

Clean not only from new machines

Improving the cleanability and microbiological cleanliness in older filling machines

- Adaptation of the filler tanks in older types - Sanitation fluid drain, adjustment of welded-on pieces for the floater, transducer pressure gauge,
- stepless level and pressure control,
- fully automatic sanitation,
- rinsing of filling valves,
- plating of the filler turntable,
- foam cleaning of the filler (manual or automatic),
- guarding for the fillers with air filtration,
- adjustment of lubrication in crown capping machines,
- transition from oil to grease lubrication.

In order to avoid contamination of the bottles, it is also possible to supply conveyor system where the conveyors between the rinsing unit and the filler or between the washing unit and the filler are guarded.



Filler before adaptation - Veseta s.r.o.Litovel, Czech Republic

Filler with guarding - Veseta s.r.o.Litovel,
Czech Republic



Microbial Cleanliness of Bottle Filling Machines

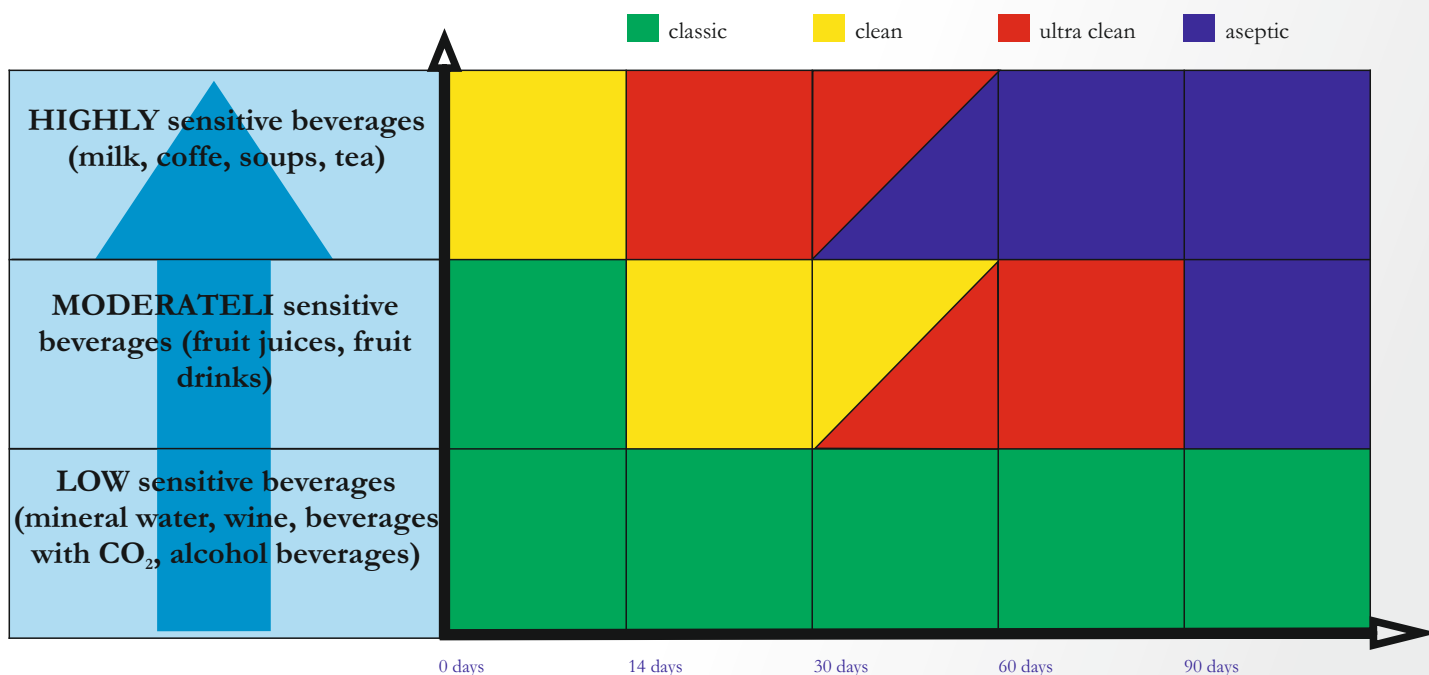
Factors affecting the design requirements for fillers

- type and sensitivity of the beverages,
- treatment of the beverage before bottling (pasteurization, stabilising agents, etc.),
- required durability,
- container,
- quality of ambient environment where the bottling machine is located.

Sensitivity of beverages is, in addition to their treatment before filling, determined primarily by their acidity value (pH), since the lower the pH value, the lower the sensitivity of that treatment beverage.

The lower the pH value, the slower the reproduction of microorganisms. The pH value of 4,5 is considered to be the limit value. Beverages with a pH value of less than 4,5 are called „high-acid beverages”, while beverages with a pH value of 4,5 and higher are considered to be „low-acid beverages”. As the pH value increases, it is essential to opt for a higher beverage treatment level and a higher cleanliness class for the bottling in order to eliminate the risk of contamination of the beverages.

The application of the different environments depending on the beverage to be bottled and its requested durability is shown in the following chart:



PEPSICO, plant Toma Teplice nad Metují, Czech Republic

Filling machines in the particular cleanliness classes differ from one another, particularly in the design of the machine guarding and in the sanitation possibilities, while the cleaning of the different parts of the machines differs in the method of protection against contamination and the possibilities to keep the environment clean.



Filler with guarding Veral 64 - PepsiCo, Vitaro Impex s.r.l. Covasna, Rumania

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