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MATERIALS HANDLING EFFICIENCY

Moving timber around your factory can be one of the biggest efficiency killers in your plant.

If you take the time to consider how much timber is used in your truss plant every day and how many times each part is handled it becomes evident that a little time spent ensuring your plant is configured to minimise time spent on this task is well worth the effort.

For this article we'll focus on the cutting part of our operation and base our figures on a saw producing 600 parts per day, at an average of two parts per stick.

There are many aspects to consider in creating the best situation for your sawyer but the most significant ones are usually space, layout restraints and saw type.

There are also several methodologies when it comes to presenting timber, some of which will be better suited to single saw operation and some for multiple saw operations.

TIMBER STACKED AT THE SAW

The location and orientation of timber packs to a saw is critical.

As a starting point, if we were to save just five seconds for every stick in our example, we would be looking at a six per cent improvement in through put.

The first factor that might affect picking time is timber orientation.

If the packs are stacked perpendicular to the orientation they are required at the saw then your sawyer must turn every stick they pick which takes extra time.

This can also be tiring, and places extra strain on the back of the sawyer as they twist while carrying a heavy load.

A second key factor is stock usage.

Analyse which stock lengths are most commonly used and ensure that these packs are closest to the saw.

A racking system could be implemented to further reduce the distance from the saw.

RATIONALISING TIMBER STOCK AT THE SAW

This option may be suited to you if

you have a small factory where it is not possible to store a full range of the required stock near the saw.

By reducing the range of stock available to a saw there may be a waste penalty, however this option may allow you to stack your full range of timber at the saw and therefore reducing picking time.

The resulting increase in cutting efficiency may well outweigh any penalty from increased waste or discounts for short packs. Crunch some numbers, you might be surprised.



PRE-PICKED TIMBER

Pre-picking timber involves creating a list of timber required for a job and picking the timber onto a trolley prior to cutting.

This is a good option if the timber cannot be stored close to the saw or for linear and multi-bladed saws with the capacity to cut a high volume of stock.

The greatest advantage of this method is the ability to hand over this pre-picking task to someone other than your sawyer.

Going back to the saw in the previous example; if the job requires 50 sticks and your sawyer saves 15 seconds per stick when cutting, he would have 12.5 minutes to pre-pick the timber for that job for a zero net gain.

But, if someone else pre-picks the timber for your sawyer and does so for the six similar jobs the sawyer may cut in a day, your sawyer would have an extra 75 minutes per day cutting. That's an 18.5% increase in throughput for the workstation.

When considering automated linear saws however, the situation is a little different.

As this style of saw usually has an automated infeed and outfeed system the sawyer is responsible for loading and unloading the decks.

Keeping the infeed deck full so that the saw can work continuously is almost a full time job in itself.

With pre-picked timber a sawyer can spend sufficient time managing the timber on the outfeed side of the saw, allowing more time to organise the cut parts in a manner which best suits your jig-setters.

Spend some time out in the factory watching how your sawyer works and what he needs to get his job done.

Also, think about which option might work best for your factory and if you make changes, make one at a time so that you can isolate and properly measure the efficiency gains.