S8 +4®

In-line Dual Sputtering Module

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The new frontier of sustainable metallization

TAPEMATIC®

The right choice

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The New Frontier of Sustainable 3D Metallization

Tapematic S8+4 redefines the standards of in-line sputtering by combining cutting-edge technology, sustainable design, and unmatched productivity. With a throughput exceeding 10000 parts per hour, it sets a new benchmark for large-scale, high-quality 3D metallization. Designed for industries where precision, durability, and aesthetics are essential, the new S8+4 - In-line Dual Sputtering Module, ensures stable processes, reduced waste, and superior decorative and functional finishes. A key advantage of the system is its dual sputtering capability, with two fully independent cathodes able to deposit distinct metal layers within a single continuous cycle. This flexibility allows manufacturers to achieve both decorative and functional coatings in one streamlined process, supporting a wide range of applications from premium cosmetics to food packaging, automotive parts and pharmaceutical components, while guaranteeing maximum precision and repeatability. Far beyond a traditional production system, the S8+4 represents a complete solution for manufacturers aiming at efficiency, flexibility, and environmental responsibility. It can be seamlessly integrated into existing coating lines or operate as a stand-alone unit, adapting effortlessly to different production environments. Its modular design, advanced automation, and resource-efficient engineering ensure readiness for evolving market demands, while optimized energy management and reduced material consumption support modern sustainability targets. The result is a durable, future-ready platform that guarantees uncompromising performance.

10000 pieces/hour — **26** parts per tray

4800 pieces/hour — **12** parts per tray

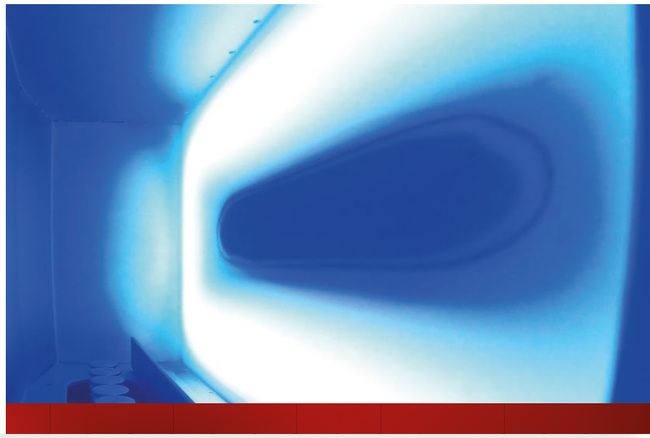
2400 pieces/hour — **6** parts per tray

Tray concept

The S8+4 stands out for its use of the proven tray concept adopted across the entire Tapematic PST Line, offering manufacturers a standardized and reliable handling solution. This approach ensures full compatibility across production stages, reducing setup times and enabling smooth transitions between workflows. By leveraging field-tested components, the system guarantees continuity and minimizes errors while maximizing efficiency. The tray concept also allows flexible handling of various substrate sizes and geometries, making the S8+4 adaptable to diverse requirements. Thanks to this design, integrating the module into existing lines becomes seamless, ensuring superior performance, higher throughput, and maximum versatility in 3D metallization.

Dual sputtering system

At the core of the S8+4 lies the dual sputtering system, with two fully independent cathodes depositing distinct metal layers in a single continuous cycle. This flexibility allows manufacturers to create both decorative and functional coatings on conductive materials as well as substrates requiring mechanical resistance, expanding possible applications. With production capacity exceeding 10,000 parts per hour, combined with exceptional stability, uniformity, and repeatability, the Dual Sputtering System is an efficient and reliable solution for industries such as automotive, food, pharmaceuticals, and premium cosmetics. Its ability to combine materials in one process reduces cycle times, optimizes resources, and supports sustainable production while maintaining consistent quality across large volumes.



