

# CASE STUDY

MCA Engineering



## CATEGORY:

Engineering Construction

## LOCATION:

Mount Isa, Queensland

## PRODUCT:

Rectangular hollow section

## Mining job wins prestigious steel award thanks to BlueScope Distribution

**MCA Engineering's recent refurbishment of the Crude Ore Bin (COB) for Mount Isa Mines entailed removing an existing array of rail steel panels and replacing them with a unique steel panel frame system inside a 60m x 20m x 25m steel silo during an ongoing mining environment.**

While this innovative construction method was testament to the ingenuity of the MCA Engineering, the use of high quality Australian-made rectangular hollow section (RHS) steel tubing from BlueScope Distribution ensured the project was both a success for the mine project, and a winner of the Australian Steel Institute 'Steel Excellence in Engineering – Queensland' award.

Requiring the safe installation of RHS all the way up the 25m walls of the COB in a frame-like configuration and then attaching steel plates to the frame, overall some 400 tonnes of high-quality RHS from BlueScope Distribution was used in configurations of 300mm x 300mm, 250mm x 150mm, 100mm x 100mm and 200mm x 200mm.



## *It was a real team effort and a coming together of all the facets of BlueScope Distribution from around the country.*

Tim Nichols, BlueScope Distribution Dubbo Account Manager.



These vertically segmental steel frames were 3100mm high and 3000mm wide, and were designed to stack on top of each other, with a plate crucifix at one end that would receive the next panel above laterally.

Engineered to be interlocked Lego-style with no bolting or welding, the steel frames were kept aligned by the standoff and crucifix system that also provided quick installation once the standoffs and bottom frames were in place.

Tony Fenwick, Manager of BlueScope Distribution and Metalcorp Steel Dubbo said the MCA Engineering job has become a template for partnering with other potential customers.

"We won the job entirely on our very responsive customer service, exceptional delivery capability, and on our superior steel product offering," said Tony.

"This included being able to stagger our deliveries to match MCA Engineering's installation schedule - basically aligning our production processes to suit their workflow."

"MCA Engineering had very tight requirements on their delivery times, so we fully understood that each delivery needed to be on time, every time and had to carry the exact stock they ordered."

"Basically, we had to be totally bullet proof when it came to our deliveries."

"We didn't just talk the talk, we actually delivered on every single promise - quality, service, and of course capability."

"From the beginning, BlueScope Distribution was deeply involved with all aspects of the job, which provided the opportunity for us to supply a range of other products not normally associated with BlueScope Distribution such as pipes, valves and fittings."

"Over the many months of the job, the close partnership we developed with the MCA Engineering has become a template for how we are able to work with other companies," said Tony.

Tim Nichols, BlueScope Distribution Account Manager, pointed out that the entire BlueScope Distribution sales team from Dubbo did a fantastic job in managing the project.

"There were a lot of people who helped make this project a success, in particular, Andrew Fisk the Customer Service Officer from BlueScope Distribution Dubbo, Trent Simmons, the Dubbo Operations

Manager and Allan Bath, the BlueScope Distribution Business Development Manager from Adelaide, all played a big part ensuring the smooth delivery of this project."

"It was a real team effort and a coming together of all the facets of BlueScope Distribution from around the country."

Andrew Rice, NSW Works Manager for MCA Engineering who was responsible for installing the RHS steel frames, pointed out that the service he received from BlueScope Distribution was simply brilliant.

"I could not have asked for better service," said Andrew.

"BlueScope Distribution delivered the RHS whenever I needed it and exactly how much I required - they were just great."

According to Toby Oliver, MCA Engineering Construction Operations Manager, partnering with BlueScope Distribution was integral to the success of the Mount Isa Crude Ore Bin refurbishment project.

"BlueScope Distribution helped us with this project in a number of ways including recalibrating their delivery times so as to dovetail perfectly into our highly demanding and continuous construction schedule."

"From an engineering perspective, the superior quality of BlueScope RHS was also a crucial factor for MCA Engineering."

"We knew that we would get the highest quality steel products from BlueScope Distribution, so that is why we chose them as the steel supplier for the frames," said Toby.

"From a technical standpoint, the use of the RHS steel from BlueScope Distribution provided the flexibility to reduce the loads on the existing structure, allowing the addition of a new high strength flat-faced liner system to the COB and increased the safety aspects of the building, while at the same time, also promoting the life of the COB by a minimum of 10 years."

"Together with the replacement of the worn rock-boxes with new high strength liners and replacing the chutes with brand new steel linings, thanks to our partnership with BlueScope Distribution, we were able to transform an old, worn out ore bin into a very functional asset for the Mt Isa mine in record time, as well as also winning an award," said Toby.

More information at [www.mcagroup.com.au](http://www.mcagroup.com.au)

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