

NON-STICK-COATED PROCESS BELTS FROM GKD AS A SOLID SOLUTION FOR AN EXCELLENT THERMOBONDING OF THICK NONWOVENS



Double-Belt Dryer with non-stick-coated lower belt and magnetic upper belt from GKD

Since last year, GKD has been testing non-stick-coated dryer belts at various manufacturers of nonwovens products. One of the leading manufacturers of technical nonwovens made of staple fibers is J. H. Ziegler Magyarország Kft. in Bábolna, Hungaria. In 2006, the company opened a new production with state-of-the-art equipment and processes. Around 3,500 tons of fibers are processed there annually into high-quality products, including nonwovens with grams of up to 4,400 per

square meter. Such weights, combined with thermal binders, pose enormous challenges for capital equipment and key components like process belts. When a new oven was put into operation in the Hungarian factory, serious problems arose with the thermal bonding process. Neither the oven itself nor the process belts being used could cope with the increased requirements that were placed on them.

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PERFECT DETACHMENT OF THE PRODUCT AND AN EXTREMELY TRUSTWORTHY PARTNERSHIP



Picture 1: Double belt oven, 14 meter long / Picture 2: Uwe Rudolph, Technical Director of Ziegler Group

The solution GKD and Ziegler finally came up with included a non-stick-coated lower belt and a magnetic upper belt. The directional weft wire with its unusually large diameter ensured the required high degree of cross-stability and robustness in both the lower and the upper belt. An innovative coating on the lower belt proved to be particularly efficient, not only in terms of trouble-free detachment of the product, but also because it significantly eased the cleaning of the belt, something which had previously involved a lot of time and effort. „We used to need six people working intensively for several hours to clean the belt,” Uwe Rudolph, Technical Director of Ziegler Group and also responsible for production in Bábolna, recalls. The new belt prevents adhesion of the extremely sticky product and thus only gets slightly soiled. The occasional bits of residual adhesive burst of their own accord or can be removed with a soft brush as easily as small fibers. „The decisive quality criteria of the GKD belts are their extremely high

degrees of cross-stability and load-bearing capacity,” says Uwe Rudolph, summing up his evaluation. „This makes them ideal for coping with our demanding products at weights of up to 80 kilograms.” The belts are non-marking and easy to close with a pin seam. The new prototypes were installed in August 2013 and have been running trouble-free ever since. Uwe Rudolph’s summary of the collaboration with GKD is extremely positive, not just because of the process reliability and efficiency achieved. „The trouble we originally had because of the non-functioning belts has given rise to an extremely trustworthy partnership. That’s really a wonderful thing!” In his view, in addition to its high level of competence in consulting and problem-solving, it was GKD’s enthusiasm and dedication that was the key factor in this development. „Our experience was so positive that I would contact GKD again anytime I needed help with a technical problem.”