

Introducing BALIQ A coating: Oerlikon's TiN expertise meets advanced S3p technology for reliable threading

Balzers, Liechtenstein, October 21, 2026 – **Threading is often one of the final and most critical steps in manufacturing. At this stage, reliable tool performance is essential to avoid scrap, rework and process interruptions. To meet these requirements, Oerlikon's technology brand Oerlikon Balzers, globally recognized for thin-film coatings, introduces BALIQ A, a new TiN-based PVD coating for threading applications that combines advanced S3p technology with decades of TiN coating expertise.**

Oerlikon's expertise in PVD coatings dates back to BALINIT A, the company's first commercially successful wear-protective TiN coating for cutting tools, introduced in 1978. Building on this heritage, BALIQ A is a new TiN-based coating with improved properties and quality, delivering optimized performance in threading applications while also being suitable for other applications across a broad range of materials.

Advanced S3p technology as the foundation

At the core of BALIQ A is Oerlikon's proprietary S3p technology. Combining the advantages of arc and sputter technologies, it enables exceptional surface smoothness, excellent adhesion and uniform coating thickness distribution. These characteristics form the basis for consistent coating quality, reliable tool performance, high process stability and reproducible thread quality.

"The capabilities of our unique S3p technology have opened new possibilities for TiN coatings," says Ivan Iovkov, Global Product Manager Cutting Tools at Oerlikon. "By combining these key advantages, BALIQ A delivers a new level of TiN-based performance for threading applications and provides a foundation for a broader range of cutting and forming applications."

Validated under real-world production conditions

BALIQ A has undergone extensive internal testing and customer validation worldwide. Evaluations with leading tap manufacturers confirmed reproducible results and consistent thread quality under both laboratory and production conditions. The coating is available in Oerlikon's major markets across the Americas, Europe and Asia.



BALIQ A enables high process stability and reliable thread production when tapping a wide range of materials.



Based on Oerlikon's advanced S3p technology, BALIQ A represents a new generation of TiN-based coating quality, enabling improved performance for threading tools.



BALIQ A continues the TiN heritage established by BALINIT A, Oerlikon Balzers' first commercially successful wear-protective coating, introduced in 1978.

For more information, please contact:

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About Oerlikon

Oerlikon is a global leader in material science engineering. Through the right combination of surface technologies, advanced materials, coating equipment, engineered components and advanced manufacturing, we help customers improve the performance, efficiency, durability and sustainability of their products and processes. Our technologies are often invisible to the end user, but mission-critical to the industries that power modern life: aerospace, energy, semiconductors, medical, luxury, tooling, automotive and general industries.

Headquartered in Pfaffikon, Switzerland, Oerlikon operates in 38 countries with a global workforce of around 10,000 people. In 2025, Oerlikon achieved sales of CHF 1.6 billion.