





How to survive when life serves up a "curve" or two!





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n order to achieve and maintain profitability, any manufacturer -- regardless of the product -- must become focused on process optimisation. Identifying bottlenecks. eliminating a bottleneck anticipating the next one and planning the next solution – it's an endless cycle but it can be a fun and fascinating one. At Vicbeam we routinely challenge our employees to take a fresh look at the process they are engaged in and ask some simple questions - what is currently bugging me about this process? What would I have to change so that it no longer was an issue for me? Furthermore, what simple change could I make that would improve the process by two seconds? It is gratifying when engaged employees embark on the daily process of optimising their work environment.

It's not always easy, however, for manufacturers to anticipate the unexpected and proverbial 'curve ball' that comes along – or for a more appropriate Australian metaphor – 'the flipper' that bamboozles, hinders production and turns the smooth day into something else 'proverbial'.

It could be the sudden and catastrophic failure of a glue pump, (did we order the spare?) four absent employees on the same day (again?) or for Glulam manufacturers the request to quote or manufacture a curved beam to a specific radius!

For the most part Glulam manufacturers are producing straight or cambered beams. Cambered beams are produced to an industry standard of 600m radius. Moulds in presses aid easy production of cambered beams and al-

though the change from straight to cambered and back again involves a labour cost in terms of setup, the changeover becomes optimised and we take it in our stride.

Curved beams are a different story and the receipt of an order containing one is known to produce somewhat of a sigh and a scratch of the head among Glulam manufacturers! The plans for the curved rafter or fascia call for an "inside radius" of 10125m, 19306m or maybe even 833mm (now that's tight!). By their nature, curved beams are 'non standard' and not generally able to be as efficiently produced as normal Glulam beams. A press might have to be specifically made, unique templates cut, there will definitely be extra ripping and dressing of laminates and careful radii set-out.

Glulam manufacturers are often asked if steam is still used in the process of bending timber and producing curved beams. In fact, curved beams are achieved simply by varying the thickness of each individual laminate according to the density of the species versus the radius required. A normal Glulam beam will generally have laminates of a size between 30-45mm but a curved beam could have laminates as thin as 5mm in order to achieve the desired result.

GLTAA member producers have noticed an increasing interest in curved laminated beams in recent years. As ar-

chitects become ever more creative with their timber visions it is expected that the demand for curved beams will continue.

Many of us have anticipated the bottlenecks that introducing curved beams into a manufacturing process creates and are ready for them!

So, send through the request for a curved Glulam beam! You might hear a groan on the phone, you may even be advised that "lead times on curves at the moment...", but in reality, and to be candid, most of us love the challenge associated with producing something special and 'non-standard' and we recognise that curved beams continue to present a wonderful opportunity to show off Glulam to the world.

