



**CARTON
COUNCIL**



For Immediate Release
March 16, 2017

Media contact:
[Sarah Kettenburg](#)
(813) 775-6210

PILOT PROGRAM TEACHES ROBOTS HOW TO MAKE CARTON RECYCLING MORE EFFICIENT

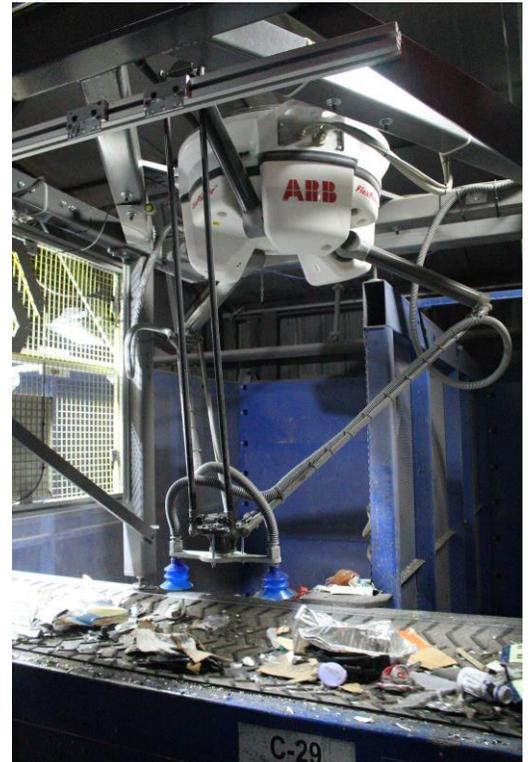
Project uses artificial intelligence to identify, grab, and separate food and beverage cartons

DENVER – In its ongoing efforts to advance food and beverage carton recycling, the [Carton Council of North America](#) announced today that it has been conducting a pilot program that uses artificial intelligence to improve the efficiency and effectiveness of carton recycling.

Through a collaboration led by the Carton Council with two Denver-based companies, AMP Robotics and Alpine Waste & Recycling, a robotic system has learned to identify the wide variety of food and beverage cartons in order to grab and separate them from the recycling stream. The AMP Cortex, nicknamed “Clarke” after the sci-fi author and futurist Sir Arthur Charles Clarke, has spider-like arms with specially designed grippers to pick up and separate cartons at a materials recovery facility (MRF). Clarke was installed in late 2016 and, through fine-tuning and adjustments, has achieved a pickup rate of 60 cartons per minute. This is a considerable increase from the human average of 40 picks per minute.

“Clarke greatly expands opportunities for the carton industry as we work to increase the efficiency of carton recycling and, ultimately, divert more cartons from landfills,” said Jason Pelz, vice president of recycling projects for the Carton Council of North America and vice president, environment, for Tetra Pak cluster Americas. “Everything Clarke has learned about identifying cartons can be transferred to robots at other MRFs. We are excited to bring innovation to carton recycling and believe this technology has widespread implications for the recycling industry, as it can be adapted to other materials.”

“Clarke provides a new and exciting approach to sorting recyclables. Currently there is nothing out there that does what this system does,” said Matanya Horowitz, founder of AMP Robotics in Denver. “Clarke can be a cost-effective way for facilities to introduce new packaging that does not always have a large volume. Additionally, unique grippers can be developed to identify and pick contaminants, which is one of the biggest issues our industry currently faces.”





“At Alpine, we’re always looking at innovative ways to divert waste from landfills while making recycling programs more cost-effective,” said Brent Hildebrand, vice president of recycling at Alpine. “We recognized this opportunity with the Carton Council and AMP Robotics as a way to contribute toward methods that might encourage people to recycle more. We are extremely impressed with the advances Clarke has already made.”

The project was possible through a grant from the Carton Council. The Carton Council formed in 2009 to expand carton recycling nationwide by building an infrastructure for recycling aseptic and gable-top cartons used for many common food and beverage

products. Ultimately, the Carton Council and AMP Robotics hope to duplicate the success of Clarke at other MRFs as an innovative, cost-effective, long-term solution to sort cartons.

ABOUT THE CARTON COUNCIL

The Carton Council is composed of four leading carton manufacturers, Elopak, SIG Combibloc, Evergreen Packaging and Tetra Pak, as well as an associate member, Nippon Dynawave Packaging. Formed in 2009, the Carton Council works to deliver long-term collaborative solutions in order to divert valuable cartons from the landfill. Through a united effort, the Carton Council is committed to building a sustainable infrastructure for carton recycling nationwide and works toward their continual goal of adding access to carton recycling throughout the U.S. For more information, visit CartonOpportunities.org.

ABOUT AMP ROBOTICS

AMP Robotics develops robotic systems for the recycling industry. From the beginning, AMP's mission has been to reduce the fundamental costs of recycling, making recycling not only the right thing to do, but also the most economically efficient method for waste management. AMP does this with a line of robotic solutions that remove valuable commodities from the waste stream and provide recycling facilities with actionable intelligence on the efficiency of their equipment as well as the content of their material flow. For more information, please visit AmpRobotics.com.

ABOUT ALPINE WASTE & RECYCLING

Alpine Waste & Recycling is the largest privately held commercial waste, recycling and compost collection company in Colorado. Founded in 1999 as a single-truck operation, the company has parlayed a customer-service and sustainability focus into a compound annual revenue growth rate of greater than 35 percent. With more than 80 trucks and more than 200 employees, Alpine handles more than 300,000 tons of waste and recycling products per year. For more information call 303-744-9881, or go to AlpineWaste.com.

#