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SAFETY OF GANTRY ROLLER PRESS TABLE WALKWAYS

Since the Global Financial Crisis there has been a surge in the purchase of new and second hand roller gantry presses from the USA.

In a buyer's market with a strong Australian dollar, these systems have represented very good value for money as a high volume, flexible workstation for roof truss manufacture.

One of the most commonly asked questions by purchasers of roller gantry presses is: "Should I install my gantry press table with walkway aisles?"

It's a good question and one that I've been asked many times.

The dilemma centres around the potential to create, reduce, or remove hazards to jig-setters and machine operators who work on or around a working surface that is 800mm off the ground, may harbour several tripping hazards, and is in the presence of a moving gantry roller that may weigh in excess of 4 tonnes.

Traditionally the majority of roller gantry tables operating in USA have walkway aisles.

These allow operators working on the top chord side of the truss to move around the table at floor level and, in theory, eliminate the need to access the table top for truss assembly.

Walking around in walkways between the trestles eliminates the fall from height hazard associated with standing on a continuous table top but potentially puts jig setters in the path of the moving gantry roller head.

Whilst operators should adhere to plant procedures that require them to step out of the walkways when the gantry head moves the potential for an operator to be standing 'captive' in the walkway remains.

Obviously the press hitting an operator in a walkway is a potentially fatal incident.

New gantry heads have carefully engineered safety systems to ensure light-beam safety sensors and braking systems to stop the gantry quickly if this occurs.

Older second-hand presses often have 'bump bars' and drivetrains which,

if not adequately maintained, may fail without detection, or fail to stop the press quickly enough to prevent entrapment.

This collision risk also applies to operators standing on a continuous table top however they are likely to be: (a) more visible to the gantry operator, and (b) more able to avoid serious entrapment by the gantry roller.

Working from walkways may also require considerable reach distances across the trestles to set up some truss joints.



Continuous Top tables require regular crouching and kneeling.

Unless strong procedural controls are maintained for the top-chord jig-setters it is likely that they will develop the habit of walking on the table top anyway.

This is more dangerous than navigating a continuous table top as the operator must constantly step over walkway gaps, typically 450mm wide.

The counter argument for walkways centres around the 'fall from height' hazard and suitability of the press table



Walkways in tabletops often aren't used and introduce an additional trip hazard.

as a 'walking and working' surface for top-chord setters.

The tabletop will no doubt harbour tooling, timber, hammers, etc. which may be considered to present a tripping hazard, and whilst the table top has no walkways, I have yet to see a gantry press table design that allows for a safety barrier at the edge of the table to prevent a slip and fall off the edge to the concrete floor below.

(800mm doesn't sound high until you consider that the jig setter's head is 2.5m off the ground.)

Secondly, and arguably more significantly, top chord jig-setters on the continuous tabletop are constantly crouching or kneeling to set the truss up (in effect working as if they are building the truss on the floor) and are at risk of incurring sprains, strains, and general fatigue.

This risk cannot be eliminated and controls are basically limited to supplying knee pads and enforcing an operator roster with regular rotation amongst workstations to minimise exposure.

Both table arrangements present several hazards with varying levels of exposure and potential consequence, and arguments for both configurations hold water.

Perhaps the most important point here is that, for sake of both the business and its employees, a considered and informed decision is made by the truss plant's OH&S committee, from which follows a strong and ongoing regime of risk controls that remain in place and continue to evolve for the life of the machine.