

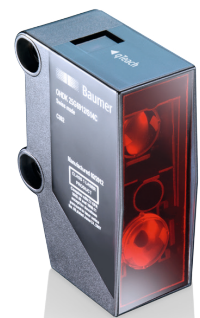
Technical Report – Photoelectric sensors.

# Waste recycling: Migros Zurich relies on Baumer sensors.

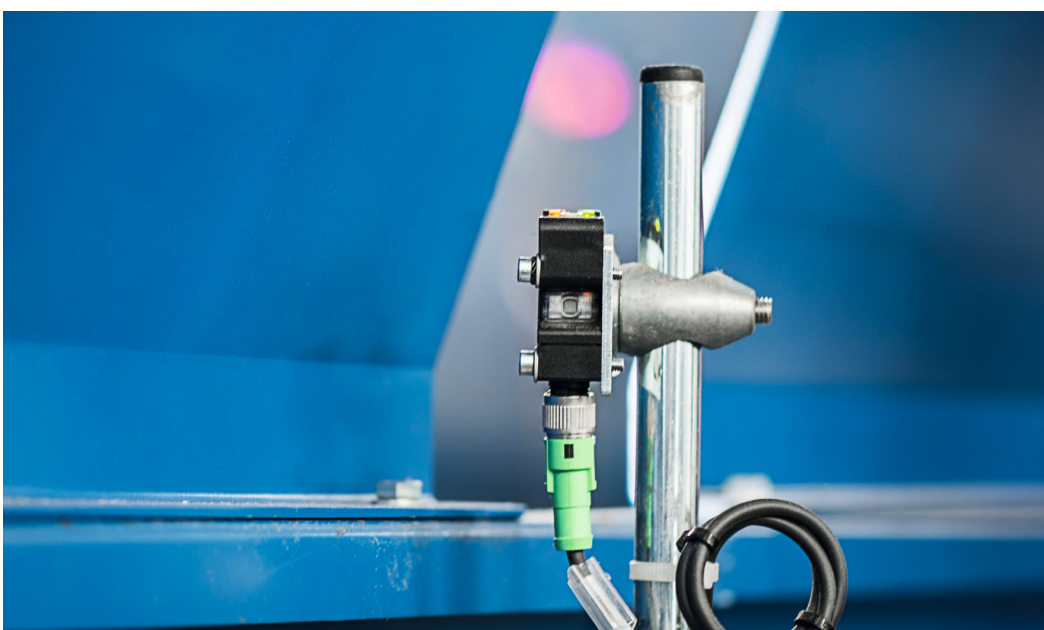
Returning, sorting and recycling packaging materials is a must today – even for retailers. These materials often include used PET bottles and containers as well as large quantities of cardboard packaging. Genossenschaft Migros Zurich ranking among the largest retail companies in Switzerland operates a recycling plant which enables resource-friendly disposal of these enormous amounts of packaging waste. In doing so, they rely on Baumer optical sensors. A total of 60 *SmartReflect*<sup>™</sup> sensors and five O500 sensors support the functional safety of the largely automated sorting and waste disposal system.

Six days a week from 4:00 a.m. to 10:00 p.m., approximately 200 trucks transport about 3500 container pallets of packaging waste from the Greater Zurich area to the plant. Placed on pallets, these containers run through the extensive paths of the sorting system and are automatically emptied. In the final step, the empty “collapsible containers” are also automatically folded up, stacked, and palletized. Before the sorting system was put into operation, this had been an entirely manual process that not only took much longer but was also real “hard work”.

Given the enormous amounts of PET and cardboard waste processed here, one thing is almost unavoidable: heavy soiling of the plant by paper dust or sticker residues from PET containers. The Baumer *SmartReflect*<sup>™</sup> ONDK laser sensor fills the bill in these conditions. The retro-reflective sensor does not require a separate reflector. Instead, a closed light beam is set up using a random machine part. The sensor is reliably tripped as soon as an object is physically interrupting the light barrier. At Migros *SmartReflect*<sup>™</sup> is used for detecting pallets as they move through the sort-



*SmartReflect*<sup>™</sup> – the light barrier without a reflector made by Baumer.



As measured by its dimensions, the retro-reflective sensor O500 with PinPoint LED boasts an enormous range of 8000 mm.



At Migros, *SmartReflect™* sensors are used for detecting pallets as they move through the sorting system.

ing system. No reflector being required saves all the cost for installation and set-up. Above all, a vulnerable element prone to damage by soiling in the sorting system's harsh environment is eliminated.

This is confirmed by André Römer, Facility Services Manager and Project Manager at Migros Zurich: "Baumer *SmartReflect™* sensors operate flawlessly and we haven't had any trouble so far. The great advantage of these sensors is that no reflector is required, yet we can still enjoy all the benefits of a retro-reflective sensor."

In addition, the photoelectric O500 sensor is installed in the bins for overfill protection. Here, this retro-reflective sensor with PinPoint LED from the NextGen series by Baumer really has been playing to its strengths. As measured by its dimensions, the O500 boasts an enormous range of 8000 mm. What's more, the O500 features qTeach, a convenient and wear-free teach procedure. Teaching of the sensor is just by the touch with any ferromagnetic tool, e.g. a screwdriver.



Every day 3500 container pallets of PET and packaging waste from the Greater Zurich area end up in the recycling plant.

More Information: [www.baumer.com/nextgen](http://www.baumer.com/nextgen)