CARDING TECHNOLOGY
AUTEFA Solutions leads the way
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AUTEFA Solutions represents companies with a long tradition and a history of years of successful participation in the market. Combining the experience of the companies AUTEFA, Fehrer, FOR and Strahm the company stands for high quality, durability and performance made in Europe.

AUTEFA Solutions creates innovative technological concepts for nonwoven products by utilizing the skills and practical experience of its employees. The customers benefit from the dynamic flexibility and specialist know-how of AUTEFA Solutions key technology sites in Germany, Austria, Italy and Switzerland.

AUTEFA Solutions Nonwoven Technology

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AUTEFA Solutions is part of China Hi-Tech Group Corporation (CHTC).
Injection Card

The traditional mechanical carding principle using workers and strippers has been replaced by an aerodynamic principle in the Injection Card. The fibers are taken off the worker rollers by an aerodynamic effect generated by specifically shaped devices. This avoids considerable mechanical stress on the fibers which usually applies to traditional carding systems with stripper rollers.

THIS PATENTED CARDING PRINCIPLE OF THE INJECTION CARD PROVIDES SOME VERY IMPORTANT BENEFITS:

- The carding action takes place at the tangent point of two convex surfaces and is very smooth.
- The fibers are not picked up by worker and stripper rollers minimizing the fiber path. This reduces the mechanical and thermal stress on the fibers resulting in a significant reduction of neps, fiber breaking and melting.
- The fiber path is completely on the inside of the card reducing the negative effects caused by centrifugal forces. It is possible to run the main cylinder at maximum rotation speed to improve the web quality.

Combined with the patented EVO-2 and EVO-3 take-off system, the Injection Card achieves very high production speeds with an excellent uniformity also with fine fibers. All cards are equipped with the new easy opening system.
WM 2+2 CARD

The Webmaster WM 2+2 Card is designed for high productivity and top quality nonwoven materials.

A patented system of two doffers between the two main cylinders of the WM 2+2 Card provides an optimal strip-off at the first cylinder and allows the division of the fiber flow in the intermediate area providing improved blending and fiber distribution on the second cylinder. In addition, the use of two doffers in the intermediate section increases the carding power of the machine with the effect of about two additional worker rollers compared to a traditional card.

The standard configuration of the WM 2+2 Card is equipped with a double doffer delivery section. Each doffer of the delivery section is equipped with a randomiser which is quickly convertible to a rotary comb allowing the production of randomised webs as well as highly oriented webs on the same machine according to the material specifications. By using the One Web System the WM 2+2 Card can also be used to produce a single web suitable for the production of light weight materials. And all cards are equipped with the new easy opening system.
Fiber Orientation

AUTefa Solutions offers a wide variety of different delivery sections according to the requirements of the web and fibers to be used. The patented EVO-2 and EVO-3 condensing system using a web control roller, enables the achievement of high line speeds without the need of a suction system under the belts.

A) Quick change system for parallel or condensed web
B) Condensing system for long fibers
C) Condensing system
D) Condensing system EVO-2
E) Randomising and condensing system
F) Randomising system

Card Feeding

For optimal opening of the fibers, AUTefa Solutions offers the new FTO system using a vertical roller system. In addition to the traditional volumetric hopper feeder HF, there is a feeding system using a FCU filling cage transporting the fibers in a controlled way to the new volumetric control chute feed CF. This system provides an excellent uniformity in the feeding process at high production rates.
Card Regulation

Feeding systems of the card can be combined with an inline control of the weight of the fiber matt or alternatively by controlling the fiber density with the “Servolap” system (x-ray). The settings of the feeding system are automatically optimised based on the information provided by the inline control system.

Nonwovens Competence Center

The AUTEFA Solutions Nonwovens Competence Center offers multiple web forming and bonding technologies in industrial scale to cover all our customer’s requirements for application oriented product optimization.

- Evaluation of fibers, fiber blends, wires and needles
- Process developments for special applications
- Recommendations for machine and line
- Performance and quality optimization
- Provision of samples for customers
- Individual training programs

All trials are documented by detailed reports of our quality control team. We guarantee the confidentiality of all activities and results.

- Fiber Preparation Plant feeding three lines
- Carding Line with Crosslapper and Needlelooms for mechanical bonding
- Aerodynamic Web Forming Line (Airlay) with Needleloom and/or Thermobonding Oven
- High Speed Carding Line with Injection Card for Hydroentanglement