever made in the desalination of seawater in Oman, with a future capacity of 250,000 m3/day.

SPIN was, among many contesters, selected as the preferred contractor for the Control System Integration package, including the design and supply of the control cubicles.

AUSTRALIA

Beenyup Waste Water Treatment Plant



« Thanks to the extensive use of simulation during the development and testing phase, SPIN considerably reduced the amount of time required to replace the hardware and software. »

BEENYUP WASTE WATER TREATMENT PLANT PROJECT HIGHLIGHTS

With a treatment capacity of 135,000 m3/day, the Water Corporation engaged SPIN to upgrade the obsolete SCADA software at the site while also replacing obsolete PLCs.

Thanks to the extensive use of simulation during the development and testing phase, SPIN considerably reduced the amount of time required to replace the hardware and software. This process allowed a seamless integration without disruption to the waste water plant's operations.

To ensure no shutdowns were required, the project was approached in stages, and it was completed in 2019.

One of Western Australia's three largest wastewater treatment plants, its operation is critical in helping to ensure the climate resilience, liveability and sustainability of the state.

AUSTRALIA

Newman Potable Water Treatment Plan

« The plant supplies water to the population of Newman and can treat an average quantity of 16,500 m3/day. »

NEWMAN POTABLE WATER TREATMENT PLANT PROJECT HIGHLIGHTS

The EPC contractor, Valoriza Water Australia, was awarded the contract for executing the new Potable Water Treatment Plant of Newman for the mining company, BHP Billiton, in the northwest of Australia in 2016.

The plant supplies water to the population of Newman, and can treat an average quantity of 16,500 m3/day.

This covers the requirements associated with the mining company and a population of 5,500 inhabitants.

SPIN successfully secured the Control System Integration package as well as the design and supply of control cubicles, delivering the highest-quality results for both

SINGAPORE

TUAS 3
Desalination Plant

« Named the Desalination Plant of the Year at the 2019 Global Water Awards, the TUAS 3 plant has a drinking water production capacity of 136,000 m3/ day. »

TUAS 3 DESALINATION PLANT PROJECT HIGHLIGHTS

As a key subcontractor to HSL Pte Ltd, Tedagua (ACS Group) was awarded the D&C contract for the TUAS 3 desalination plant by the Singapore National Water Agency, PUB.

Named the Desalination Plant of the Year at the 2019 Global Water Awards, the TUAS 3 plant has a drinking water production capacity of 136,000 m3/day.

Offering one of the largest reverse osmosis desalination plants in the region and providing enough drinking water for 200,000 of Singapore›s 1.3 million households, it’s no surprise that this plant received such an award.

Tedagua reached out to SPIN during the Design Phase in order to ensure optimal quality for the Control System design.

« With extensive experience, it's no surprise that SPIN has worked with clients from all around the world. »

OTHER WATER-RELATED PROJECTS

With extensive experience, it's no surprise that SPIN has worked with clients from all around the world. Listed below are just some of the additional projects that SPIN has effectively and successfully completed in recent years:

PROJECT	YEAR OF COMPLETION	ACTIVITIES
Southern Seawater Desalination Plant	2019	Operation and maintenance support
Margaret River Waste Water Treatment Plant	2019	Doubling capacity of the 1.5MLD plant
Bypass Pump Control System	2019	Control system upgrade of 20 bypass pump skids
Warderlocking Tank and Chlorination Upgrade	2019	Chlorination control system for the inlet to the new tank
Harding Dam Citec to ClearSCADA Upgrade	2019	Upgrade of the currently installed Citect ClearSCADA software
Prevention of Falls	2018	Upgrade of ground tanks higher than 3m in the Mid-West region to meet OHS regulations
Point Peron WWTP Upgrade	2018	Control works associated to refurbishment of assets in the 16MLD plant
Bunbury WWTP Optimisation	2018	Control works associated with optimisation of the 16MLD plant
Albany Waste Water Treatment Plant Upgrade	2018	Upgrade of IDEA lagoon from 4.5ML/d to 8.5ML/d
Testing S7-1500	2017	Consulting services for the Water Corporation as part of the preferred equipment list

VIRTUAL COMMISSIONING

SPIN differentiates and elevates itself above its competitors. Taking the utmost pride in striving to deliver outstanding service and a high-quality product, it's no surprise this company is leading the way within the water industry.

With a dedication to time and resources, as well as impeccable attention to detail, SPIN has an unwavering ability to optimise both the processes and the technology employed to deliver the best results possible.

SPIN was one of Australia's first companies to introduce SIMIT into the lifecycle of a project.

This software tool has been fundamental in overcoming the complexities associated with project implementation. In reflecting on this strategy, it's clear SPIN's progressive and forward-thinking attitude to the water industry is an invaluable asset.

« SIMIT is a platform like no other. Delivering exceptional results and nothing less, Currently SPIN is a leader and sets the benchmark in the employment and use of this procedure. »

SIMIT

Allowing the simulation of Profibus networks whilst enabling comprehensive tests of automation projects, as well as virtual commissioning, SIMIT is a platform like no other. Delivering exceptional results and nothing less, SPIN is currently a leader and sets the benchmark in the employment and use of this procedure.

The SIMIT framework offers numerous benefits throughout the lifecycle of the project, including:

TEST AUTOMATION

Ensures the quality of the automation system and improves test capabilities during the development phase.

FACTORY ACCEPTANCE TEST

Allows testing of the control system without additional code in the PLC. This improves the control system's reliability and can reduce testing time by up to 50%.

SITE ACCEPTANCE TEST

Improved testing can reduce commissioning time by up to 30%.

OPERATOR TRAINING SYSTEM

SIMIT can be used for realistic training environments to train operations personnel.

PERTH

Level 7,
172 St.Georges
Terrace, Perth
WA 6000
Australia

T +61 894 86 9300
F +61 894 81 83 00
info@SPINau.com.au
www.SPINau.com.au

KUALA LUMPUR

S.11.03, Level 11,
Menara Trend IMS, 68,
Jalan Batai Laut 4
41300 Klang, Selangor
Malaysia

T +603 33 45 30 08
F +603 33 45 30 08
info@SPINmalaysia.com
www.SPINmalaysia.com

BARCELONA

Rocafort
241-243, Entlo. 5ª
08029 Barcelona
Spain

T +34 93 494 93 00
T +34 93 363 20 17
F +34 93 494 93 01
info@SPIN.es
www.SPIN.es

WORCESTER

Oak House,
Bromyard Road
Worcester WR2 5HP
England

T +44 19 05 74 93 00
sales@SPINuk.com
www.SPINuk.com