

2019 SPIECAPAG CAPABILITY STATEMENT



The leading Pipeline, Facilities and Horizontal Directional Drilling contractor



THREE DIVISIONS OFFERING COMPLIMENTARY SERVICES TO THE ENERGY, RESOURCES AND UTILITIES SECTORS



HDI LUCAS
ENTREPOSE

HORIZONTAL DIRECTIONAL DRILLING

Trenchless installation of pipelines, cables and conduits under natural or artificial obstacles



SPIECAPAG
ENTREPOSE

PIPELINES & FACILITIES

A leader in pipeline & facilities contracting servicing the energy, mining and water sectors



SPIECAPAG
ENTREPOSE

UTILITIES

Expertise in civil construction for municipalities and utilities, servicing water, waste water and gas network infrastructure



FOCUSED ON THE COMMUNITY

Offering employment and training opportunities to local people, and supply-chain opportunities to local companies. Local individuals and their communities gain skills that contribute to our projects' success by working alongside Spiecapag's experienced project staff.



GLOBAL BEST PRACTICE

Working on projects across the globe, Spiecapag can genuinely offer continuity to key staff. This builds a strong corporate memory, allowing us to retain best practice knowledge that de-risks complex projects.



FLEXIBLE & COOPERATIVE MANAGEMENT

Spiecapag has the experience to quickly integrate with, and work alongside other businesses, be they other contractors, joint venture partners, or financiers. This allows resources to be quickly focused on delivering successful outcomes.



FINANCIAL STABILITY

Part of the Vinci Group that has an annual turnover of \$65 billion. With a credit rating of A- by Standard and Poors, and A3 by Moody's, Spiecapag is capable of delivering even the largest projects.



SAFETY & ENVIRONMENT

A high focus on safety and environmental performance means that our workers go home safe at the end of every day. This culture supports reliable project delivery.



INNOVATION

Bring new ideas to the table, be they in delivery partnerships, safety, quality, procurement & logistics, community engagement, financing or contracting to deliver the best solutions to Spiecapag's clients.



PLANT & PEOPLE

Spiecapag's in-house, specialist pipeline plant is overseen by our experienced project managers and site supervisors. This streamlines mobilisation and efficient use of resources.

SPIECAPAG

[Spee-cah-pag]

noun

The pipelines specialist within the Entrepose family of companies, delivering projects across Oceania and the wider Asia Pacific.

WHO WE ARE

With almost 100 years of experience, Spiecapag is one of the world's leading companies in oil, gas and water pipelines and associated systems.

Services we offer

- Onshore pipelines and associated facilities for the energy, resources and utilities sectors
- Horizontal Directional Drilling (HDD) trenchless installation
- Pipeline repairs
- Procurement and logistics to regional and remote sites
- Design, routing and constructability studies.

Capable and experienced

A specialist in projects of all sizes and complexity, Spiecapag has a unique list of references, from flagship projects to brownfield works.

Community-centric

Spiecapag believes that there can be no economic development without the respect of stakeholders in and around its projects.

VALUE WE BRING

Focused on community

Spiecapag has a long tradition of supporting and engaging traditional landowners and locals in the delivery of its projects. In support of this commitment, Spiecapag developed and implemented a Capacity Building Program on its remote projects. A key fundamental of this program is working with communities to ensure lasting benefits in terms of employment and commercial opportunities that endure beyond the time-frame of the project.

Industry-leading safety innovation

The word 'Safety' has become synonymous with the expectations of the construction industry, and Spiecapag has an enviable safety record, made possible by an innovative approach to managing new and complex risks. All employees are empowered to assess their work-site risks and to implement appropriate controls. Employees are also encouraged to innovate new ideas and continually improve the controls and management of risks.

International compliance accreditation

Spiecapag is committed to complying with best practice methods. To support this commitment, and because Spiecapag operates to international standards, Spiecapag holds multiple ISO accreditations: 9001 Quality Management Systems, 14001 Environmental Management and 18001 Occupational Health and Safety.



"Spiecapag repeatedly demonstrated their experience as an expert pipeline constructor, with strong local management and safety processes, working alongside other contractors."

Andrew Down, Project Manager – Northern Trunklines, QCLNG Project, BG Group/Shell

"Jemena found Spiecapag Australia to be experienced and skillful in the delivery of the works, particularly in light of the mountainous and challenging terrain. Spiecapag were very focused on working with the local stakeholders and delivered against the project commitments for time, cost and importantly for us our local commitments for indigenous jobs and contracts."

