

BATCHING MOTION FOR TIRECORD FABRIC



Using degressive batching motion

OVERVIEW

The production of large batches with this special tirecord fabric gives some problems with big diameters and heavy weights. When using conventional batching motions the so-called “Cauliflower Effect” results.

This problem can be solved with the degressive batching motion. For winding the fabric lengths the batching motion is imperative.

KEY ADVANTAGES

- no “Cauliflower Effect”
- no variation in width
- no deformation of the selvage zone
- higher fabric quality



DEGRESSIVE BATCHING MOTION

We recommend using degressive batching motions. With degressive winding the batch rolls are produced at a constant pressure, i.e. a device must exist which controls respectively reduces the pressure of the batch roll to the tangential driving roller. For each fabric the pressure can be set individually. With this measure the so-called “Cauliflower Effect” is prevented. Variations in width and density especially in the selvage zone are avoided.

The degressive system consists primarily out of a weight system and a compensation system. The compensations system adjusts with a threaded spindle motor driven the pressure on to the winding roller. The pressure itself can be set at the control panel. The compensation system is always equipped with an expelling device which is integrated into the side sleigh plate of the winding system. By reversing into the starting position at the same time the batch roll can be expelled. With the degressive winding technique presently batch diameters of up to 2000 mm with up to 4000 kg can be produced.

As already mentioned these large fabric lengths have a positive effect primarily for the subsequent dipping and hot stretching process. Higher processing speeds are possible due to the exact position of the selvage. The squeezing rollers only need to be lifted shortly when the sewn connection pieces are passed through. Hence, less badly dipped fabric is produced and therefore a better tirecord quality is achieved.