Increase in production capacity and lower energy costs: Successful machine extension with heat-recovery system at HANNO in Laatzen

HANNO stands for foam impregnation and noise protection. 200 employees work south of the Expo site in Hanover to solve customer problems using state-of-the-art technology. Quality, economic efficiency and customer orientation are the company's main targets. The focus is on impregnated foamed material for industrial applications: sound absorption, acoustics, anti-drumming as well as joint sealing in building construction. Reliable products, competent advice, comprehensive logistics and friendly service are the hallmarks of HANNO. Founded in 1895, HANNO is part of the HANNO-Vito-Group with locations in Germany, Switzerland, Austria and the USA.

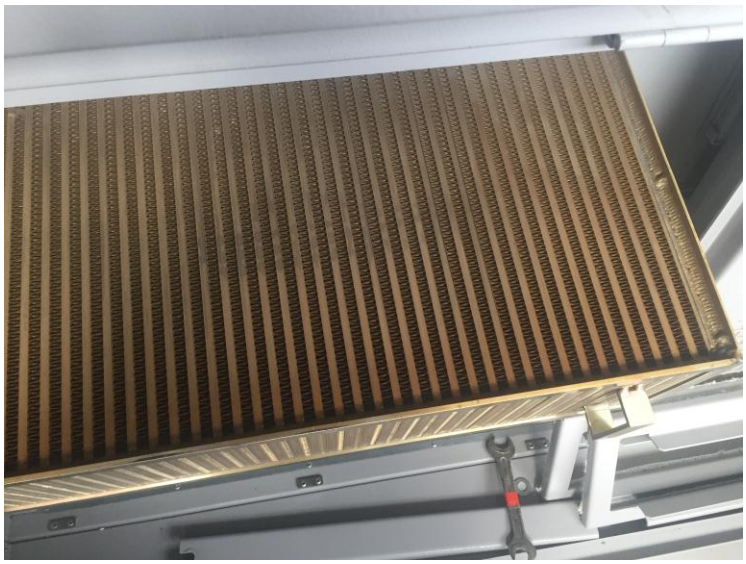
In 2011 a BRÜCKNER belt dryer with four dryer compartments was installed at HANNO. Due to an increased demand the machine capacity should be expanded. Therefore BRÜCKNER was awarded the contract for a machine extension by another four dryer compartments. HANNO expected from the belt dryer which would then be twice as long, an increase of the throughput speed for drying the web material (transfer adhesive). In order to increase the energy efficiency of the line, a BRÜCKNER ECO-HEAT PE 15 air/air heat-recovery system was ordered in addition to the machine extension. The heat-recovery unit uses the exhaust air heat to heat up fresh air. The heated fresh air is fed to the dryer, thus reducing the heating requirement of the dryer. The energy saving concept was checked and supervised by an energy consultant (Ing.-Büro Energie-Punkt). The confirmation by an accredited energy consultant is required in order to receive a subsidy from the KfW Bank for the total costs of the heat-recovery system. This ensures that only sensible heat-recovery concepts benefit from EU subsidies for CO2 avoidance.

The machine extension was installed at HANNO at the turn of the year 2018/ 2019. After 12 months of operation, HANNO project manager Reinhard Vogelei could draw the following conclusion: Depending on the product, the production speed could be increased by 65-100%, the specific gas consumption per square meter of transfer adhesive was reduced by 30%! So the investment in BRÜCKNER's heat-recovery system pays off for HANNO in a very short time.

An inspection of the highly efficient cross-flow heat exchangers of the heat-recovery system after 12 months of operation has shown that there is no caking of pollutants. Therefore no special cleaning is necessary. The maintenance-friendly heat-recovery unit therefore requires very little maintenance: only the outside air filter needs to be cleaned from time to time to prevent pollen and dust from the outside air from entering the production building.



The extended belt dryer with directly mounted heat-recovery system



One of the compact heat exchangers of the heat-recovery – after 8 months Without Fouling