"We would definitely consider Spiecapag for any future work we have."

Paul Bilston, Pipeline Project Manager – Northern Gas Pipeline Project, Jemena

Spiecapag has completed some of the most challenging pipeline construction projects in the world, and these have been achieved by continually pushing the boundaries of construction techniques through innovative design and systematic construction techniques. We maintain fleets of specialised equipment, specifically designed to safely deliver projects in some of the most challenging environments on earth.

Fields of expertise

- Onshore and near-shore pipelines for the oil & gas sectors including compression, pumping and metering stations
- Water supply and distribution networks
- Pump stations and tailings dams
- Slurry, fuel lines and mining transfer pipelines.

Ongoing and recently completed projects

Sunrise Project / Clean Teq / New South Wales

70km of pipeline and fibre optics to provide long-term water supply to a Nickel-Cobalt mine near Parkes, about 350km west-north-west of Sydney.

Spiecapag was contracted to deliver the complete engineering, procurement and construction (EPC) of 70km x DN450mm Ductile Iron Cement Lined (DACL) water pipeline from Lachlan River to Sunrise Mine Site. The scope includes a river inlet, multiple bores, a pump station, a large storage tank, and multiple major river crossings via pipe bridge or horizontal drilling. Detailed design activities have commenced incl. topographic and geotechnical surveys. Construction is expected to commence Q2 in 2019 with final commissioning and completion in Q1 of 2020.

Compressor Relocation / Santos / Cooper Basin Queensland

Relocate two existing Enerflex compression packages for re-installation with new auxiliary equipment and piping connections near Ballera, about 1,100km west of Brisbane.

This project involved the isolation and

disconnection of two-stage reciprocating compressors involving major lifts with a 250T crane, from approximately 35km north east of Ballera, followed by their transportation, and installation at the new site, 70km east of Ballera. Modifications to the existing manifold piping arrangement were also required, and, with our joint venture partner, we were responsible for testing of the newly installed system, including hydro, loop, functional and welding testing.

Phillip Creek Compressor Station Interconnectors to AGP and NGP / Jemena / Northern Territory

Spiecapag constructed the interconnectors required to complete the final tie-in works at the Phillip Creek Compressor Station. The scope included installation of the 100m interconnect line from the compressor to the APA Amadeus Gas Pipeline (AGP) and 150m interconnect line to the newly installed Northern Gas Pipeline (NGP). The scope also included above-ground pipework and the fabrication of pipe storage racks.

Northern Gas Pipeline / Jemena / Queensland

142km of pipeline connecting gas-producing fields in the Northern Territory to Australia's East Coast gas market via Mt Isa in north-west Queensland.

The project was originally planned to be built around the wet season, with 93km scheduled to be completed before the wet season, and the remainder as part as a remobilisation in March. Due to early access and high productivity rates, Spiecapag safely completed all mainline construction activities prior to the Christmas period, avoiding the need for the 2nd mobilisation in March. Working in a remote part of Queensland, Spiecapag engaged extensively with local businesses, including indigenous communities, where job-specific training was delivered, leading to 24% of our workforce coming from local indigenous communities.



~100 YEARS
of experience
globally

24%
Indigenous workforce engagement
on most recent remote project

+50,000 km
of pipelines built
globally



...Projects recently completed

Victorian Northern Interconnect Expansion / APA / / New South Wales & Victoria

165km of domestic gas looping pipelines, crossing hundreds of rural and semi-rural properties in NSW and Victoria, entirely constructed within the easement of an existing live, high pressure pipeline.

The project was the third phase of a \$200 million proposal to enable more gas to flow into NSW from existing supply basins by expanding the Victorian infrastructure and to alleviate supply pressures by flowing gas in from other sources. Working for over 600,000 man hours without a single lost time injury (LTIFR = 0), we constructed 95km of 400mm Outside Diameter (OD) pipe in Victoria, and 70km of 450mm OD pipe in NSW. Overall the project consisted of 7 Loops, 2 of which are in NSW and 5 in Victoria.

Eastern Goldfields Pipeline / APA / Western Australia

293km of gas pipeline across the Great Victorian Desert from Murrin Murrin to two offtakes, one at KP83 and the second at KP293 in a region 12 hours drive north-east of Perth.

