

SMP provides specialised piping solution for the world's biggest and first fully automated lithium chemical manufacturing facility outside of China.

Tianqi has developed a lithium hydroxide plant in Kwinana, south of Perth in Western Australia, to help meet rapidly growing demand for rechargeable batteries driven primarily by the electric vehicle and energy storage system industries.

Stage one of the plant will produce 24,000 tonnes of battery grade lithium hydroxide per annum and incorporates innovative technologies and processes to produce the highest quality product. Lithium hydroxide is a lithium compound derived from spodumene, a lithium-bearing mineral. Spodumene will be locally sourced and the lithium hydroxide will be containerised and exported from Fremantle to customers around the globe.

SMP Engineering was contracted by MSP Engineering as a specialised piping contractor to install 15,000+ lineal metres of poly, carbon steel, 304L, 316L and duplex stainless steel. Pipe ranged from 15nb – 300nb with the majority being small bore site run services and utilities including as built drawings once complete. The team completed in excess of 8000 welds and required a peak manning of 200 direct project crew consisting of Coded Welders, Boilermakers, Fitters, Crane Operators, Riggers and Trades Assistants. We had an experienced leadership team of 40 consisting of a Project Manager, Superintendents, Supervisors, Welding Inspectors, Engineers, HSE Officers to oversee the safe and quality outcome achieved.

This team completed the installation as well as:

- Specialised procurement on behalf of the client
- Materials Control for SMP works and on behalf of the client
- Piping yard receivables and dispatch on behalf of the client
- Full weld traceability and MDR

### Project Key Facts

#### Project Owner

Tianqi Lithium

#### Project

Lithium Hydroxide Processing Plant

#### Client

MSP Engineering

#### Project Value

~ \$33M

#### SMP Scope

Provide a specialist piping contractor:

- 304L, 316L and duplex s/s
- Site run small bore
- Large bore 2" – 12"
- Mechanical equipment installation



Photo Credit: Tianqi Lithium

### Project Milestones

- + Peak Manning 240
  - o Directs 200
  - o Indirects 40
- + 278,000 project man hours LTI free
- + 36,274 Take 5's
- + 4,744 Safe Act Observations.
- + 10 km+ small bore piping installed
- + 5 km+ large bore piping installed
- + 900+ Pipe Supports (site fab & install)

***"We selected SMP Engineering as our site run piping specialist based on their reputation to provide a quality and safe outcome. They delivered on this and I would recommend them for any piping works suitable and aligned with their capability."***

*Len Greenhalgh, Manager Construction, MSP Engineering*

Structural+Mechanical+Piping+Engineering