Green Technology, High Efficiency

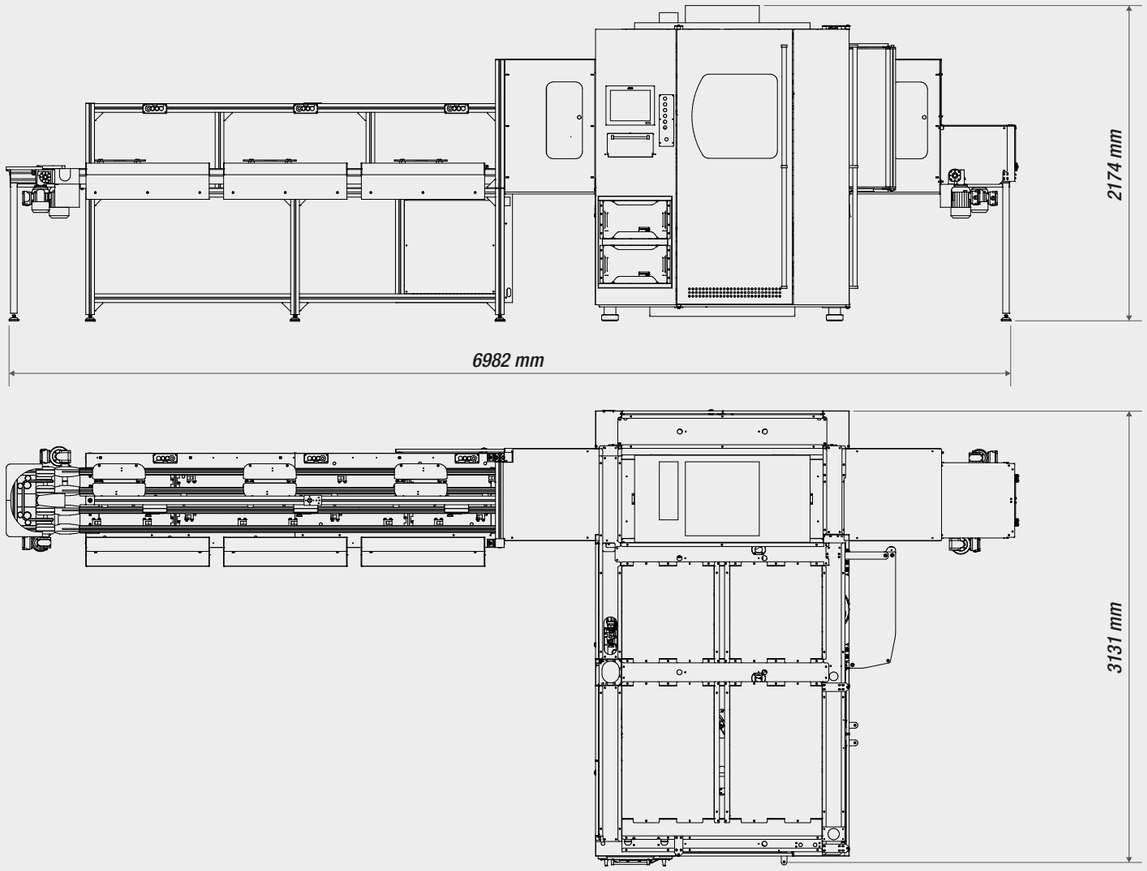
The S8+4 is designed with a strong commitment to sustainability, combining energy-efficient operation with resource-conscious engineering to minimize environmental impact throughout the production process. Optimized vacuum management, intelligent power distribution, and precise process control not only reduce energy consumption but also limit material waste, while fully automated handling ensures consistent results with fewer rejected parts. In addition, its modular and adaptable design allows manufacturers to scale production efficiently without unnecessary resource use. By integrating these eco-friendly solutions, the S8+4 empowers manufacturers to achieve high-quality output while promoting responsible, sustainable, and cost-effective manufacturing practices.

S8+^{4} key features

- ***Dual-Independent Cathodes deposit distinct metal layers in a single cycle for maximum flexibility.***
- ***High-Speed Throughput produces over 10,000 parts per hour with consistent quality.***
- ***Versatile Applications handles conductive and mechanically resistant substrates for multiple industries.***
- ***Seamless Integration fits Tapematic PST Line trays for smooth workflow and quick setup.***
- ***Advanced Automation reduces manual intervention and ensures reliable, efficient operation.***
- ***Sustainable Design optimizes energy use, reduces waste, and supports eco-friendly production.***
- ***Modular & Scalable works as a stand-alone unit or within larger automated lines***
- ***Proven Quality & Reliability built on decades of expertise for durable, industrial-grade performance.***

Advanced automation

Built on decades of Tapematic expertise in automation, robotics, and surface finishing, the S8+4 integrates advanced solutions that enhance efficiency, precision, and repeatability in 3D metallization. Intelligent handling and smart process controls minimize operator intervention while ensuring consistent quality and reducing rejection rates, even at very high speeds. The system features ultra-fast cycle times, intelligent configuration memory, and a modular architecture designed for future needs, allowing manufacturers to scale operations with flexibility and reliability. Its resource-conscious design also promotes sustainable manufacturing by optimizing energy use, minimizing waste, and improving material efficiency, showing how advanced technology aligns with environmental responsibility.



S8+⁴ technical data

Substrate	
Substrate material	ABS, PE, HDPE, PC, PS, PA, PET, PVC, SAN, PPA, PP, PMMA, POM, Glass, Metal
Substrate dimension	Ø 102 x 130 h mm (Custom dimension upon request)
Handling process	
Loading / Off loading	6 individual manual stations
Transport	Modular chain conveyor system
Tray	13 configurable positions Tapematic standard tray system
Clean room environment	Built in class 100 Hepa filter
Sputtering Process	
Target material	Aluminum, Silver, Gold, Stainless Steel, Chrome, Copper, Titanium
Vacuum chamber	Load lock system to maintain consistent high vacuum
Production	
Cycle time	> 10000 pcs/hr
Yield	95%
Up-time	85%

Physical	
Dimension	7000 w x 3200 l x 2200 h mm
Weight	5000 Kg
Utilities	
Power	400V 3 phase 50/60 Hz 55 k VA
Air	6 bar 200 N l/min
Water	5 bar 34 lt./min, 16-18°C, pH 6-8, dH 4-8
Argon	2 bar, 50 sccm, purity 99.999%
Environment	
Working area	12 m x 6 m ceiling height minimum 3 m
Temperature	18 - 24 °C
Relative Humidity	35 - 55% non condensing
Safety	
CE	Complies with all current regulations
Patents	
European patent granted	EP2500448B1, EP3599030, EP3441232, EP3015176B1

We reserve the right to make modifications without prior notice

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