A project comprised of five work fronts reports its results

The useful life of glass bottles duplicates

From the Company's Technical Vice-Presidency, important projects are being implemented in favour of the good practices of manufacture to positively impact the environment. This is how the Industrial Operations area is leading a project that has allowed reducing scuffing in our returnable glass bottles.

After analyzing bottle scuffing sources, action plans were established and developed, aimed at protecting bottles from the caustic corrosion to which they are subjected during the washing process, and the scratches that appear due to the physical deterioration that mainly takes place in the production lines.

The first activity carried out was the implementation of more stringent parameters with respect to the quality of the bottles delivered by the vendor. Likewise, an improvement plan was established to prevent or reduce caustic corrosion, by applying an additive to the washing solvents used in the machines that execute this process, called anti-scuffing and, finally, at the outlet of bottling train washers, systems were installed to apply a protection film, which renews the original glass coating and increases greasiness, thus reducing the abrasion suffered by the bottle during the transportation at the factory and on the market; the system is known as coating.

The results demonstrate that the useful life of a bottle, from the caustic standpoint, has duplicated, because the bottle can now be returned 44 times (formerly 20), while maintaining a good presentation throughout its useful life. On the other hand, it has been proven that with the application of the coating, the useful life of the bottle can increase 40%, taking into consideration that the useful life of the bottle is measured as the scuffing band width. Likewise, studies have demonstrated that the bottle explosions are reduced 20% due to the improved handling at the production lines. Therefore, an additional benefit is gained in the reduction of glass consumption and in the emissions associated with glass production and recycling.

This is a positive project for the environment, as it points directly to the company's Sustainable Development priorities. By increasing the useful life of the bottles, the company contributes to reducing carbon dioxide emissions, the use of utilities and the utilization of the fossil fuel used in the bottle manufacturing process.