

CRAFTED

WITH
CAPRAL



Volgren is Australia's largest and most trusted bus body builder. They design and manufacture public transport buses of all types, across multiple technologies including zero-emission vehicles.

Capral works closely with Volgren as a key supplier of standard and exclusive Aluminium extrusions, sheet and machining services.

CAPRAL
ALUMINIUM

DRIVING A SUSTAINABLE FUTURE.

In the intensely competitive world of manufacturing, innovation is essential.

Accordingly, Australia's largest bus body manufacturer Volgren has made its name with innovative, sustainable and efficient public transport solutions.

The company built its first bus in 1979 with the promise of creating a more reliable, comfortable and longer-lasting vehicle with lower operating costs than others then available.

Today, Volgren designs, manufactures and assembles public transport buses of all types across multiple technologies, including zero-emission vehicles.

Thanks to its 400-strong manufacturing, operations and aftersales support teams across NSW, Victoria, Queensland and Western Australia, its bus bodies are close to 90 per cent locally produced and offer the lowest lifetime cost of any bus in Australia.

Since 2018 Volgren has delivered dozens of hybrid and electric buses to Australian operators and is now fast-tracking delivery of Australia's first European hydrogen fuel cell buses.

Volgren's E-bus, the Optimus E-Bus, is one of its class's lightest zero-emission bus bodies and operates successfully in Melbourne, Sydney, Brisbane and Perth. The body has been effectively engineered to suit multiple electric chassis and complies with Australia's highest safety and flammability standards for buses.

Although Volgren officially began trading in the 1970s, its story started in 1940s Dandenong, when local milk carrier George Grenda moved into buses. His business thrived as Dandenong grew, and by the 1970s, Grenda Bus Services was a hugely successful route bus and coach company. In 1977 Swedish vehicle manufacturer Volvo partnered with Grenda to create Volgren and introduced extruded aluminium, rather than steel, for bus body construction and the Swiss Co-Bolt system.

Leading global bus body manufacturer, Marcopolo SA, acquired full ownership of Volgren in 2017, strengthening Volgren's local capability with its technology, buying power and international experience.

Volgren national purchasing manager Andrew Costello says Volgren is still one of only a few Australian companies manufacturing bus bodies from aluminium, rather than steel, despite aluminium's clear advantages.

"Most buses are still built from fully welded steel. Aluminium is much lighter, resistant to corrosion, and recyclable. Moreover, the lighter a bus is, the more people you can fit in the bus."

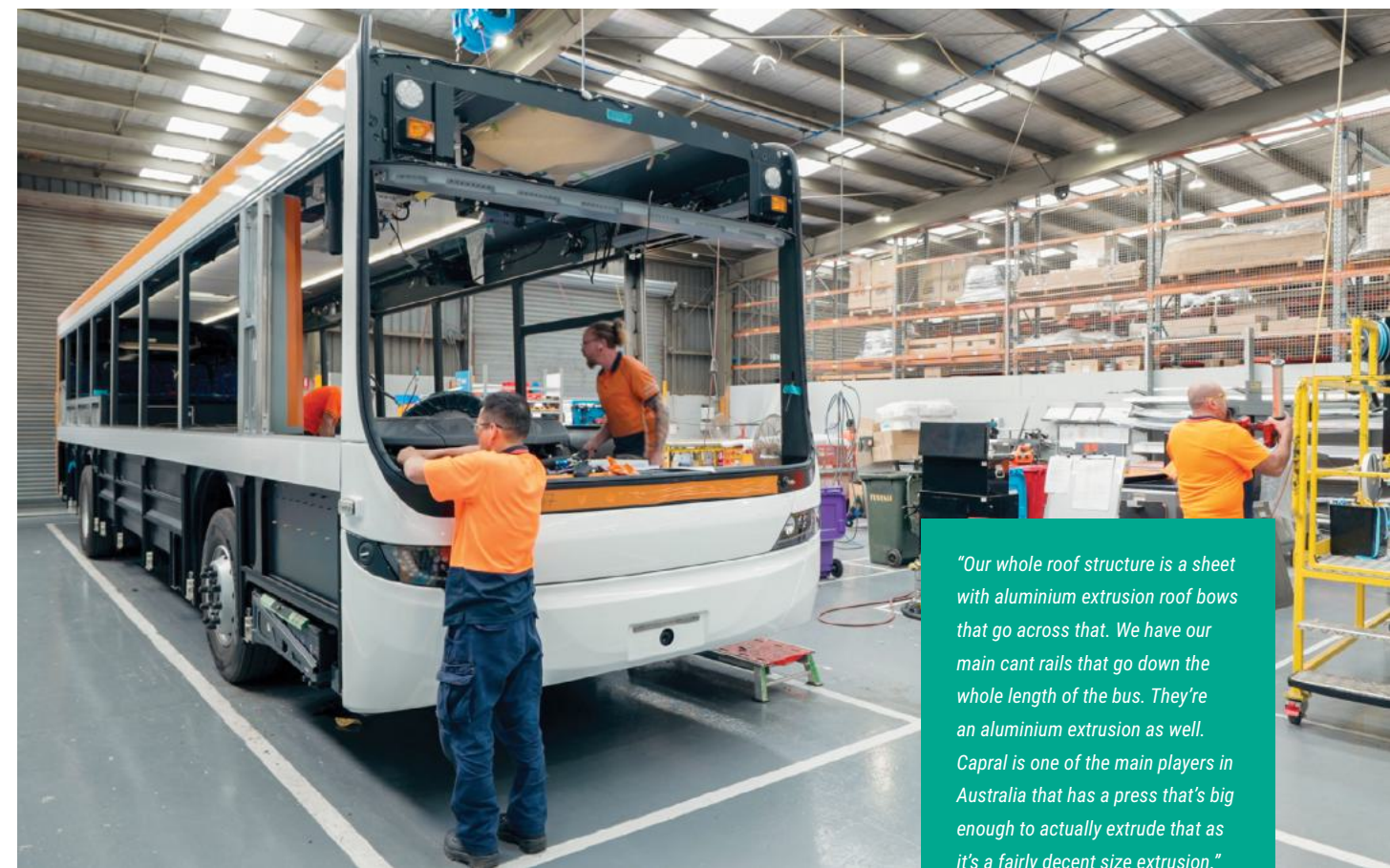
The Co-Bolt process is also critical to Volgren's production; Andrew says this system uses bolted gusseted joints.

