GANG-NAIL GUIDELINES No.126

ANOTHER MITEK ADVANTAGE

BENEFITS OF LASER PROJECTION

In GN Guideline No.99 I put out a challenge to truss plants to reduce lost production time using tape measures at truss jigs.

On the path to achieving this quest, one important technology not to be overlooked is laser projection.

Laser projection systems are mounted directly above truss assembly areas and project a template of the truss to be built on to the work surface.

It highlights the position and shape of all truss joints and connector plates, eliminating the need for measuring during set-up.

Tooling set-up time is reduced, as is time placing timber and connector plates.

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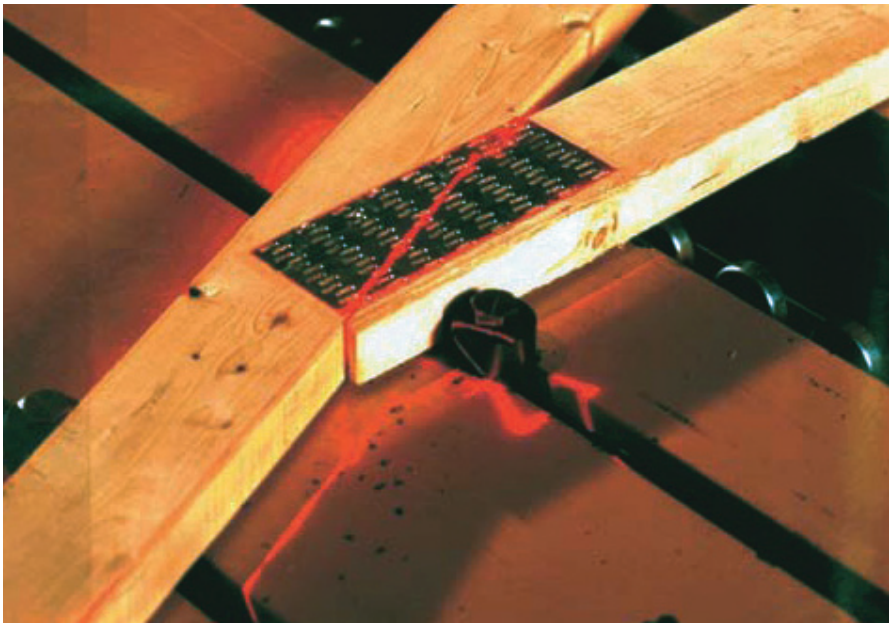
■ *Laser projection reduces tooling set-up and truss assembly times.*



■ *Precision location of the connector plate on the joint using a laser projection system.*

As an established and proven product, laser projection hardware and software is better than ever before and many of the earlier barriers to practical implementation of the system have been overcome.

High equipment capital cost and poor visibility under high ambient light levels were two key criticisms of laser projections systems in the past, but no more.

The cost hurdle is lower than ever.

Laser component costs have dropped significantly in the past few years, and coupled with a stronger Australian dollar a typical three head projection system capable of projecting a 16m truss span can presently be installed for about $100,000.

Combined with claims of up to 70% reduction in set-up and changeover times, this should be a trigger for plants wishing to increase throughput at new or existing workstations to conduct a cost-benefit analysis.

Template visibility on the work surface is also better than ever.

The availability of green lasers, as well as red, and high laser scan rates mean the brightness and clarity of the laser template in plants with high ambient light levels is far greater than before.

In addition to higher throughput, there are further benefits of laser projection systems.

Immediate access on work surface to truss member and nail-plate locations, as well as plate sizes, results in reduced training time for new operators, an important factor in the present labour market.

And as one might expect, owners report fewer set-up errors and less product re-work at laser assisted workstations.

Lasers projectors can also be made to work in tandem with other production aids.

As the system is PC controlled, it also favours another growing trend: paperless production in the factory.

Linking the laser workstation PC with plant production reporting systems provides real-time feedback on job progress and workstation productivity.

And for the 'ultimate' table jigging system the laser projector can be made to work seamlessly with a table mounted automated pucking system, providing both automated truss tooling and laser projected truss information.

The benefits are by no means limited to truss production. Wall frame and floor truss production stations are equally suited to laser projection.

So I encourage plant owners to consider the benefits of a laser system in all areas of production where set-up and assembly time is critical, and take another step toward putting tape measures down and productivity up. TTN