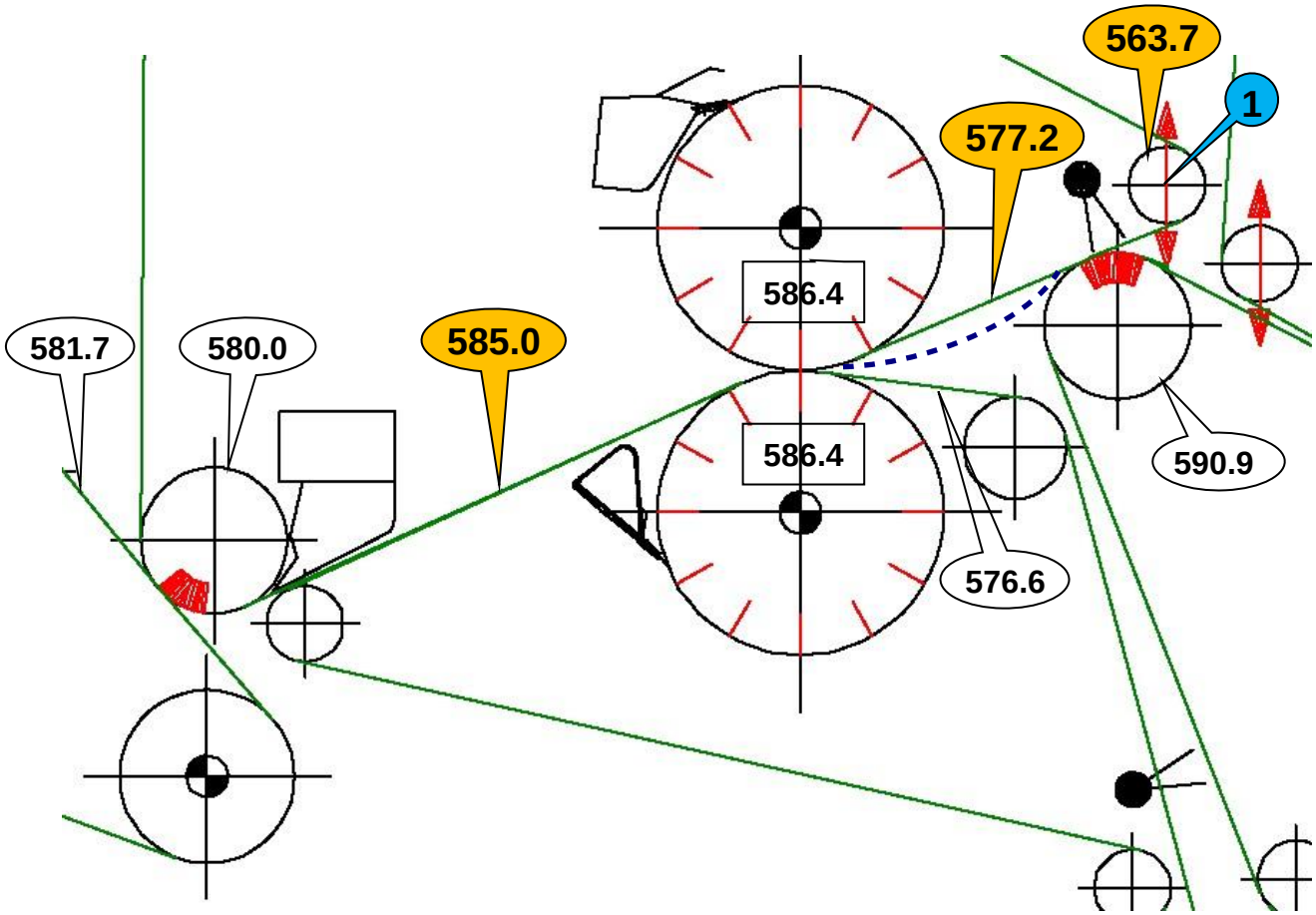
Paper drop-off and edge wrinkling due to speed differences

Problem:
In order to ensure a defined web guidance on a board machine the paper web should stick to the Pick-up felt after the first nip. In this particular case, the paper web dropped off while hanging loosely below the felt and causing edge wrinkling at the same time which led to sheet breaks (see figure below).

The measured felt speed after the nip was approx. 8 m/min lower than before the nip.

Solution:
Heimbach increased the dipping of the 2nd Press transfer vacuum roll into the pick-up felt by re-positioning of the guide roll. (1) As a result a smaller wrap angle as well as an increased tension of the Pick-up felt can be achieved.

The guide roll after the first press nip can be driven. However, this effort is only reasonable when running at high speeds over 1000 m/min.
Optimising the load distribution in the 1st press should reduce felt wear.



Benefit:
Reduced felt wear