

## APPLICATION REPORT



# Easy disposal with LOGiQ® Waste from Schenck Process

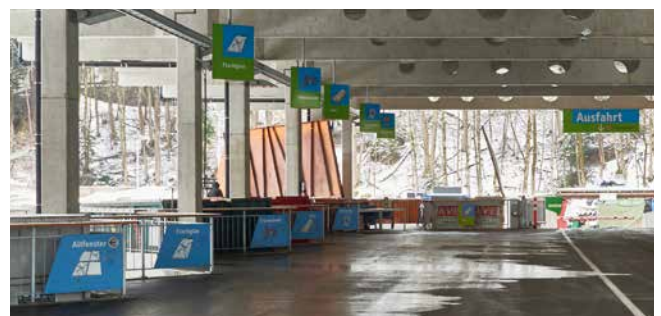
- Automated waste sorting for recycling centers
- Modern self-service concept allows waste to be deposited outside regular opening hours
- Very high weighing accuracy and maintenance-free components
- Fair cost distribution for waste disposal



**Photo 1: The opening hours of recycling centers often make life difficult for people who work conventional hours. So what do you do with your refuse after closing time? Thanks to extended opening hours and a modern self-service concept, the recycling center in Kufstein, Austria, is citizen-friendly and easy to use.**

**Ever since they were first opened, the recycling centers in the Austrian towns of Kufstein and Schwaz have been among the most state-of-the-art facilities of their kind in Europe. They are equipped with the intelligent logistics solution LOGiQ® Waste from Darmstadt-based Schenck Process. Their outstanding features include a modern self-service concept and maximum weighing accuracy for waste volumes. Both show the modern citizen-friendly approach of the operators (Stadtwerke Kufstein and Daka Schwaz).**

Rigid opening times are no longer appropriate for customers in the 21<sup>st</sup> century, who have to organize their private lives and working hours flexibly and individually. Imagine you could only dispose of your cardboard boxes, glass bottles, plastic toys and bulky items on working days between 10 a.m. and 5 p.m. and until 12 noon on Saturdays. The result would be bags of waste accumulating outside houses when the recycling center was closed, causing headaches for more than just full-time workers. LOGiQ® Waste allows waste facilities to be operated 24 hours a day, seven days a week without operating staff. Even though the operator in Kufstein opted for extended opening hours with minimal staff rather than 24-hour operation, customers still benefit from the fact that the facility is designed for smooth self-service.



**Photo 2: The recycling center can be operated fully automatically and without additional staff.**



**Photo 3: On arrival, visitors collect an ID card from the registration terminal and the barrier opens.**



**Photo 4: Waste for which a charge is payable is unloaded onto the container scales and automatically weighed. The charge is calculated on the single-use or regular-use card.**

### **Customer-friendly and service-oriented**

LOGiQ® Waste is based on the idea of providing a service. When the recycling centers in Kufstein and Schwaz were being designed, every process was defined in detail, from entry to payment at the exit barrier, and measures were taken to prevent users from making mistakes. The customer either collects a ticket from the barrier point on entry or brings along their own recycling card. Typical household amounts of plastic, cardboard, iron or electronic scrap, textiles and other materials can be deposited free of charge. Bulky items and some types of wood are weighed to calculate the charge payable. Collection containers for chargeable waste are protected by a rolling grille that only opens once the recycling card or single-use ticket has been held over the sensor on the terminal to record the data. Once the waste has been deposited, the grille is closed again at the touch of a button. The refuse is precisely weighed at this point and the weight is assigned to the ID card. The customer can now pay quickly and easily at the pay machine.

At the exit barrier the ID card is checked and the customer can pay here if they have not already done so. It is also possible to hand over larger items like car tires to the on-site staff. The charge is calculated using a mobile terminal with integrated ID card reader. The LOGiQ® Waste web application provides staff with a complete overview of all processes on the site, including

the weight and charge payable for every disposal process. This data can be viewed on a smartphone, tablet or PC.



**Photo 5: At the disposal stations, waste is weighed in 1 kg loads.**





**Photo 6:** The deposited amount is recorded on the ID card and the charge must be paid (by debit or credit card only) at the payment or exit terminal before exiting.



**Photo 7:** The customer can pay by cash or with the ID card. The machine accepts coins and notes. Change is given in three different coins and a payment receipt is printed out at the same time.

### Cost-saving and very flexible

The bulky waste containers are mounted on robust container scales from Schenck Process. When full, the containers are safely transferred to the waiting truck on a rail system. The staff can control the barriers, check the cash level at any time, access error reports and view live streams. "The combination of various accurate weighing systems such as container scales, weighbridges, construction waste and platform scales with modern data management delivers a reliable process, fair cost allocation and, crucially, flexible opening times to make facilities more customer-friendly," says Bernhard Haider, Schenck Process, commenting on the benefits of LOGiQ® Waste.

LOGiQ® Waste gives operators of collection centers complete flexibility in the planning of opening hours, up to 24/7, without additional staff requirements. The disposal stations are designed to be simple and self-explanatory, reducing the chances of human error to a minimum. All components are largely maintenance-free. Automation reduces operating costs.

### The benefits of LOGiQ®:

- Automated processes from entry to payment
- Automation of data exchange
- Complete documentation of all processes
- Exactly defined processes even without operating staff

### All facility components at a glance:

- **REGISTRATION TERMINAL**  
made from painted sheet steel with heating system. Display, card dispenser/reader, pushbutton, intercom.
- **CARD DISPENSER/READER**  
combined, holds up to 500 ID cards. Dispenses and reads cards at the same time. Reads and returns regular-use cards, takes in single-use cards.
- **BARRIER SYSTEM**  
with integrated controller for automatic opening and closing through induction loop and ID card reader. Unlocking system for manual opening with key.
- **SCALES**  
Hot-dip galvanized container scales for standard or compacting containers. Net weighing range up to 7,500 kg. Weighing stages of 1 kg, minimum load 10 kg; the minimum deposited volume corresponds to the minimum price.
- **TERMINAL FOR CONTAINER SCALES**  
made from painted sheet steel with heating system. DISOMAT® Tersus weighing terminal with Plexiglas cover, weight and dialog display. ID card reader and end button to close the rolling grille.
- **HONEYCOMB ALUMINUM ROLLING GRILLE**, designed for high performance, including the necessary safety features.
- **PAY MACHINE MADE FROM STAINLESS STEEL**  
with heating system. Dialog unit, ID card reader, note and coin acceptor, integration of card payment module, intercom and receipt printer.
- **EXIT TERMINAL**  
made from painted sheet steel with heating system. Display and dialog unit, integration of card payment module, intercom.
- **MOBILE TERMINAL**  
with built-in ID card reader for the acceptance of cargo.



**Photo 8: The ID card is checked a second time at the exit barrier. Here visitors have another opportunity to pay any charges.**



**Photo 9: Data is reliably transferred, stored, and archived online. The "Hofliste" application allows staff to monitor all processes at the recycling center at all times.**



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