

Innovation in the right direction.

Driving sustainability and efficiency in tissue production

The tissue industry is entering a decisive phase in which efficiency, sustainability and product quality are no longer optional but essential competitive factors.



■ GENIUM
rewinder - double
rider rolls winding
system, uniform
winding profile
from the core to
the last sheet.

The new industrial paradigm must integrate digitalization, reduction of energy consumption and advanced automation into tissue converting processes.

Giotto Technologies' offer demonstrates how innovation can truly align with the challenges and opportunities of the tissue industry. The company's vision is clear: innovation must not only improve performance but also foster sustainability, efficiency and flexibility. Its team of Italian technicians and engineers combines creativity and experience to deliver high-quality technology and services tailored to clients' needs to face new challenges in the worldwide tissue market.

▼ Use of Torque Motors: consistent power, energy optimization and cost reduction.

Industry 5.0: from automation to adaptive efficiency

The concept of Industry 5.0 represents a step forward from Industry 4.0. It goes beyond speed and automation, placing industrial development on three pillars: sustainability, efficiency and human-machine collaboration. For an energy-intensive sector such as tissue converting, where energy costs may represent a significant percentage of total production costs, this shift is crucial. Tissue converting companies must be able to:

- Cut energy consumption;
- Reduce waste and emissions;
- Certify performance.

The challenge: energy and market pressure towards a more sustainable industrial production paradigm

Energy costs have a significant impact on total production costs. With rising energy

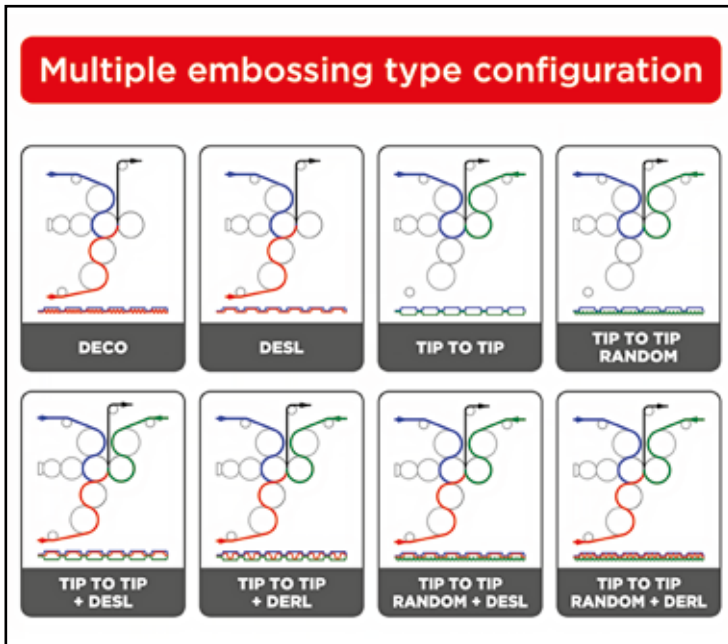
prices, every percentage point saved translates into an immediate competitive advantage. At the same time, customers and retailers demand sustainable products such as recycled packaging and certified green solutions, while the UN 2030 Agenda sets ambitious SDGs (Sustainable Development Goals) for energy efficiency and emissions reductions by 2030. Failing to embrace Industry 5.0 entails significant risks: loss of competitiveness, market access limitations and the obsolescence of production lines that may soon become non-compliant.

Giotto Technologies' answer: the GENIUM line

Giotto Technologies' solutions are designed to optimize and support tissue converting companies in the transition to Industry 5.0.

The GENIUM converting line is not only compliant with regulations but also





designed to improve processes - an advanced solution engineered for both performance and sustainability. Thanks to new-generation torque motors, gears, belts, reducers, and transmissions are reduced to a minimum. The production process can achieve up to 15% energy savings, requires less maintenance, and ensures optimized power usage. Product quality is guaranteed by the GENIUM rewinder, which features a dual pressure roll system for uniform winding, HMI-adjustable core diameters and a patented on-the-fly glue application system that ensures consistent glue quantity at any speed. At the same time, Giotto Technologies' solutions provide

exceptional production flexibility, allowing rapid product differentiation. The TRIPLER embosser features the unique capability of being equipped with three Rubber-to-Steel embossing units, offering up to eight different embossing configurations. TRIPLER enables tissue producers to

◀ **TRIPLER.**
The newest embossing solution with 3 engraved steel rolls working simultaneously.

launch innovative products on the market with an enhanced 3D effect of the graphics, increasing paper bulk without compromising softness. The commitment to digitalization and smart automation ensures maximum control and reliability. The GENIUM line is equipped with an MES (Manufacturing Execution System) that allows production to be scheduled from the management system and all setups to be configured via HMI. Through the MES, operators gain total control over the process in one smart, centralized system. All the intelligent sensors on the GENIUM line for operation control, predictive maintenance, and data-driven process optimization are powered by Siemens.

A strategic partner for the future

GIOTTO TECHNOLOGIES positions itself as a trusted technology partner, supporting clients and guiding them through the path of digitalization and sustainability. With its combined focus on sustainability, automation and quality, Giotto Technologies paves the way for a more efficient and adaptive tissue industry. ■

GIOTTO TECHNOLOGIES SRL

📍 Lucca, Italy

✉ email: info@giottotechnologies.com





FROM RAW MATERIAL TO FINISHED PRODUCT

COMPLETE SOLUTION for tissue transformation

A reliable partner for all tissue converting needs:
from tissue machines to converting lines for rolls and folded products,
focused on energy efficiency.



GiOTTO Technologies can provide a complete solution from tissue machines to converting lines, for rolls and folded product, realizing the full integration of the production process.

DISCOVER HOW!