Spiecapag's scope of work included all construction elements of the gas pipeline from clear and grade through to re-instatement. The works included operating multiple workfronts, each delivering 5km of productivity per day on average to achieve project schedule. The project was delivered early at both off take points, enabling early commissioning and gas up of the pipeline, with no time lost due to injuries (LTIFR = 0). Proactive environmental practices on the project resulted in the team being awarded industry environment awards for excellent fauna management.

QCLNG Northern Trunklines / BG Group (Shell) / Queensland

167km of buried high-voltage electricity cables, 54km of gas pipelines and 25km water trunklines in central Queensland.

The project was a brownfield development and the construction was made more complex by the high number of trenches in the same working width: one particular stretch of right of way had seven trenches running in parallel which gave rise to challenges with work area management and simultaneous operations. The project successfully delivered 155 crossings of road, water courses, or existing pipelines, and was recognised with awards for its safety performance, resulting in zero lost time injuries (LTIFR = 0).

PNG LNG / Esso Highlands (Exxon Mobil) / Papua New Guinea

Over 450km of onshore pipelines to transport natural gas from the Hides Gas Conditioning Plant (HGCP) to the Omati River, and condensate from HGCP to the Kutubu Central Processing Facility.

This greenfield project from the PNG highlands to the coast involved 2,400 local employees, of which 1,900 were customary landholders along the pipeline route. Spiecapag delivered the project in a way that gave local communities opportunities and training that would be useful in the future. One of the greatest challenges on this project was logistics to very remote locations, with the linepipe transported on barges up the river network to our lay-down yard, and roads and bridges being constructed along the remainder of the route. Another significant challenge was the terrain, with very steep slopes along that route where we used a combination of spider excavators and cable system to install the infrastructure.



VNIE
165km
Gas Pipeline
Victoria & NSW




NGP
142km
Gas Pipeline
Queensland



EGP
293km
Gas Pipeline
Western Australia



QCLNG
246km
Gas/Water/FO
Queensland



PNG LNG
450km
Gas Pipeline
Papua New Guinea

"Spiecapag's efforts in completing this project within expected time-frames were greatly appreciated. I would not hesitate to recommend working with Spiecapag again in the future."

Sam Stephenson, Mechanical & Piping Engineer
Eos Export Pipeline, Senex Energy

HORIZONTAL DIRECTIONAL DRILLING

Thanks to decades of experience in thousands of projects around the world, HDI Lucas, a subsidiary of Spiecapag Australia and sister company of HDI, France, is a key player in the field of horizontal directional drilling.

