

Customer Story

FAKUMA virtual: PURE LOOP, Customer story STABILO

Pens made from recycled plastic

The PURE LOOP shredder-extruder combination produces recycled pellets for the caps of STABILO highlighters

For more than 160 years, STABILO International has been producing billions of writing instruments used by people all over the world. They continue to provide the most important tool for writing, painting and drawing, despite the ever-present competition from keyboards and touchscreens. While the trademark swan originally graced the first machine-made pencils, today the product range extends from colour and graphite pencils, ink and fibre-tip pens, fountain pens, ballpoint and rollerball pens to highlighters. The company's STABILO GREEN range offers a product line that consists largely of recycled plastic. In addition, in-house PP production waste is recycled to make the caps for the entire STABILO BOSS family of highlighters. The production site in Weißenburg (Germany) uses the PURE LOOP ISEC evo 002 shredder-extruder combination.

"Since February 2019, we have been using the newly commissioned ISEC evo machine for recycling all our PP injection moulding waste such as sprues and splatter. We use the recycled pellets to make the black caps for the entire STABILO BOSS family of highlighters," explains Christian Nimmrichter, who was involved in introducing the extruder to the Weissenburg plant.

Flexible applications, easy to operate

Matching the diversity of the writing instruments, the different types of PP to be recycled vary both in colour and in shape. This is precisely where the strength of the new shredder-extruder solution comes into play because it was especially designed for the efficient processing of different types and shapes of material. The machine's wide processing spectrum from heavy, free-flowing to light and high-volume input material results from the intelligent combination of the double feed ram system and single-shaft shredder. With a capacity of up to 150 kg/h, this recycling solution ensures continuous and uniform filling of the extruder to fulfil an important prerequisite for the production of high-quality recycled pellets. "For STABILO, the machine has been configured for flexible filling either by conveyor belt or from the silo. Once the material on the conveyor belt has been processed, the ISEC automatically retrieves material from the silo. If both sources have run out of material, it then

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switches off automatically," says Norbert Gruber, PURE LOOP project manager, describing a detail of this application-specific configuration.

In contrast to the recycling solution previously used, pelletising takes place at the hot die face. This made it possible to significantly improve the quality of the recycled pellets, and in turn, the proportion of material returned to the production process. Another plus: From switching on and off at the push of a button to the dosing of coloured dyes - the ISEC evo is really easy to operate! This is confirmed by Christian Nimmrichter, "This recycling machine has met with a high level of acceptance among our employees right from the start. We were impressed by PURE LOOP's flexibility, design, solid workmanship and excellent project management." And on-site recycling has considerably reduced logistics costs.

