Gang-Nail Guide Lines No.20

# How Efficient Is Your Business?

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Over the last year or two there has been a great deal of innovation in truss plant equipment, the emphasis being on automation and reducing the labour component of cost.

This new focus on more efficient equipment is to be applauded, as our industry has until recently been unwilling to invest in capital equipment.

In my last article, Gang-Nail Guidelines No 16, I outlined a method of evaluating the investment in new equipment purchases.

However, there are, I believe, many opportunities to improve your truss plant efficiency without necessarily making a large investment in new equipment.

Before I go any further, I need to define what I mean by truss plant efficiency.

In this article, and in most cases where truss plant efficiency is raised, we mean the labour efficiency in the production area. The common unit of measure is EqA/Man Hour.

The calculation of this number should include all direct labour in the manufacturing process, ie yardmen, sawyers, press operators and any personnel used to stack, package and load trusses.

The efficiency ratio EqA/Man Hour is a key management ratio, which should be monitored on a regular basis and, if possible, compared with other plants.

This will give you a reliable measure of your business' competitiveness. In my experience, the efficiency can vary from 2 to 3 EqA/Man Hour in an average plant, to 6 to 8 in some of the better plants.

When you consider that the labour component of cost is approximately 15 per cent, the difference between the production cost in an average plant, compared to a plant in the top bracket, could be 7.5 per cent. This is a substantial advantage.

However, this 7.5 per cent can be compounded as it enables the more efficient plant to win more business. This not only increases profit on a pro-rata basis, it reduces the fixed overhead component of cost, which in turn, increases the profit margin.

For further explanation of this effect, refer to Gang-Nail Guidelines No 8.

There is no doubt that good equipment will assist enormously in improving a truss plant's efficiency. However, good equipment alone will not make an efficient plant.


***Good equipment also requires well-trained and motivated people.***

I have heard a number of stories on how the installation of new equipment has not lived up to expectations in one plant, but has had significant impact in others.

The only difference being the people. The resistance to new technology is a very real problem and can mean the difference between new investment being an asset or a liability.

As a matter of principle, staff at operator level should be involved in the decision making process, so they have some ownership of the decision.

Training and staff motivation are very important in any truss plant. In fact, one of the more efficient plants that I know has only rudimentary equipment, but has highly motivated and very skilled people.

## Training

To achieve above average efficiency, training should include more than elementary machine operation.

It should include training on more efficient work practices, eg how best to set up equipment, most efficient jig loading procedures, etc.

Each operator should know what his role in the team is without having to be given instructions.

These systems should also be documented so in the case of a sudden change of staff, the systems developed are not lost.

## Motivation

There are a number of ways in which production staff can be motivated to become more efficient.

These include:

a) cash incentive schemes.
b) goal achievement, eg a slab at the end of the week when targets have been achieved.
c) end of year rewards - trips, bonuses, etc.
d) competition between work groups.
e) good communication with management.

The requirement for an effective incentive scheme is:

1. It should be entirely self-funded, ie the gain in productivity should more than pay for the scheme.
2. The scheme should be easily managed, that is, it should not be a burden on office staff and it should be obvious to staff on an hour to hour basis how they are performing. For this reason, the EqA unit of work is a desirable measure.
3. Benefits should be paid regularly so that the link between effort and reward is as strong as possible.
4. Benefits are to be paid to all who contribute to the extra performance. For this reason, detailing staff should probably be included in any incentive scheme.
5. The responsibilities of each party in the scheme should be clearly defined so that there are no disputes as to who should be doing each task. A policy should also be developed for work that is not up to standard and appropriate deductions made.
6. Benefits should only be paid for output that is above average.

As the labour component of cost is only second to the cost of timber, it warrants a significant amount of management time.

As indicated earlier by the variation of truss plant efficiencies, labour component of cost provides the biggest potential saving in production cost.

So a close look at operating systems, training and incentive schemes could be very rewarding.