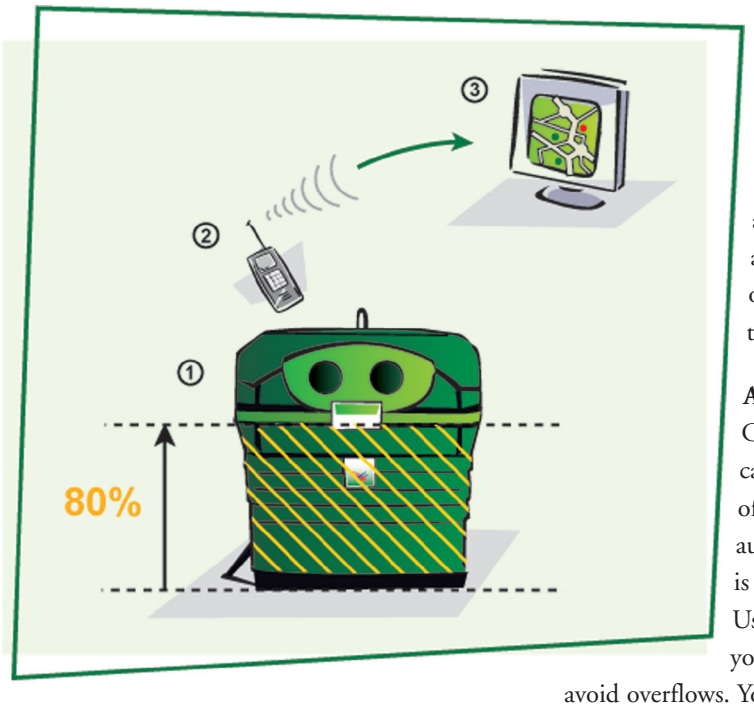
An innovative system

Opti'system® stand-alone indicator

Optimise your costs through intelligent verification of filling levels



Optimising costs for the waste collection network is a major priority both for local authorities and the industrial sector.
The expertise evolved by TEMACO on grouping products has facilitated the refinement of an efficient and innovative way to meet this need: we have devised a patented electronic system enabling assessment of levels of filling at recycling points, of both the drop-off and underground type.

An innovative and operational system
Currently, most collecting from recycling points is carried out blind. The Opti'system® measures the level of fill of the container and notifies the collector or local authority of the need to collect using a platform which is accessible on the Internet.
Using this system and its associated cartography, you can rationalise the frequency of collections and also avoid overflows. You are thus ensuring both the optimisation of your costs and the cleanliness of the locations where your recycling containers are installed.

A complete tracking and monitoring system
Our Internet platform also offers you a log of this information in the form of summary control panels, facilitating rapid rationalisation and in the long term, the management of collection from recycling points.

A system which can be adapted to your equipment
The Opti'system® is stand-alone and can be adapted to drop-off banks as well as underground containers, regardless of their volume or trademark.

PLASTIC OMNIUM URBAN SYSTEMS

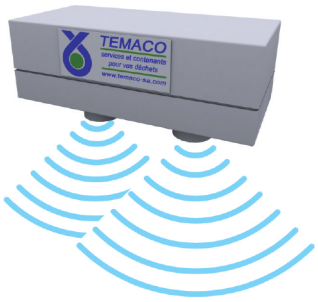
Technical description

Programmable
Alert threshold

1: assembly of the control box on any type of drop-off bank, semi-underground or underground container

2: no preliminary diagnostics required

3: operates over the whole of the territory covered by the GSM network



1: stand-alone remote readings control box

2: daily ultrasound measurement

3: transmission of data by modem

4: certification of EN610-1: 2001 standard by the TÜV laboratory

Product details

The detection system is contained in a protective plastic housing which is positioned on the inside of the container, under the roof, and combines the following elements:

- Electronic card equipped with control and ultrasound measurement control software.
- GSM modem with SIM card.
- Integrated transmission aerial.
- Two sealed compression packs (one for the ultrasound transmitter and one for the receiver) installed under the housing.
- Connector for a serial link reserved for the manufacturer for programme modification.
- 4 x 1.5 volt 13 Ah batteries (commercial standard).
  Battery life: 15 months under normal operating conditions.

Dimensions: 24 cm x 12 cm x 7.5 cm
Weight 1.3 kg
This housing meets the standard EN610-1:2001.

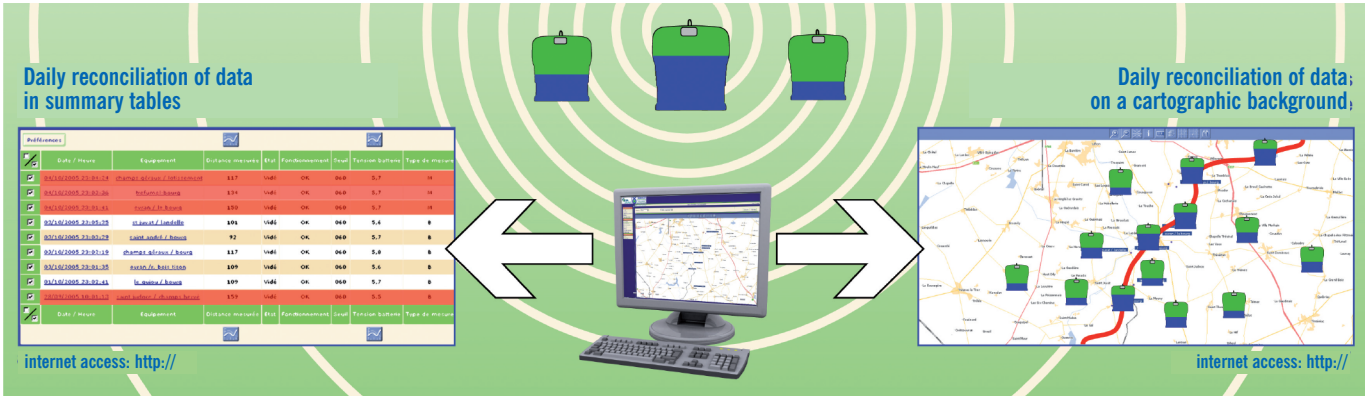
Adaptability

This system can be fitted to any type of drop-off bank or underground container.

- *Drop-off bank*
  Depending on the type of container, the system can be installed in under fifteen minutes on a container in situ at a given site, without the need for it to be turned over, as the Opti'system® is introduced through the filling porthole.
- *Underground container*
  The system can be installed in 1 hour on an emptied container in situ at a given site which is fitted with an inspection hatch. Otherwise it needs to be laid on the ground for the Opti'system® to be positioned

Data management

"Containers identified by GPS coordinates and a call number are equipped with a housing fitted with a GSM modem, a SIM card and ultrasound sensors enabling the level of fill to be measured. This level can be pre-set by the local authority for each container using an integrated programming system. A measurement is performed automatically every day and then transmitted by coded SMS to our server as soon as the level of fill reaches the threshold that has been configured. Our server decodes these SMS messages and re-constitutes them via a platform accessible via the Internet in the form of summary tables and a cartographic background which in particular resumes data on "containers to be emptied" and "emptied containers". A software function also enables a log of events to be provided on any of the containers, enabling analysis and optimisation of collection routes."



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