Modern, adaptable and complementary Equipment

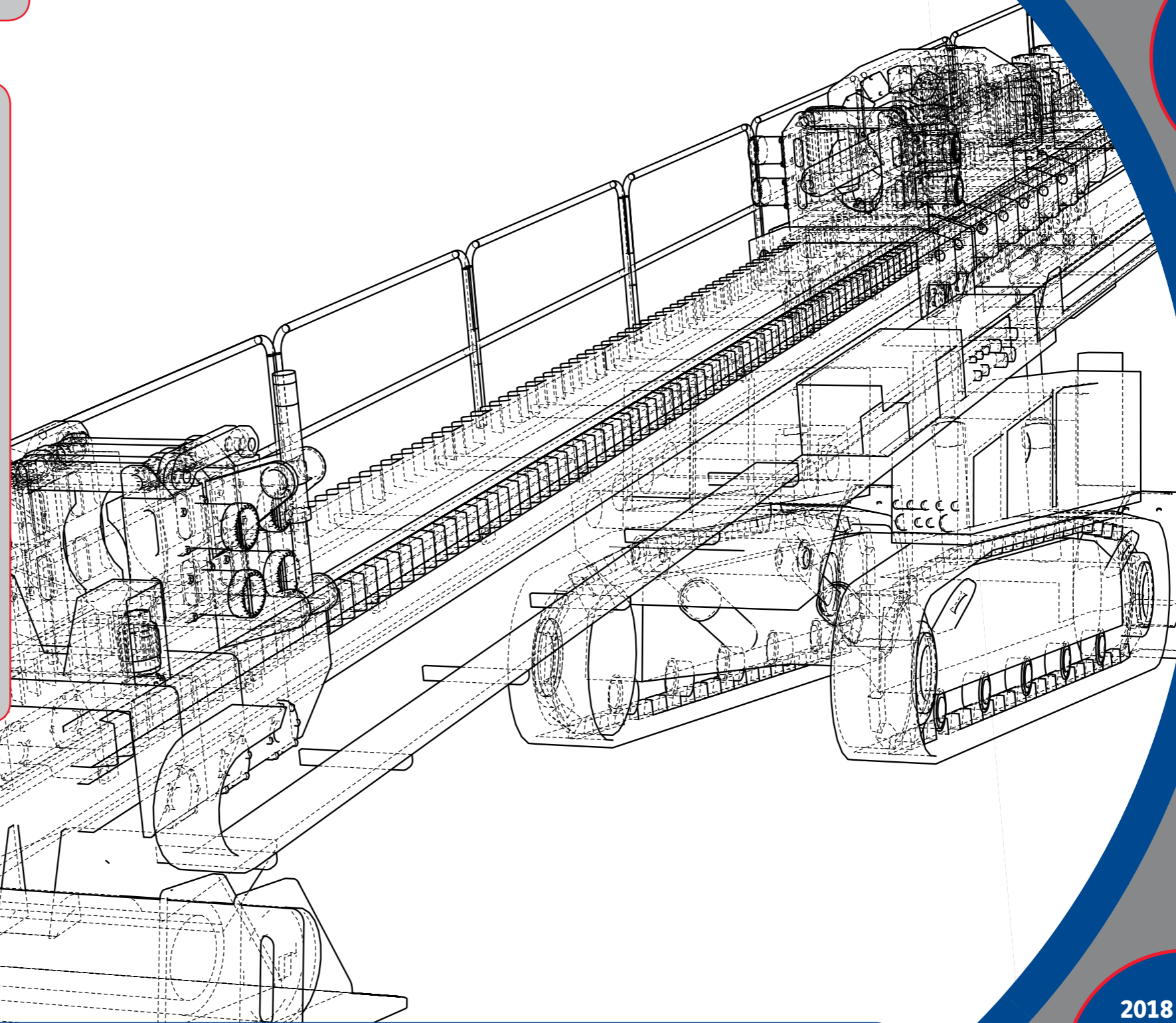
HDI's drilling rigs offer a pulling capacity ranging between 35 and 400 tons. They allow for the installation of small size pipelines over short distances as well as large diameter pipelines (up to DN 1400) over very long distances.

Rigs are trailer or crawler mounted and consist of a central beam rack with a carriage moved by pinions powered by hydraulic motors. Hydraulic rotary motors located on the carriage provide the necessary rotary force.

Each drilling rig has its own control cabin, steering kit, high pressure pump and other ancillary equipment, forming a complete and autonomous drilling spread. The HD 650 and HD 350 models are designed and manufactured in-house.

Advantages of Directional Drilling

- Construction permits are granted quickly
- Unrivalled protection for pipelines
- Surface traffic is not disrupted.



1987
Drilled the first landfall using directional drilling (ESSO – Bass Strait, Australia)

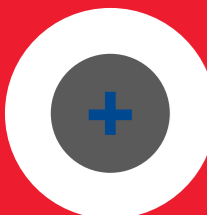
1991
Drilled the first HDD in rock (SNAM – Sicily, Italy and TPC – Niagara, USA)

1991
Installed the first 48" pipeline by directional drilling (GASUNIE – Canal Noord Holland, Netherlands)

2002
Completed the first HDD over 2km in length (DUKE ENERGY – Tamar River, Tasmania, Australia)

2012
Completed the world's largest HDD Project, including 9 Landfall HDD at 800DN (CHEVRON – Gorgon Gas Project, Western Australia)

2018 Installed largest-ever volume of piping by directional drilling in a single "shot" 1820m of 48" pipe (TAP, River Axios, Greece)



WORLD RECORD HOLDER FOR LARGEST VOLUME OF PIPE BY HDD IN A SINGLE SHOT - 1,820M OF 48"



OVER 2,000 HOLES DRILLED



2,000,000+ METRES INSTALLED

SECTORS OF OPERATION

Oil & Gas

HDI Lucas has worked on many landmark projects in Australia and South East Asia.

