

MANUFACTURING PULP-BASED NONWOVENS



CP AND WLS LINES

Solutions for processing paper-grade pulp

Pulp – the sustainable, affordable wipe solution

Nonwovens in single-use end products. add significantly to the waste mountain each year. Most wet and dry wipes contain petroleum-based fibers such as PP and PET which disintegrate into micro fibers when thrown away carelessly.

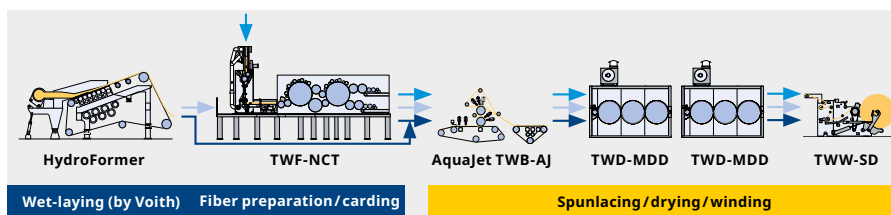
Paper-grade pulp is an affordable, abundant and sustainable raw material. Made from plantation wood – mainly pine, spruce and other, soft- or hardwood pulp

makes for excellent wipes when combined with longer man-made fibers. Pulp with viscose or lyocell delivers functionality, sustainability and competitive production costs. Trützschler Nonwovens and partner Voith offer proven machinery and production line concepts for

- Carded/Pulp nonwovens (CP)
- Wet-Laid/Spunlaced nonwovens (WLS)

A flexible CP AND WLS line configuration

Several WLS as well as the first industrial-scale CP line ever are successfully serving the wipes market.



In-built flexibility:

- wet-laid/spunlaced nonwovens
- carded/spunlaced nonwovens
- carded/pulp nonwovens

CP Line characteristics

- 2-layer baby and body wipes composite:
Web weight: around 50 gsm (with up to 65 % pulp if desired) / Line speed: up to 300 m/min

WLS Line characteristics

- Flushable wipes, baby and body wipes:
Web weight: around 50 gsm /
Line speed: up to 300 m/min

Quality wipes made with paper-grade pulp

Although pulp is used in paper-making, it nevertheless is suited for soft and strong nonwovens with a textile feeling. Viscose, lyocell or even PET fibers give high strength due to proper entangling of short pulp and longer man-made fibers.

CP and WLS wipes are voluminous with a high absorption capacity due to a massive input of softwood or hardwood pulp. Our line reliably processes the longer and thinner NBSK softwood pulp – but is also adaptable to the even lower priced, shorter, thicker and denser hardwood pulp.

Key components in pulp processing

All machinery ensures gentle fiber treatment and high throughput.

• Fiber preparation and Web forming

Voith's HydroFormer, in use in over 70 wet-laid lines, processes a dispersion of short pulp fibers and longer fibers needed for proper entanglement. In WLS lines the wet-laid, homogeneous web is directly delivered to the AquaJet. In CP lines the HydroFormer's pulp layer is combined with a carded web, formed by the NCT high-speed card.

• The AquaJet in wet-laid web processing (T-BOND)The industry leading Trützschler configuration ensures reliable fiber entangling and short pulp fiber integration into the nonwoven.

• Through-air drying (T-DRY)

Modular TWD-MDD multi-drum dryers ensure the high evaporation capacity needed for drying the extremely wet WLS and CP nonwoven. The dryer's intermediate chamber minimizes thermal energy consumption.



More information:

Contact us: nonwovens@truetzschler.de