NFFOODS Spectrum
perspectives on food technologies & business
ASIA

Greiner Packaging, Siegwerk and Krones join forces in recycling initiative

20 February 2024 | News

The three companies were able to effectively deink and convert the rigid containers into high-quality white recyclates, without the need for altering the ink formulation or print design

The three companies were able to effectively deink and convert the rigid containers into high-quality white recyclates, without the need for altering the ink formulation or print design

Greiner Packaging, producer of rigid plastic packaging and cardboard-plastic combinations, Siegwerk, one of the leading global providers of printing inks and coatings for packaging applications and labels, and Krones have joint forces in a thought-provoking initiative that highlights the capabilities of state-of-the-art recycling facilities in the conversion of direct-printed PP and PS cups.

Despite being considered non-recyclable by some Design for Recycling Guidelines, the three companies were able to effectively deink and convert the rigid containers into high-quality white recyclates, without the need for altering the ink formulation or print design. This was achieved by utilising hot caustic washing, a standard process for PET bottle recycling that is increasingly adopted also by recyclers who are working with polyolefin (PO) and PS rigid streams.

The findings underscore the need for guidelines to evolve with technological advancements in recycling, ensuring they reflect the most efficient and sustainable routes to a circular packaging economy. The project partners advocate for a reevaluation of the role of printing inks and coatings in recycling, calling for a broader assessment of packaging drinkability under standard hot caustic conditions and the adoption of the corresponding test standard published under DIN SPEC 91496. This viewpoint is well aligned with the position paper recently issued by EuPIA.