



Glass Specialist Weha - Therm keeps track of racks with Box ID's IoT solution

The Challenge

Glass and window manufacturers, like the German market leader Weha-Therm, use special transport racks to deliver high-value, fragile products, to customers. Once shipments are received, customers return the empty racks. Getting a precise, up-to-date view of the entire asset fleet to optimise operational processes is challenging, as racks may be mishandled, not returned on time, or lost. Weha-Therm wanted to solve this problem with real-time location information on all its transport racks.

The Solution

Weha-Therm implemented a solution from BOX ID Systems to remotely track individual racks in real-time. The end-to-end IoT location tracking solution, enabled for the Sigfox 0G Network, includes tracking devices and a specialised data analytics platform. The solution provides 100 percent transparency to racks, anytime and anywhere across Europe and globally. Fitting maintenance-free devices with many years of battery-life was easy and cost-effective.

The Results

Weha-Therm achieved real-time visibility to its racks across logistics processes. The data insights enables optimisation of operational efficiencies:

- reduced loss and theft ratios
- higher rack fleet utilisation
- timely and predictable returns of empty racks
- reduction of manual processes and bottlenecks in rack management
- automatic continuous inventory for optimal planning and load carrier optimisation.

OG Network Operator



As the exclusive Sigfox 0G Network Operator, Heliot Europe owns and operates the national 0G Network covering Germany, Switzerland, Austria, Liechtenstein, and Slovenia that is suitable for the vast majority of all IoT applications.

www.heliotgroup.com

Solution Partner



BOX ID Systems offers end-to-end IoT-enabled location monitoring solutions to cost-effectively track millions of logistics assets through the global industrial supply-chain, including site-to-site, on-premises and inside buildings.

www.box-id.com/

Customer



Weha-Therm is a trusted industry partner and market-leading German specialist manufacturer of high-quality insulating and single glass products, combining advanced production processes with a team of unmatched expertise.

www.wehatherm.de

For decades, Weha-Therm Isolierglas GmbH & co. KG has been a trusted industry partner and market-leading German specialist manufacturer of high-quality insulating and single glass products spanning 8,000 different categories. Weha-Therm combines advanced production processes with an outstanding team of unmatched expertise to deliver customer service based on flexibility, expertise, speed, and foresight.



Flexible, reliable and fast delivery is one of the key success factors of our business.

Daniel Freund, CEO, Weha-Therm

Weha-Therm uses racks specially designed to transport fragile, high-value glass products. Once the goods are received at the destination, the customer returns the empty racks.

Ensuring the right number of racks are in the right location at the right time is essential for optimal manufacturing, efficient operations, and a great customer experience. However, the day-to-day management of the entire asset fleet is challenging, as racks are often not returned on time, are mistakenly misdirected, or lost.



Weha-Therm's vision was to overcome these challenges and increase operational efficiency with an IoT-enabled track and trace solution to provide access to timely location information across its entire rack fleet. The challenge was to find the right end-to-end IoT solution, which required reliable devices, with many years of battery-life, connected to a low-cost national network, and a data platform capable of delivering location insight to support decision-making with accurate information.

An economically viable and operationally scalable IoT solution

After an in-depth evaluation, Weha-Therm chose the BOX ID Systems solution. All transport racks were fitted with **inexpensive IoT tracking devices that record the current location and all rack movements**, transmitting the data via the global Sigfox 0G Network.

The **battery-operated trackers** have a **maintenance-free service life of up to seven years** and are easily **retrofitted to existing racks**. Installation requires only a few minutes to screw the trackers to the racks. BOX ID System's platform turns the data into actionable insights and tracks the entire fleet of racks in real-time.

Data is accessed using an easy-to-use web application.

The data platform offers many extra functions that simplify rack management, such as the automatic creation of a continuous fleet inventory showing each asset's location and its associated customer information.



Based on the exact information of racks, Weha-Therm can address the customer in a targeted manner. Misunderstandings can also be prevented about the length of stay or the number of returned racks.

*Christian Trösch
Head of Sales, Box ID Systems*

BOX ID Systems delivers real business value for Weha-Therm:

- The overall loss ratio of racks is significantly reduced.
- Customer mishandling, such as using racks for their own purposes, are easily and instantly identified and actioned..
- Cumbersome, manual, error-prone tracking processes are replaced with automated, remote-monitoring requiring no on-site staff.
- Higher rack utilisation rates and faster rotations reduce the need for capital expenditure.

**The Heliot Europe 0G Network:
Reliable connectivity over a low - cost,
low - power, long - range wireless
network**

Heliot Europe is the exclusive Sigfox 0G Network Operator in Germany, Austria, Switzerland and Slovenia, and is part of the global 0G Network.

The 0G technology is a critical component of BOX ID System's asset tracking solution. Sigfox, the world's leading IoT service provider, pioneered low-power network connectivity specifically for the many applications made possible when devices can operate and communicate for years without needing a replacement battery.

The 0G Network, powered by Sigfox, harnesses ultra-narrowband technology to support connectivity solutions that improve existing business cases and enable a new range of opportunities for businesses across all industries. It delivers out-of-the-box, two-way, secure communication services to unlock the true potential of the Internet of Things (IoT).

For Weha-Therm, the ability of the 0G Network to support two-way communication over long distances outdoors as well as indoors, and enabling many years of battery life for the tracker device, was crucial.

BOX ID Systems offers unique benefits, including:

- retrofit solutions for existing rack inventory
- Europe-wide and global tracking with long-life trackers
- easy access to location information via a web-based application
- automated, continuous inventory management.

A key to the successful development of the solution was a close collaboration between all parties: Weha-Therm, Box ID Systems, and Heliot Europe. The solution is now being deployed elsewhere in Europe by several other production and logistic companies.



“ *With the Box ID solution, we have an overview of our rack inventory at all times. That transparency and flexibility has truly had a positive impact on our business.*

Daniel Freund, CEO, Weha-Therm