

MANUFACTURING FUNCTIONAL NONWOVENS



Solutions for high throughput and efficiency

PET/CV fiber blends for classic applications

Synthetic fibers – Polyester (PET) and Polypropylene (PP) – still play an important role in a number of applications. They deliver specific properties unmet by natural or cellulose-based fibers:

- Most classic baby and body wipes contain a polyester/viscose fiber blend. PET fibers give strength and softness while the viscose fibers take up liquids fast.
- Disinfectant wipes need chemical resistance. Therefore both PET and PP are ideal raw material choices.
- Industrial wipes' distinguished property is a soft, non linting surface – a requirement not easily met in blends containing short fibers.
- Since an even surface is a pre-requisite for a good coating substrate, PET is a first choice for this application.

Shown below is a high-capacity line configuration with 2 TWF-NCT high-speed cards.



Line characteristics

- Wipe production with 2 NCT high-speed cards:
 Web weight: 30 100 gsm
 Line speed: up to 350 m/min
- Fibers: PET, PP, viscose, lyocell and blends
- Output: more than 20.000 tons/year depending on fiber type, web weight and working width

Key components for achieving high throughput

All machinery is carefully chosen to ensure high throughput and high machine availability as well as meeting all product/ process requirements.

• Fiber preparation T-BLEND

The TBL-BO bale opener, equipped with either a weighing pan or a weighing belt, delivers 1.000 kg/ hour with a weighing accuracy of +/-1%.

 Carding and web forming T-WEB
 Inline configurations of 2 TWF-NCT cards or 2 – maybe 3 – TWF-NC cards allow for highest processing speeds without compromising on web quality.

Did you know?

- · Also available with 2 or even 3 TWF-NC cards
- Similar line concepts with just one card
- A crosslaper following a TWF-NC card optimizes MD/CD ratio
- TWF-NCT cards also efficiently process cotton fibers
- 100% viscose or lyocell fibers are also an option

T-BLEND and T-WEB components implement the "Clean Concept". Designs for easy and fast maintenance improve machine availability and overall line efficiency.

Spunlacing (T-BOND)

AquaJet's high-speed configuration allows speeds up to 400 m/min for manufacturing plain, structured or perforated nonwovens.

• Through-air drying (T-DRY)

Due to its modular design, the modular TWD-MDD multi-drum dryer ensures optimal dryness of the spunlaced nonwoven at minimal energy consumption.



