

Reclaimer in Focus

Klöckner Pentaplast of Canada

Plastics reclaimers focus on the feedstock they need to produce recycled flakes and pellets. Converters are the next step down the chain, and they work to ensure the quality of sheet used by packaging producers.

Klöckner Pentaplast lives in both worlds.

“The fact that we do both gives us unique insight into the end-use packaging needs of consumer goods companies as well as the high-quality feedstock needs of recyclers,” said Patty Enneking, group director of global sustainability and environmental affairs for Klöckner Pentaplast. “This sets us apart from other companies who typically produce sheet or recycle but do not do both.”



Klöckner Pentaplast operates a 100,000-square-foot PET reclamation and sheet production facility in Montreal. The operation, at the north end of the Island of Montreal, recycles post-consumer PET bottles into flakes, which are then converted into film and sheet under the same roof.

The facility opened in May 2015 to replace a 65,000-square-foot building in the Anjou borough of Montreal. The new facility provides more flexibility for equipment enhancements, material movements and storage.

Michel Gosselin, the facility's site manager, spoke about the operation during the Plastics Recycling 2016 conference in February in New Orleans. Participating in a technical track session entitled “The Right Tools for the Job,” Gosselin emphasized the importance of having the recycling and converting departments in close



Technical Specifications

Klöckner Pentaplast of Canada

Location:
Montreal

Start-up date:
Original facility opened in 1994, current location opened in May 2015

Annual capacity:
36 million pounds

Materials handled:
Post-consumer PET bottles

Member associations:
Association of Plastic Recyclers, SPI: The Plastics Industry Trade Association, Sustainable Packaging Coalition, PAC Next, Association of Visual Packaging Manufacturers, ASTM International



proximity, calling the arrangement “the most important and best decision Klöckner Pentaplast made regarding plastic recycling in the last 15 years.”

Gosselin said having the flake operation near the extrusion line allows operators to swiftly make adjustments, which reduces waste while saving time and money. The setup also allows staff to run a trial on the wash line and, within 24 hours, produce a sheet product. That’s a benefit to converter customers who depend on timely, consistent quality.

Gosselin also emphasized the advantages of having advanced equipment and knowledgeable workers.

“Making high-quality sheet from post-consumer flake, especially sheet with high recycled-content levels, requires precision,” he said. “The right configuration of state-of-the-art recycling equipment is crucial, as are experienced operators who know how to address issues that arise from impurities and continuously changing feedstock.”

Bales arrive at the facility from curbside and deposit recycling systems in the U.S. and Canada. Klöckner Pentaplast then uses its proprietary processing methodology, which relies on components from a variety of outside equipment suppliers, to recycle the plastic.

The bottles are sorted into clear, green and other colors. After grinding and washing, optical and electrostatic sortation methods are used to sort the flakes.

The end products are the company’s SmartCycle Pentafood, Pentaform and Pentaclear lines of PET films. They contain post-consumer recycled content levels ranging from 25 percent to 100 percent. Some clean PET flake is also sold on the open market to other production facilities.

Flakes produced by the Montreal operation can be used for a variety of products, including blister packs, clamshells, trays, boxes and other thermoform or print applications for food, health and beauty as well as electronics and other general-purpose consumer and industrial products.

