Case Study | ZSK Embroidery Machines

CodeMeter – Secure Production Data, Secure Business

No More Loose Threads in the Textile Industry

The Challenge

The textile industry is one of the pioneer sectors in the rise of truly globalized supply chains. Fashion brands or high-tech fabric makers often operate a globally dispersed business, with designers far away from the actual production of their creations. ZSK Stickmaschinen GmbH stands as a critical lynchpin in that global system, as invaluable and much-coveted designs and production data pass through its high-tech design tools and embroidery machines – an alluring target for product pirates and more ruthless actors on the grey market.

The Solution

ZSK Stickmaschinen relies on Wibu-Systems to protect its own business model and the legitimate business of the users of its machines. CodeMeter allows only the correctly licensed use of the embroidery machines; by encrypting the software controlling the ZSK machines and the production data, Wibu-Systems' technology stops would-be IP thieves from stealing invaluable branded designs and counterfeiters from replicating the textile machines' inner workings themselves.

The Result

With a tiny CmDongle slotted unobtrusively into its machines, ZSK Stickmaschinen achieves its double purpose: The integrity of its own technology and the designs of its clients are protected, and the system becomes a strong gatekeeper in a globalized and virtualized business: Versatile licensing allows complete control over production volumes and ensures that data can move through the collective network without the threat of manipulation. Access to client documents is securely limited to legitimate users and, optionally, to specific periods defined by the license.



Julius Sobizack Managing Director ZSK Stickmaschinen GmbH

"We have been partnering with Wibu-Systems for well over a decade. Since we started using their products, we have not experienced anymore piracy of our own software solutions."





The Company

With over a century of innovation in textile engineering to its name, ZSK Stickmaschinen GmbH is respected as a hallmark for quality, precision, and reliability in innovative single and multi-headed and specialized embroidery machines. Its technology is favored by users in all areas of the textile industry, from regular branded apparel to high-tech fabrics and the promising field of wearable electronics.

Taking Back the Fight – CodeMeter in the Textile Industry



The fashion world and the textile industry at large are beset by multiple threats and risks. As one of the sectors of industry with the most truly globalized supply chains, it depends on the worldwide flow of not only material products, but also more intangible assets: Designs, production data, confidential documents, and order specifications are, more often than not, sent in digital form from a product developer's office or designer's studio to any number of workshops and factories, often in low-cost economies. As each piece of clothing or textile product usually goes through multiple hands at multiple specialized contract manufacturers, there is a potential for leaks all along the product pipeline.



With over 100 years of technological development to its name, the machines made by ZSK Stickmaschinen GmbH stand at a critical juncture in this global network: Its embroidery machines often handle very specialized and IP-heavy tasks in the supply chain. This is not limited to logos on branded apparel, as the technology is also employed for highly specialized applications e.g. in the automotive industry, ranging from stitched details on in-car upholstery to the technically intricate job of processing load-bearing carbon parts – in essence nothing other than a woven fabric – or embedding delicate electronics in the materials.

Textiles have also been one of the most visible targets of product pirates: Gone are the days of poorly reproduced branded fashion, fakes that could be spotted at first sight. The pirates have become far more sophisticated, with forged designs so close to the original that fashion brands and specialized textile makers are forced to turn to other, post-production marking and identification means that are often either prohibitively costly or offer only a false sense of security. Even then, there remains the risk of the proverbial "fourth shift" pumping out materially identical, but essentially stolen goods for the grey market.

Textile and fashion companies need to inject new safeguards and traps in the field to plug the leaks and take the fight back to the product pirates. With Wibu-Systems' CodeMeter technology, ZSK Stickmaschinen gives them a powerful tool to do so directly from their embroidery machines. Equipped with CmDongles, the machines include Wibu-Systems' unbeaten encryption, protection, and licensing capabilities to shield confidential data and invaluable IP from prying eves and take back control over production volumes and designs in factories that often have no representative of the product's actual maker on the ground. At the same time, the encryption of the operating software on the ZSK systems means that the highly intricate and innovative embroidery technology itself is protected from another class of product pirates: potential thieves of the highquality German engineering that has gone into the ZSK machines.

On top of protection and encryption, the versatile licensing capabilities of CodeMeter enable the users of ZSK embroidery machines to adapt their business models for the globalized Industrie 4.0 world that the textile industry has already become. With time or volume-limited licenses, they have full and real-time control over the use of their designs and the production volumes on the other side of the world. Orders and designs can flow in one direction, production monitoring and billing data can flow back, safe in the knowledge that it cannot be tampered with in the machines. And with a new trend towards personalization in fashion, ZSK Stickmaschinen and Wibu-Systems together offer the perfect package for a future of fully customized, small batch production – from the comfort of a design studio and without worrying about the fate of designs let out into the wild.

About Wibu-Systems:

WIBU-SYSTEMS AG (WIBU[®]), a privately held company founded by Oliver Winzenried and Marcellus Buchheit in 1989, is an innovative security technology leader in the global software licensing market. Wibu-Systems' comprehensive and award winning solutions offer

unique and internationally patented processes for protection, licensing and security of digital assets and know-how to software publishers and industrial manufacturers who distribute their applications through PC-, embedded-, mobile- and cloud-based models.





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