WinMulti - Advanced Optimisation

This page will explain the options for advanced optimisation

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For the vast majority of cases, the standard optimisation will do a good job, but what happens if you have a batch of frames, all of a similar size and the optimiser is leaving you with a group of similar large offcuts, or you are buying in a particular colour of profile which comes in a different bar lengths.

Common Issues, and how to address them

Issue: I am getting a lot of Big Offcuts

Take for example a group of 4 door sashes 850x2050. With the Optimiser tolerance at 50mm the beginning bar would have 2x850+2x2050=5800, this is out of the 50mm tolerance, the only group of pieces which will (assuming a 6000 bar length) be able within the tolerance is 7x850=5950. this would leave 8x2150 and 1x850 left for future bars, bar 2 would end up as 2x2150 and the remaining 850 for a total of 5050 (950 offcut) and the remaining pieces 6x2050 would have to be 2 per bar leaving 3 offcuts of 1900 and using 5 bars of profile as shown below.
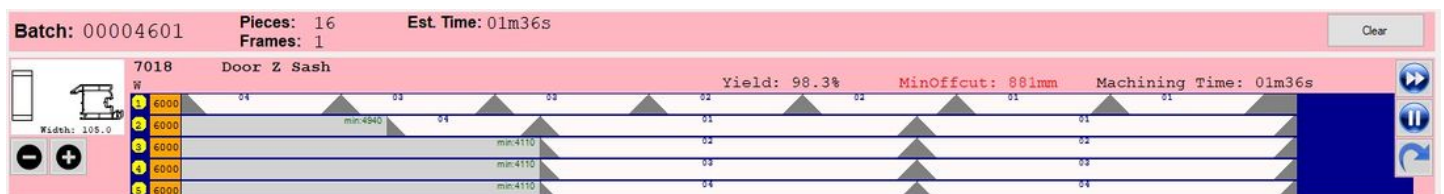
Instead, set an optimiser tolerance of 700, this would mean that the initial 5800 bar would be acceptable therefore getting these 4 sashes out of 4 bars with minimal (200mm) waste per bar. It seems counterintuitive, but in certain circumstances, allowing more waste ends up getting less.
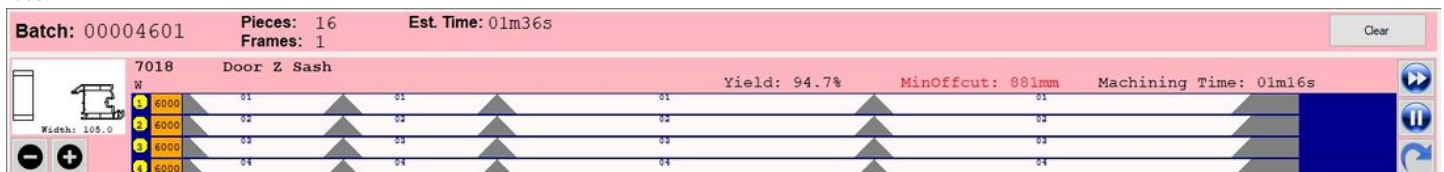

Issue: But we bought in the bars at 5200mm for this Job!

Occasionally, you may have a set of bars which differ in length to the standard. To use them, click on the Reoptimise Icon for the appropriate profile group and enter the new bar length, then click OK, the optimiser will use those bar lengths for that group. This will only affect the current batch. If you wish to change the standard bar length for all batches going forward, see the profile settings screen.

Optimisation Parameters Description

To the Right is the Reoptimize Dialog box, it has 4 options :-

1. Use Optimiser v2 - The standard optimiser looks at each bar in turn and will pick pieces to get the waste to within a certain tolerance, this may in rare cases decrease the waste slightly on this bar. but increase the waste dramatically on subsequent bars. To get around this, we have another optimiser which is slower as it is much more involved but can increase the yield. Tick this box to use this option.
2. Standard Frames - This feature forces the optimiser to look across the whole batch if there are multiple "standard" frames that are all the same size. This is a longer process, but can yield better results.
3. Standard Length - If you have a group of bars which are of a different length, then enter that length here, the optimiser will then use that length for this profile. the next time this profile is use the length will default back to the standard.
4. Optimiser Tolerance - The standard settings for optimisation are 700mm for Door Sashes and 50mm for other profiles. With some patio sashes as they can be wider, an optimiser tolerance of 1000 can get better results.
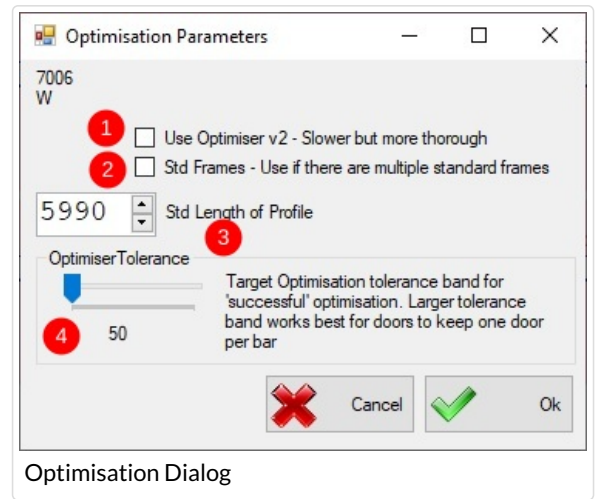
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Optimisation Dialog