

# / Circular economy of refillables



Sustainability is the key objective in some cases, in others it is the collection of data for more efficient business operations. Regardless of their motivation, more and more companies are aiming to **increasingly use refillables and monitor their life cycle**. For this purpose, each item receives a unique marking that identifies it throughout its entire life cycle. At every stage of the cycle, this code is captured digitally, making circulation, consumption and demand transparent. Taking the beverage industry as an example, manufacturers of bottles and beverages as well as their licensees and bottlers benefit greatly from the information generated. Regional trends, bottle lifetimes and return rates become predictable.

# / Technology lays the foundation



Laser marking is the method of choice to ensure that the coding on the bottle remains legible throughout its entire lifetime. The challenge lies in ensuring constant readability and avoiding damage to the plastic at the same time. The individual serial number is encoded in a QR code in compliance with the GS1 Digital Link Standard. Both industrial camera systems and smartphones are capable to read this code.

It provides different information depending on the user and device. While the reading station for refilling is only interested in the serial number, consumers use the integrated web link to access a return app where they receive a digital deposit.

## TQS – Traceable Quality System

### Features

- High-speed laser direct marking
- Camera inspection to verify code quality
- GS1 Digital Link structure compliant
- All modules under one easy to operate control
- Open interfaces for data exchange

### Benefits

- Permanent marking without damage
- Label-free application of all information
- Digitalizing containers to track them
- Enabling circular economy of refillables



### Headquarters

WIPOTEC GmbH  
Adam-Hoffmann-Str. 26  
67657 Kaiserslautern  
Germany

T +49 631 34146-0  
F +49 631 34146-8690  
info@wipotec.com  
www.wipotec.com

**WIPOTEC** 