

SAFER, SMARTER AND FASTER LIFTING

Excerpt from article By Katherine Crichton, From April 2007 Manufacturers' Monthly

Ensuring the highest levels of worker safety while maintaining optimum productivity is often a concern for manufacturers, but recent advances in crane technology provides peace of mind.

Health and safety in the workplace is a vital issue for the manufacturing industry but the latest developments in crane design means manufacturers are not only looking at cranes as a safety device but also as a way of increasing productivity.

Recent trends in crane design indicate a move towards more ergonomic and lightweight crane system, which allow workers to move loads safely, easily and quickly. Manufacturers are choosing to install several workstation cranes throughout the workshop instead of a single larger crane, enabling operators to work on smaller, repetitive lifting jobs as well as the heavier jobs usually undertaken by bigger cranes.

An example of this is a glass company who needed a crane to lift glass panels up to 500kg in weight. Initially they [were planning to install] a 3t SWL motorised crane and spent \$30,000 having a new concrete floor poured to handle the load.

The company then realised it could install a smaller and lighter Altrac roof mounted gantry crane that didn't need to be motorised [due to low dead mass] for half the price of the 3t crane and the same cost as the floor upgrade. The company saved money and decreased risk factors and potential maintenance issues associated with live wires from the motorised bridge.

Manufacturers are no looking for cranes to suit the application rather than an application to suit the crane, requiring equipment to be more portable, adaptable and easier to use.

This is a development Tate McFarlane, project engineer with Bomac Engineering has noticed in recent years. "It's a big investment to buy a crane so you want to be able to take it down when you when you leave," he said.

To help address these requirements, Bomac Engineering designed the Altrac crane system. "Basically what we needed was a lightweight system that took up no room, so we started to develop an aluminium extrusion that was adaptable and didn't require people to have super knowledge in crane systems to install it," he told *Manufacturers' Monthly*.

Before implementing a new crane system, Tate says there are some considerations manufacturers need to make to ensure their investment pays off.

Along with the short and long-term cost associated with installing and maintaining a system, manufacturers need to consider their application.

"When companies set up a new factory, no one ever thinks about how they are going to move a product. They think about the product and how it will be built, but never give any thought to how it's going to be transported from A to B.

"They need to think about the layout of the factory, size of load and lifting frequency, SWL as well as consider the physical working environment. For example, I-beam cranes can get dirty very quickly," he said.