Automatic in-line dilution systems will improve quality, machine effectiveness, and operational efficiencies. The in-line adhesive dilution system removes the need for outdated manual and semi-automatic systems. This system enables Tissue and Towel manufacturers to easily and consistently dilute the concentrated adhesive to achieve the exact adhesives solid level they desire. It also has the capability of adding color to the adhesive to enhance brand image.

The automated process delivers a continual supply of diluted adhesive, up to 480 kgs per hour, freeing up operator time. Plus the diluted adhesive is constantly agitated in the tank so there is no need to worry about the risk of separation. Developed with six preset dilution levels, based on the solid content of the adhesive, the system utilizes four weighing scales under each plate to ensure consistency.

**HOW DOES IT WORK?**

**Two-component**

1. Concentrated adhesive is pumped from a bulk container into the first 80 liter tank in the dilution system.
2. Water is added while the adhesive is agitated to provide 80 liters of diluted adhesive at the required preset solids level in tank 1.
3. The system automatically pumps the diluted adhesive to the tissue machine when called for.
4. At the same time, concentrated adhesive is pumped from the bulk container into the second tank of the dilution unit.
5. Water is added while the adhesive is agitated to provide 80 liters of adhesive at the required preset solids level in the second tank.
6. The diluted adhesive in both tanks is gently agitated while adhesive is being pumped to the tissue machine. When tank 1 is empty, the unit switches to pump diluted adhesive from tank 2 to the tissue machine.
7. The system then begins at step one again to fill the empty tank with diluted adhesive.
8. This process continues until a machine operator stops the process.

**Three-component**

1. For three-component mixing, the concentrated adhesive and water are added to tank 1, same as for a two-component mix, however, when the batch is complete it is then transferred to tank 2.
2. In tank 2, the diluted adhesive is mixed with the third component, like a dye.
3. As with the two-component working process, the unit can continue to make down three-component adhesive automatically.
BENEFITS TO THE CUSTOMER

- Closed systems like the adhesive auto dilution system improved quality consistency and prevents bacterial infection.
- Unit is simple to operate with six preset dilution levels based on the solids of the concentrated adhesive.
- Dilution unit can be sited away from the tissue machine.
- Diluted adhesive is constantly agitated in the tank to eliminate separation risk.
- Frees up operator time to focus on higher value activities.
- Capable of automatically adding in a third component.
- Available exclusively through a supply agreement with H.B. Fuller.

ABOUT H.B. FULLER

Since 1887, H.B. Fuller has been a leading global adhesives provider focusing on perfecting adhesives, sealants and other specialty chemical products to improve products and lives. With fiscal 2017 net revenue of over $2.3 billion, H.B. Fuller’s commitment to innovation brings together people, products and processes that answer and solve some of the world’s biggest challenges. Our reliable, responsive service creates lasting, rewarding connections with customers in electronics, disposable hygiene, medical, transportation, aerospace, clean energy, packaging, construction, woodworking, general industries and other consumer businesses. And, our promise to our people connects them with opportunities to innovate and thrive. For more information, visit us at www.hbfuller.com.