Application of Depth Filter Media – Extension of Lifetime

There are possibilities to extend the lifetime of the depth filter media and to improve the capacity of these filters.

1 Deposit of turbid matter

During the filtration of wine, cider or beer, a considerable amount of tannins, pectin's, proteins and colorants, fine crystals of tartaric acid, micro-organisms as well as colloids such as polysaccharides, are deposited within the inner volume of the filter media. Since not all colloids are real turbids, they reduce the filtration speed considerably.

By rinsing the filter media with water, some of the above mentioned substances will go into solution and the filter media are partially cleaned. This procedure is also known as regeneration of filter media.

2 Principle of regeneration

Depth filter media are cleaned by means of water. The aim is to change the chemical-physical properties of the liquid and therefore to dissolve substances which are insoluble in the unfiltered product.

3 Regeneration put into practice

3.1. Rinse for 10 - 15 min with cold water. The pH will drift to the neutral point, adsorptive bonding therefore will be removed.

3.2. Continue rinsing for 10 - 15 min with warm water of about 113 °F. Proteins and salts of the tartaric acid will be dissolved, the viscosity of the colloids will be reduced.

3.3. Never use water at this stage warmer than 122 °F! Otherwise proteins will coagulate, that means, they will become insoluble and block up the filter media.

3.4. If you wish to remove the red dyes of previously filtered red wine, you may now rinse for 10 more minutes with hot water of 176 - 185 °F. This will enable you to filter a rosé wine through the same filter media.

3.5. Continue the preparation of the filter equipment for either sterilization or cooling to room temperature with cold water.

Do not Backflush the standard FILTRODISC Modules. Only forward flushing!