Technical Datasheets

Nonwoven Fabric (TNT) in Industrial Environments

Nonwoven fabric (TNT) is a technical material made from synthetic fibers-primarily polypropylene or polyester-bonded together through mechanical, thermal, or chemical processes, without traditional weaving. It is available in rolls, sheets, or pre-cut formats in a variety of thicknesses, weights, colors, and finishes.

Industrial Uses:
TNT is widely used across industrial sectors for its functional and cost-effective properties:
- Surface and component protection during processing, transportation, or storage
- Technical packaging (shaped or flat) to protect against dust, impact, or scratches
- Air or liquid filtration, thanks to its micro-perforated or compact structure
- Masking in painting or sandblasting operations
- Temporary covers and tarps in production environments
- Production of disposable garments (gowns, caps, coveralls, etc.)
- Dust barriers and interior linings for equipment and machinery

The material can be treated to be water-repellent, breathable, antibacterial, or antistatic depending on the specific application.

Application in Vacuum Cleaner Bag Production:
In both professional and domestic cleaning sectors, TNT is a key material for the production of vacuum cleaner filter bags due to a combination of technical characteristics:
- High filtration efficiency: effectively captures fine dust and allergens
- Strong yet flexible structure: adapts to the shape of the container
- Low permeability to unfiltered air, while allowing controlled breathability
- Quieter operation compared to paper or plastic bags
- High tear resistance, even when full or containing damp dust
- Available in multilayer versions, often combined with meltblown or other filter layers

The use of TNT in vacuum cleaner bags enhances the lifespan and performance of the appliance, reducing premature motor clogging and improving the quality of the exhaust air.