







### Trim optimisation has the ability to lower costs and increase manufacturing efficiency

This whitepaper will show you 5 features to look for when choosing trim optimisation software

"A trim optimisation solution will not only reduce waste and maximise throughput but will also significantly reduce the time spent in production planning. Efficient knife change and pattern counts will reduce non-productive operational time. A disciplined process to consider secondary processes and inventory can become quite complex, yet quite valuable. This is often the single most underutilised opportunity to

Jay Jordan, North American Regional Manager

Manufacturing companies are under constant pressure to deliver high-quality products at lightning speed while cutting costs to stay ahead of the competition. One of the most efficient ways to cut costs in the reel and sheet production industry is to deploy trim optimisation software. Manual planning of cutting plans is time-intensive, and despite many long hours of hard work, it can still produce suboptimal results complete with too much waste or too many patterns.

It's no surprise then that companies in the paper and board, plastic film, metal, converting, and nonwoven industries are moving towards more intelligent solutions. But with several options on the market, how do you know which software is the right fit for your business? Choosing your solution carefully is paramount

improve."

because it needs to work for your business today and in the future. With this in mind, we've compiled a list of 5 features to look for when choosing your trim optimisation software.



# Reducing Trim Waste and Maximising Throughput is the Number One Priority

Trimming is a universal challenge in roll and sheet based industries. While on a single item, the portion of unused or wasted material might be small, it can amount to a tremendous amount of waste in a large production operation. Even minor improvements to reducing trim waste can have a considerable economic impact. However, there's no reason to strive for a minor improvement when it comes to saving costs - reducing trim waste should be the number one priority for any thriving business. You should be aiming for software that will produce the most significant return on investment, which means choosing software that will have the greatest immediate and long term impact on your business.

## **Decreasing the Time Spent by Planners on Trim Optimisation**

Manual trim optimisation is exceptionally time-consuming and can impact costs in a busy manufacturing plant. Any time planners have to spend creating trim optimisation plans is time they can't spend improving the operation in other ways. Many manufacturing companies find that beyond the inherent benefits of trim optimisation software, they can improve costs and efficiencies in other areas simply by freeing up planners' time. When choosing your trim optimisation software, try to quantify exactly how much time it will save your planners because solutions that still require heavy manual input are unlikely to reap considerable benefits in the long run. As a side effect of decreasing time spent on trim optimisation, the time between order entry and production can also be shortened.

### The Optimisation of Secondary Processes and Inventory

The optimisation of secondary processes can have a significant impact on saving time and money, but it's not without its challenges. Naturally, you want to find a solution that can integrate the optimisation of secondary processes like secondary slitting and other secondary machines without negatively impacting the function of the primary lines. For large or complex orders, there can also be many conflicting objectives that need to be accounted for. With this in mind, you want to pick software that prioritises and optimises secondary processes to promote efficiency across the operation. If the solution is too over-tuned or under tuned towards secondary processes, you won't achieve optimal performance. Optimally consuming or creating inventories should be an inherent and disciplined extension of the trim optimisation process. Mixing stock goods and MTO (directly from production) can often prove to be a big advantage. Optimising operating results can also lead to more flexibility and also reduces storage.

## **Creating Efficiencies for Knife Changes and Pattern Count**

Production processes with a high number of knife changes may result in a lot of lost time as the slitter tries to keep up and readjust the cutting knives. Picking a solution that can minimise knife changes without negatively impacting the production process can result in substantial time savings, and in manufacturing, time is money. For example, compared with unoptimised solutions, Greycon's full method algorithm can achieve 20% to 40% savings. Sophisticated software can change the sequence of patterns and the parent reels within them to promote greater efficiency.

## Incorporating Machine Learning So the System Can Improve Over Time

Manufacturing is a fast-paced industry that continues to evolve every year. As a result, the software you pick today might be perfect for today's environment but lag behind in a few years when customer demands shift. If you don't want to battle with your software, forcing it to stretch to places it was never meant to, the best option is to pick a solution driven by machine learning. Machine learning algorithms enable the software to mould itself to your organisation and improve over time. With minimal input, the algorithm can predict the benefits of pattern reduction and find more efficient ways of working. Additionally, right now, everything is pointing to machine learning being the future of software. So, if you want to future proof your business, machine learning-based software needs to be a priority.

#### What's Next?

Greycon's trim optimisation software X-Trim achieves these five features and more. If you're ready to upgrade to the next generation of trim optimisation software, get in touch today.

#### Want to learn more?

#### Contact us today

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#### **Greycon's X-Trim Solution**

You may be surprised to know that there isn't a complicated implementation process with X-Trim, you can be up and running within 5 weeks. Here are 5 key points to know about X-Trim.

- 1. A highly intuitive UI that helps the planner to understand the generated plan and the issues at a very quick glance. It helps decide if the plan is good to go or if any fine-tuning is required.
- 2. The speed of the optimisers helps planners perform multiple what-ifs, allowing them to make highly informed decisions.
- 3. Our solutions seamlessly integrate into many popular industry platforms, bringing together world-leading expertise to help our customers capture the benefits of multiple services. This includes various commercial ERP systems, order entry systems, and more.
- 4. Ability to handle faults and then produce optimal solutions, trimming around the defective areas
- 5. A user friendly system in terms of ease of constraint modelling.

For More Information, Visit: <a href="https://www.greycon.com">www,greycon.com</a>