"This avoids the risk of continuous bus vibrations fracturing welds. Our system requires no welding and results in a much longer joint life.

"Our joints are lock-tightened with very little chance of anything loosening over time. For operators, it means far superior reliability than a traditional steel bus and is one of the main reasons why we can offer a 15-year warranty on our buses' aluminium structures."

Quality, explains Andrew, is paramount in Volgren's business. Volgren operates rigorous quality systems and builds quality into its products through its suppliers, logistics and production.

Capral Victorian State Manager, Brad Ryan works closely with the Volgren team.



"Our whole roof structure is a sheet with aluminium extrusion roof bows that go across that. We have our main cant rails that go down the whole length of the bus. They're an aluminium extrusion as well. Capral is one of the main players in Australia that has a press that's big enough to actually extrude that as it's a fairly decent size extrusion."



WHERE CAPRAL ONCE PURELY SUPPLIED EXTRUSIONS, IT NOW ALSO MACHINES PARTS. THIS ADVANCE MEANS VOLGREN'S TEAMS CAN FOCUS ON FASTER ASSEMBLY AND MINIMISING CUSTOMER COSTS.

Capral has been Volgren's principal aluminium supplier for at least 15 years and meets Volgren's ethos of quality, local input and innovation, Andrew notes.

"We build buses and want our supplies priced at construction-type costs, but we also want an architectural look and finish to our products. Capral has always achieved both for us."

The supply partnership continues to drive new value for both businesses; where Capral once purely supplied extrusions, it now also machines parts. This advance means Volgren's teams can focus on faster assembly and minimising customer costs.

Capral's size and capability are also crucial to Volgren, Andrew says.

"Our whole roof structure is a sheet with aluminium extrusion bows across the roof and main cant rails extending the entire bus length.

"Capral is one of the few players in Australia with presses large enough to extrude our parts."

Andrew says bus body manufacturers

must tailor bodies to the requirements of individual bus chassis and operators.

"Our variation is big and requires a large engineering team.

"When Australia used to build cars, Ford would build a Falcon and a Territory here, and that would be it. Whereas we build the equivalent of a Territory, a Commodore, a Ferrari, an electric BYD and a Tesla all on the same production line."

Even though Volgren's ownership is now multinational, Andrew says the Volgren team remains family-focused, with experienced people providing a family-style influence.

"The teams here are always looking to improve themselves. They're not too scared to ask if we can look at doing something better. It's the way it's always been at Volgren; we know what the operators are after and work hard to give them what they need."

Andrew emphasises that Volgren is well-placed for future success and to continue contributing to Australia's environmental sustainability.

The Volgren team are currently exploring Capral's LocAl™ Lower carbon aluminium offer to further reduce the environmental impact of their builds by reducing the embodied carbon in the Aluminium products they use.

"It's great to be part of the biggest bus manufacturer in Australia, which is leading the way for zero-emission transport."



Watch the Volgren Crafted with Capral case study to learn more about the team and their long-term partnership with Capral.

