



Preconditions for high splice speed and reliability:

The maximum splice speed indicated for the splicer SP-M / SP-X might be limited by paper grammage and paper quality as well as working width and roll diameter.

Due to the technical design of the subsequent machines, e.g. corrugating roll contact pressure, tension intensity of the double facer, etc., it might become necessary to reduce the maximum splice speed in order to avoid as far as possible negative impacts on the production, e.g. delamination.

Splice reliability depends on:

Technical factors

- required range of braking torque 8 - 640 Nm per brake (operating constantly on both sides)
- reel stand brakes: RE brakes, model CX.251, or comparable equivalents
- range of web tension: 250 N - 1250 N

Machine factors

- perfect condition of the machine
- correct preparation of splice
- maintenance and cleaning according to the operating instructions, operating errors excepted
- effect of peripheral units excepted
- paper travel variations excepted

Paper factors

- the common paper grades used according to VDW, VPW, FEFCO and TAPPI recommendations for liners and media must have the following properties in respect to their runability:
 - * paper moisture according to the nominal value of the respective paper grade
 - * optimum tensile strength of the paper: minimum 6 N/mm width
 - * clean, well cut front edges without damage of the front sides of the paper rolls
 - * uniform and flat, tightly wound paper rolls over the total roll diameter. Unwinding of the paper webs from the roll must be even and smooth across the working width.
- the reel must not show damage at its ends
- the ends of the paper reels must be in good condition



- no creases, breaks, tears, paper flaws or bonding spots in the paper web
- no damaged reels or paper reels with excessive winding tension variations
- no eccentrically and non-uniformly wound paper rolls
- no extremely bouncing paper rolls
- in case of untrue running (ovality) of the reels, the speed has to be adjusted according to the concentricity error
- as for the papers with a high percentage of foreign particles the preparation of the splice should only take place shortly before the splice to avoid release of the bonding area
- use of 60 mm or 100 mm splicing tapes at ambient temperature according to operating instructions (for example Tesa 50607 with 60 mm or Tesakrepp 4432 with 100 mm, or comparable equivalents).
- the cores must have such a stability that they do not swing in the middle shortly before the core is completely unwound
- the core quality must be designed for high speeds of the corrugator. The cores must be manufactured in one piece across the entire working width and must be stable under axial loading (according to DIN ISO 11093-1):
 - * inner \varnothing 100 mm \pm 0.5 mm
 - * outer \varnothing 120 mm \pm 0.5 mm
 - * moisture 7-9%
 - * straight cores
 - * length to paper width + 0 mm / - 3 mm