



**Constellation Europe chooses Puresep as key provider of  
state of the art filtration equipment**

**Following an in-depth review of requirements, industry recommendations and a major review of available technologies, Constellation Europe Ltd, part of Constellation Brands Inc has chosen Puresep Filtration Technologies Ltd, a leading provider of in-house manufactured filtration equipment, and Begerow, the liquid filtration specialists, to provide state of the art Stepflow filtration technology to its new Winery in Avonmouth. The Stepflow system ensures the wine is efficiently and economically filtered ready for bottling at one of Europe's largest bonded warehouse.**

Two Stepflow systems have been commissioned to serve the two bottling lines in place at Avonmouth. Stepflow filters are fully automated bespoke systems. They are stand-alone units, each on a base frame. Each filter has its own control with an operator panel. The filters are on a duplex skid, each having two independent filtration streams, one in filtration and one in standby.

Each line sees wine filtered through two stages, a pre-filter and a final sterilising filter. The pre-filter stage is a 30-fold cartridge housing using Begerow depth filter cartridges. The final sterile filter is a 24-fold cartridge housing with Begerow membrane cartridges.

The system is fully automated, with a differential pressure monitoring system to provide automatic changover between lines; however it is also linked to an operator station for permission to changeover. Mix proof valves allow regeneration on one line of the plant whilst the other is in filtration. The regeneration process is programmed to start at least every 12 hours of production; depending on the quality and the volume of wine. Once the Stepflow has completed its regeneration it is ready for use. The filter regeneration and integrity test is fully automated and therefore, It is not possible for filtration to start with a negative integrity test.

A self-contained CIP system was also installed in order to aid in efficient cartridge sterilisation and aid in maximising efficiency. A wine warmer was put in place to ensure optimal temperature of the wine is maintained, to ensure efficient bottle labelling.

Each Stepflow is fully integrated within the entire plants control system, enabling all facets of the production line to be interlinked; so, when production is required all components in the process communicate with each other.

Craig Crosby, Project Manager for Constellation Europe, says “we needed a system that could efficiently serve the needs of the Avonmouth plant. The Puresep / Begerow partnership matched our exact requirements. Not only is the technology state of the art and bespoke to our needs but the service levels offered from local experienced engineers is second to none”

**Benefits of the stepflow system:**

- Usage of cartridges is optimised
- Fully automated and user friendly
- Minimised manpower
- Environmentally friendly – reduced water consumption and reduced costs
- No usage or disposal of filter powders
- Enclosed self regenerating system and sterilisation program
- Remote maintenance via analogue/digital modem
- Local experienced engineers

Vince Payne, Managing Director of Puresep says “Supplying Constellation with both filtration and water treatment solutions shows our capability and strength in providing bespoke systems across a whole plant, from water intake through to final packaging. It enables us to take responsibility for the whole system. Working with the Constellation team has been a pleasure”

###

Puresep Filtration Technologies Ltd is headquartered in Herefordshire. Founded in 2002, Puresep now boasts over 500 customers across market sectors that include: Food and Beverage, Pharmaceuticals, Paper and Chemicals, Puresep has high hopes for the future and is setting aggressive targets for growth. Puresep Technologies has two divisions, Puresep Water based in Lincolnshire and Puresep Filtration based in Herefordshire. Customers include; Scottish and Newcastle, Universal Beverages, Brivic, Diageo and Marstons.

For further information contact : Jo Collins, Puresep Technologies Ltd, Bromyard Road Trading Estate, Bromyard Road, Ledbury, Herefordshire, HR8 2UP. Tel: 01531 636 328, Fax: 01531 634012. email: [jcollins@puresep.com](mailto:jcollins@puresep.com)

