

First fabricators certified for higher risk and more complex works

Family-run South Australian small to medium (SME) business Bowhill Engineering and the largest Australian fabricator, Civmec Construction and Engineering's main facility in Henderson, Western Australia have become the first two certified to the third Construction Category (CC3) under the National Structural Steelwork Certification Scheme (NSSCS).

This demonstrates how achieving certification to the higher mark is related to improving quality and productivity through systems and process improvement.

Fabricators are certified to one of three Construction Categories defined in AS/NZS 5131 with CC3 being the highest level of certification currently provided for contributing to more complex, higher risk structures like bridges, those designed for fatigue actions or as specifically required in authority construction specifications.

Manager of Steel Compliance Australia (SCA) who audited the companies, **Alan Nightingale** said both businesses understand the need for a documented quality management system (QMS) commensurate with the activities of their businesses and that also adequately supports the requirements of AS/NZS 5131 and other standards they have achieved certification to.

"Bowhill Engineering has a real interest in developing and improving its business and manufacturing processes and in doing so, providing surety to customers as to its ability to deliver a broader range of quality steel fabrication," he said.

"Civmec is committed to using its existing qualifications (including certification to the National Structural Steelwork Compliance scheme) and capabilities to continue to grow and diversify its business. It followed the progress of the NSSCS and supporting the Scheme in 2015, achieving certification to CC3 at the initial audit."

He said to date, the SCA has certified 38 fabricators to the NSSCS and like Bowhill Engineering, there are already a number of other fabricators certified to CC2 that plan on progressing to CC3 over the coming 12 months.

"Small to medium workshops can achieve certification to CC2 and CC3 provided they operate a good standard of quality management system and ensure that they organise their structure to cover the elements required under AS/NZS 5131," Mr Nightingale said.

"This can mean multi-tasking and in some cases, may require formalising access to third party support such as formally qualified welding supervisors to assist with the development of weld procedures and to support welder qualification activities.

"The three steps in the certification process from application through desktop audit to final site audit allow for a progressive gap analysis to be undertaken to assist the fabricator to define those activities required to provide continual improvement and access to higher levels of certification."

By necessity, Civmec has a large organisational structure with personnel undertaking dedicated roles.

"Our main differentiator is our multi-disciplined service offering where we are able to apply our ever-expanding capabilities across sectors," Civmec Chief Executive, **Pat Tallon** said.

"Additionally, we pride ourselves on our ability to treat all parties, whether client, subcontractor, supplier or employee, as key stakeholders.

"This stakeholder state of mind extends to our 'open door' policy of transparency and honesty, ensuring that our clients' project expectations are exceeded and our employees are developed and mentored by senior management.

"We are delighted to receive the SCA CC3 Certification as it aligns to our quality standards, a level achieved through our work on some of Australia's most complex fabrication and construction projects.

"We believe this pride plays a big part in producing a quality product and our culture is based on achieving excellence."

Like Civmec, Bowhill Engineering closely followed the progress of the NSSCS, had expressed interest in becoming certified early in the process and became one of the early adopters, originally certified to CC2. In the 12 months since certification, it has made changes to the business to cover the requirements to meet certification to CC3.

This has included improvements to its QMS, updating all welding procedures to bring them into line with the latest version of AS 1554, formalising arrangements for welding supervision and welding inspection and introducing additional activities in regard to material traceability.

"Our commitment to SCA CC3 accreditation was motivated by the alignment with quality outcomes as specialist fabricators of heavy and complex structural steel," Bowhill Engineering Chief Financial Officer, **Jodie Hawkes** said.

"What this process has done is automatically drive down risk for all stakeholders, particularly the end client.

"We understand that there is still a way to go with getting 'buy in' from all the states and territories as well as engineers to specify to the required Construction Category levels, but we've seen value in investing in this early so it's an opportunity for improvement and that's something we are continuously on the lookout for.

"Over recent years, our entire industry has been impacted by growing competition that saw the sourcing of often significantly cheaper fabricated steel from overseas creating the very real and growing risk of non-conforming product being used in Australia becoming almost the 'norm'.

"Our industry needed some firm leadership to combat these challenging circumstances and this came via our State Government through the Office of Industry Advocate in conjunction with the technical prowess of our industry body, the ASI."



Civmec Construction & Engineering

The Civmec facility in Henderson in Perth is the largest and best equipped fabrication facility in Australia. The main workshop is approximately 30,000sqm serviced by 30 overhead cranes with capacity up to 200 tonnes.

It operates a comprehensive and well-developed QMS and holds a wide range of certifications and pre-qualifications including Quality (ISO 9001, ISO 3834), Safety (ISO 18001), Environmental (ISO 14001, ASI Environmental Sustainability Charter).

It recently committed an additional private investment of \$80 million in a new shipbuilding facility due for completion in 2019 adjacent to its existing facilities in the Australian Marine Complex (AMC) at Henderson.

Bowhill Engineering

Bowhill Engineering is a small to medium sized family-owned business on the Murray River in South Australia. It has purpose-built facilities including the main workshop of about 2200sqm in area, backup facility covering 500sqm and a paint shop of about 850sqm.

Bowhill Engineering holds certifications to Quality (ISO 9001), Safety (AS 4801) and Environmental (ISO 14001). It undertakes a wide range of tasks managed through a well-defined organisation structure with good definition of everyone's roles and responsibilities and strong management support in terms of training and communication.

Bowhill Engineering tackles a wide range of work and is currently working on ferry hulls for the DPTI and over 1000 tonne of road bridges for the Darlington interchange in Adelaide.