- The Gorgon LNG Project (Barrow Island, WA), 9x 800m landfalls up to DN800
- Tangguh LNG Project (West Papua), 3x 2065m landfalls up to DN600
- Hangzhou Bay Pipeline Crossing (Shanghai), 2x 1750m landfalls up to DN600
- Tamar River Pipeline (Tasmania), 2065m in single crossing length
- SeaGas Pipeline (South Australia & Victoria), 8 crossings for total length of 3750m
- Pohokura Gas Field Development (New Zealand), 2x 1850m landfalls up to DN600.

Electricity and Telecommunications

Our company has delivered multiple world firsts for telecommunications and power utilities. We have worked with our clients to bring fibre optic to the tops of rugged sandstone mountains and high-voltage electricity cables under waterways to protect them from inclement weather conditions.

- EDF Garonne River (France): world first HDD for high-voltage (225kV) cable
- China Light & Power (Hong Kong): largest cable installation by HDD in 2001, with 6 separate 1400m crossings
- Telstra Mount Sugarloaf (NSW): optical fibre cable drill, setting world record for height gained using HDD
- TUAS (Singapore): 2 x 700m drills for fibre optic ducts.

Water, Sanitation and Minerals

HDI Lucas installs pipelines for the transportation of drinking water and waste water as well as water intake lines for desalination plants and discharge lines for sewage, following treatment.

- Western Corridor Recycled Water Pipeline (QLD), 4x 1200m crossing DN600
- Tauranga Southern Wastewater Pipeline (New Zealand), 1600m DN900
- Chatswood Graded Sewer Pipeline (NSW), 1860m DN820
- Illawarra Waste Water Transfer Pipeline (NSW), 1962m DN900
- Cascades Upper Blue Mountains Sewer Pipeline (NSW), 2 x 2440m crossings up to DN450.



Trenchless installation of pipelines, cables and conduits under natural or artificial obstacles



APPLICATIONS FOR HORIZONTAL DIRECTIONAL DRILLING



LANDFALLS

Landfalls using HDD are more and more frequent due to the advantages they offer compared to traditional techniques:

- No environmental impact on coastlines (protected beaches and sensitive areas) or on residents (protected fauna and holidaymakers);
- Safe crossing of surf zones;
- Drilling at a sufficient depth to ensure protection of the pipeline against erosion.

ONSHORE OBSTACLES

Onshore obstacles are typically waterways (rivers, streams, canals, etc.), roads, motorways or railways. Many other applications are possible, such as crossing golf courses, residential areas, rock outcrops, airport runways, dump sites, quarries under operation, environmentally sensitive areas, etc.

COASTLINE

The Utilities division of Spiecapag in Australia specialises in the construction and maintenance of civil infrastructure projects across the water, wastewater and gas sectors.

As a complete pipeline and infrastructure Engineering, Procurement and Construction contractor for minor through to major capital infrastructure programs, we combine the knowledge, experience, support and maturity of a large pipeline construction business with the skills, systems and agility to deliver cost-effective outcomes scaled for the Utilities sector.

This know-how in the construction of utility pipelines and infrastructure extends

to associated structures, including amongst others:

- Pump stations
- Metering stations
- Control and storage facilities
- Maintenance chambers
- Emergency relief overflow structures
- Valves, fire hydrants
- Flow meters and
- Drainage structures.

Our philosophy is to build long-term relationships with the Utilities sector and the communities they serve through our core values of honesty, reliability, competence, safety, transparency and collaboration.



**SCALABLE, LOCAL
WORKFORCE**



**INTEGRITY IN
COMMUNITY AND
COMMERCIAL
DEALINGS**



**SAFETY AS OUR
CORE FOCUS**

**Expertise in civil construction for municipalities and utilities,
servicing water, waste water and gas network infrastructure**

Previous Projects

Robertson – NSW

Appointed by Wingecarribee Shire Council to construct an advanced sewer treatment facility that utilises Siemens membrane technology to purify all the wastewater generated by the residents and commercial businesses of the town of Robertson. This project involved the construction a central advanced waste water treatment system as well as storage and pump stations, a 14km pipeline and a new 49ML treated water storage dam. The treatment process will remove 99.9% of bacteria and viruses.



