Over Optimising Issue

Latent problem with optimiser system used on Stuga batch loading

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Summary

The optimser software optim32.exe is very old and when it was written, computing power was not great, so shortcuts had to be made with it to run at a reasonable speed. These shortcuts occasionally come to the surface, with the effect of "overOptimising" a bar length, so it adds up all the piece lengths wrong and uses up more than the bar length.

A replacement optimiser (v2 optim2016.exe) was written to solve this issue, but because it is more thorough, it slow the process down

The software has a clever way of dealing with this, and if it detects "overOptimising" it will switch to using the v2 optim2016.

However, there has been evidence that the optim2016 also then over optimises the bar.

Therefore a parameter has been added called "overOptimise" which allows a grace amount for over optimising. This would be no good in reality, because the pieces simply will not fit on the bar. Therefore this must be used in conjunction a sytem to add a similar grace distance on the bar end for any overoptimising to use. This is done with the gaps file, and the "p" character.

In this example, overOptimise is set to 20 on an ancil saw (S012) to allow for the optimser's regular problem of overoptimising, and the p is used for the bar end waste as the grace area

```
gaps  | SQ  \ MI  < AH  / IM  e ES  s mSQ m mMI a mAH i mIM f YF  r YR (Lead)
| SQ  k    j+v  w+j  j+v  t    k    j+v  w+j  j+v  k    k
\ MI  j+v  j+v  w+j  j+v  t    j+v  j+v  w+j+v j+v  j+v  j+v
> AH  k+x  j+v  j    j+v  t    k+x  j+v  j    j+v  k+x  k+x
/ IM  j+v  j+v  w+j+v j+v  t    j+v  j+v  w+j+v j+v  j+v  j+v
e ES  p    p    p    p    0    s    s    s    s    s    s
s mSQ k    j+v  w+j  j+v  e    k    j+v  w+j  j+v  k    k
m mMI j+v  j+v  w+j  j+v  e    j+v  j+v  w+j+v j+v  j+v  j+v
a mAH k+x  j+v  j    j+v  e    k+x  j+v  j    j+v  k+x  k+x
i mIM j+v  j+v  w+j+v j+v  e    j+v  j+v  w+j+v j+v  j+v  j+v
f YF  k    j+v  w+j  j+v  e    k    j+v  w+j  j+v  k    f
r YR  k    j+v  w+j  j+v  e    k    j+v  w+j  j+v  f    k
for version 6.63
```