



Application Notes

AutoBlend Systems Pulp & Paper Industry Liquid Stock Dyeing In Paper Mills

Advantages

- No preparation tanks required.
- Savings of space due to compact design.
- Savings of working time necessary for the dye preparation in the case of batch operation.
- Convenient changeover to different colors and concentration.
- Quick and easy cleaning of the equipment.
- Uniform and reproducible color standards by highly accurate metering.





Problem

Continuous preparation of highly diluted dyes and metering the same to paper stock suspension upstream of the paper machine head box.

Process

The dyes are drawn from the Supplier's drums and are then metered in controlled volumes. The specific blend of dyes is obtained by setting the plunger stroke length of each pumphead. The dye volume is adapted to the stock flow by varying the speed or stroking speed of the pump. The flow of dilution water is adjusted by means of a flow meter and a control valve. The metered dye and water volume are blended in a static inline mixer and are added to the dilution stock upstream of the paper mill.

The suction line of any pumphead can be filled and made ready for operation by switching over the three-way valve and water driven ejector, even while one of the dye metering pumpheads is still working. The Bran+Luebbe building block system provides a metering pump unit with up to 36 pumpheads for different dyes. Flushing of the metering and blending system is obtained via three way valves.

Components

- Bran+Luebbe matering pumps.
- Static mixer.

Automation

Loss of product detection.

Simplified process diagram