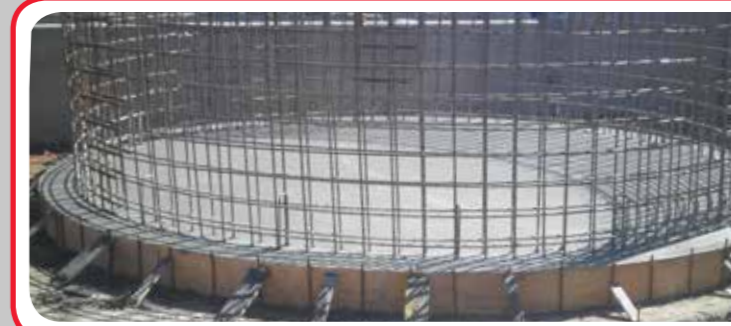
Flowerdale - VIC

Appointed by Wagga Wagga City Council to deliver the Design and Construct contract for the Flowerdale Sewer Augmentation. The project consisted of the construction of a new 560mm OD sewer rising main and a 250mm treated water return line from the Pearson St pumping station to the Narrung St sewerage treatment plant, 2.8km away. The works included three new pumps in an existing wet well, new valve pits, new meter pits, intake valves to the existing wet wells, a new substation within the compound and refurbishment of the telemetry, SCADA and alarms to the pumping station.



Kangaroo Valley – NSW

Appointed by Shoalhaven City Council to deliver Design & Construct contract for all required facilities for the Kangaroo Valley Sewerage Scheme. This project required the installation of a reticulated sewage collection system using a pressure sewerage network including advanced membrane and biological treatment to enable the reclaimed water to be used for local irrigation use on pastures and for safe discharge into the Kangaroo River to meet Sydney Catchment Authorities Specifications.



Dungog – NSW

Appointed by Hunter Water Corporation to design and construct the 30ML Dungog Clear Water Tank (CWT) and 7ML Anna Bay Reservoir using precast concrete panels 2.8m wide with 287mm wide cast-in-situ joints. The walls were stressed vertically and horizontally. Similarly, the floor was also cast-in-situ and post tensioned which led to cost savings of about \$1 million in comparison to steel construction. This project allowed for the treatment of water prior to release into the mains which feed Maitland and parts of Newcastle.



FACILITATING PROJECT DELIVERY

Spiecapag's immediate parent, Entrepose Group, is a subsidiary of VINCI, a world leader in concessions and construction. Entrepose is an international contractor that specialises in designing, building and operating infrastructure for production, transport and storage in the oil and gas industry, utility and for other energy & resources sectors.

Entrepose works globally to perform turnkey projects under EPCC contracts (engineering, procurement, construction and commissioning) or specialist works contracts. It has an outstanding reputation for safety expertise, with a great number of successes

in the management of large scale projects. Entrepose's know-how is driven by its major, internationally-established brands, developing global solutions that cover every aspect of infrastructure and equipment projects in onshore, offshore and underground fields including their interfaces. By offering integrated packages alongside other companies within VINCI's construction division, this know-how can also extend to civil engineering and facilities maintenance.

more than **3,000** permanent employees

Nearly **250** projects completed yearly

Presence and activity in over **30** countries

The Entrepose group is organised into five business lines, plus a network of cross-disciplinary, regional subsidiaries.

ONSHORE		OFFSHORE	UNDERGROUND
PROCESSING AND RECYCLING WASTE VINCI VINCI Environment UK VINCI Environnement Central Europe	INFRASTRUCTURE FOR THE OIL AND GAS SECTORS AND FOR INDUSTRY ENTREPOSE CONTRACTING Entrepose IKL Entrepose Industries Entrepose CMPEA Entrepose de México	ONSHORE PIPELINES SPIECAPAG Spiecapag Régions France Spiecapag Australia HDI	OFFSHORE WORKS GEOCEAN UNDERGROUND STORAGE GEOSTOCK Geostock Sandia Geostock Asia UGS Geogreen Entrepose Drilling



Spiecapag's membership of the VINCI Group provides our clients with assurances of solid parent company backing. At A\$65.2 billion (40.25 billion Euro) in 2017 revenues, VINCI's strength in financial and construction markets can make all the difference on complex projects.

Simple benefits include enabling Spiecapag to leverage of the global buying power associated with such a large, global, entity, and our use of VINCI's systems, processes, and research and development to provide a safer, reliable and world class service to our clients.

Vinci Construction employs thousands of people in over 100 countries. The business provides a wide range of services for its infrastructure projects, including financing, design, construction, and maintenance.

Within the group there are divisions with expertise in all constructions fields that are ready and willing to assist with any specialist requirements.



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