

# BVG Bauer-Verfahrenstechnik-GmbH

## Economic production is not possible without chemicals

**H**igh-quality papers cannot be manufactured economically nowadays without chemicals. This is particularly true of corrugated board base papers made from recovered paper. In order to be able to cover the whole of this area reliably, Papierfabrik Adolf Jass chose BVG Bauer-Verfahrenstechnik-GmbH from Greifenberg/Ammersee as the supplier for the new mill in Schwarza. The order to supply turnkey equipment for the chemical systems represents continuation of

co-operation between Adolf Jass and BVG that already began more than 20 years ago and that is a model of mutual respect and trust.

BVG was commissioned to supply one of the first continuous enzymatic starch degradation plants for corrugated board base papers to the mill in Fulda as long ago as 1984. Further systems at the mill followed, in order to be able to

**Dispersion of bentonite powder**



## *Local service - Global know-how*



**Papierfabrik Adolf Jass Schwarza assigned Jaakko Pöyry to start implementation engineering 14 months before the production start-up.**

We are proud to have been part of the team building a plant that was started up in record speed within the tight time schedule.

**Further reference projects:**

- PM5 - Lang, Ettringen
- PM1 - Rhein Papier, Hürth
- PM4 - LEIPA, Schwedt/Oder

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**JAAKKO PÖYRY**

*Competence. Service. Solutions.*



### Super-ECC system for the fully automatic processing of surface starch

keep pace with the steadily increasing production.

The new "Super-ECC" system for Schwarza is already the fifth starch system that Jass has ordered from BVG. Turnkey delivery of all the chemical equipment has many advantages. They include not only uniform technology but also consistent engineering and standardisation of all the parts of the system, uniform electrics, programming and user guidance. It is confirmed again and again that the programs work best when they are supplied directly by the equipment supplier.

BVG is one of the few suppliers in the paper industry that has programmers of its own. All the standard automation systems, such as Siemens S5, S7, Win CC, PC 7, ABB AC 800 M, Ahlstrom Allspa 8000i-ICS, Allen Bradley Control Logix, Panel View, Metso Automation DNA and Aucotec can be programmed by BVG. BVG was the only supplier for the Jass Schwarza project that programmed the equipment it supplied itself, independently of the DCS supplier.

The equipment in detail, in the order of the process chain:

### Liquid chemicals

Storage, processing and metering of internal and surface sizing agents, internal and sizing colour, defoaming agents, biocides and felt cleaning agents (acid and alkali).

### Powdery chemicals

Storage, processing and metering of bentonite, polyacrylamide (PAM).

### Starch processing

Storage, processing and metering as follows: two silos with a volume of 300 m<sup>3</sup> each, continuous slurry production underneath each silo, BVG Super-ECC degradation converter with online viscosity control, stoarge tank for starch paste, recirculation line to the work stations, work stations on the SpeedSizer (film press), dilution stations for size at the work stations, warm water generator.

### "Super-ECC" degradation converter

The process engineering of the degradation converter is a regular subject of controversial debate among specialists.

BVG has developed a degradation converter of its own that has led to an excellent performance regarding starch quality, operational reliability and user convenience.

More than 60 Super-ECC systems are in operation all over the world. In the corrugated board base papers segment, BVG has even succeeded in obtaining a market share of 100 % with new systems in Central Europe in 2004/2005. All six new paper machines that have already gone into operation and will be going into operation during this period use Super-ECC. This market position demonstrates the correctness of the BVG concept and the capabilities of the company.

It is very important to clean the starch medium in the circulation systems of the application units on the SpeedSizer. Good cleaning is essential in order to be able to produce not only fluting but also test liner on the paper machine.

### Cleaning final prepared starch

Even tiny contaminants lead to streak formation and thus to the production of waste. There had been no previous experience with the single ply paper machine and film press in the production of test liner. BVG carried out this assignment by using BVG Super-Strainer pressure filters and vibrating screens in the inflow.

The filter baskets of the Super Strainers are self cleaning and do not need to be rinsed for weeks. The vibrating screens require practically no maintenance too. Even after it has been in operation for several months, the entire system still makes an extremely clean impression – something that is unusual in this section of the machine.

High functionality, absolutely clean design and exceptionally reliable operation are the outstanding features of chemical processing equipment from BVG. The machine standards are more professional than has been the case with brown papers before. The customer is extremely satisfied.