

ELECTRONIC TENSION CONTROL

There are many factors governing the speed and tension of paper through a high speed web press. I would like to explain all the critical influences before I talk about electronic control.

SLIDE

Very critical tension control is required for the following reasons.

- Folder cut off control
- To maintain colour register
- To maintain headlay and sidelay register for nips.

FIXED SPEED:

BLANKET/BEARER Circumference drives the paper at the designed press speed.

FOLDER NIP ROLL SPEED should be around 0.1% faster than units to allow for "growth of paper through other factors, for instance the addition of moisture can lengthen paper. Also more than 1 web can benefit from this very slight gain.

CONSTANT SPEED: (can be varied)

CHILL ROLLS can only balance tension between the unit and the folder

CONSTANT TENSION: (can be varied)

INFEED should take care of variations in paper elasticity entering first unit and be adjustable to suit paper strength. I will explain this in more detail later.

SPLICER should be capable of feeding paper at lowest possible constant tensions to the infeed and be capable of splicing a reel without large tension variations.

I would like to explain the electronic tension control in more detail

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