

## **GS1 instead of EAN13**

### **Fit for global standards in barcode with eXtra4**

Birkenfeld, October 28, 2015 GS1 DataBar is about to replace EAN13. eXtra4 Labelling Systems has dealt intensively with the migration to this new type of coding. The identification technology experts from Birkenfeld near Pforzheim are now able to print and check GS1 codes on labels. They can offer support in generating them regarding both software and hardware. They are at the customers' side providing advice during the implementation process and after.

GS1 (Global Standards One) has replaced the formerly relevant committees UCC (Uniform Code Council) for North America and EAN (European Article Numbering) for Europe and the rest of the world in the standardization of barcodes. New standards were set which now apply worldwide. The aim is to meet the demands of a globalized world as it has become reality in many economic sectors already.

First of all, the trade of consumer goods is affected by the new GS1 guidelines. But also in the industry the new code begins to spread already. Basically, those who supply industries working with complex logistic systems would be well advised to deal with this fundamental change in product coding.

In commerce, also in the jewellery and watches industry, all those who supply mail order houses, department stores, chain stores, home shopping providers, online sales platforms or e-commerce in general will be confronted with this issue in the long term. For in these sectors, all producers are entitled to tag their goods with GS1 DataBar codes since January 1st, 2010 already by virtue of GS1 decree. Accordingly, retailers must provide the capacity to scan such tagged merchandise at checkout, on the shelf, in the warehouse or at other points of their logistics system.

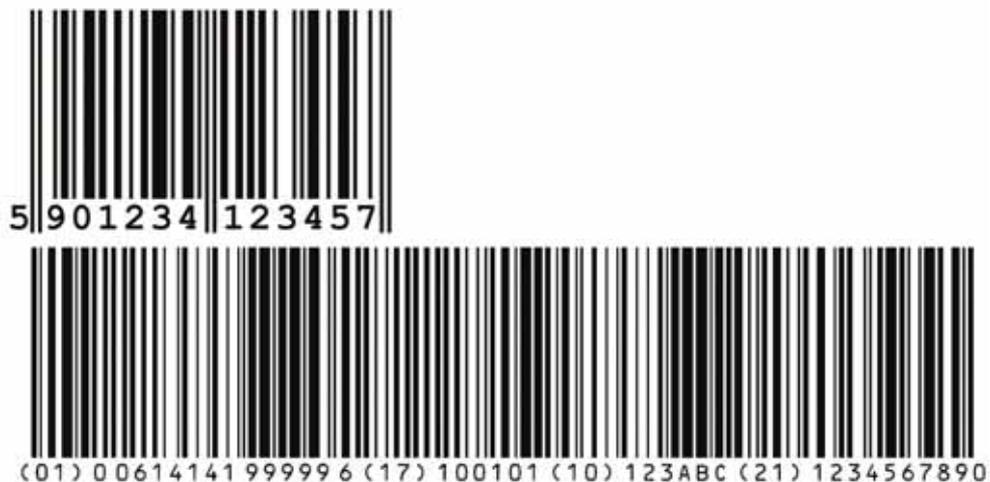
The advantages of the new code over the old are clear:

- An EAN code so far consists of the GTIN (Global Trade Item Number), i.e. country of origin, manufacturer and product identifier. GS1 DataBar, however, can integrate much more data: e.g. also the batch number, date of manufacture, packaging unit, expiry date and much more. A GS1 code thus caters the demand for traceability of the production process from manufacturing to sale.
- GS1 DataBar is a code family and consists of one-dimensional (1D), stacked and two-dimensional (2D) code types. Depending on the type, different amounts of data can be encoded, but the GS1 code will always be more compact and requires less space than conventional codes.

Unfortunately, the upscale potential of the GS1-DataBar family is also associated with increased complexity. Those who want or need to use GS1 codes should better become acquainted with them in detail beforehand. It is important to clarify the following questions:

- What data should be encrypted in the code and which code type of the DataBar family should be used?
- Which label printer is to print GS1 codes? In current devices on the market, GS1 capability can be expected. In older models these must be checked first. Where applicable, also an older device can be used for GS1 after a firmware update.
- What software for the generation of GS1 codes should be used? Regular standard label design programs are not always reliable to this end. Better use software customized to individual requirements.
- How can a generated GS1 code be tested before serial production and the use on goods? Untested, conventional scanners are not adequate here as they can successfully read, depending on the type, even if the code does not comply with the standard. And what if the customer's systems should refuse the code on site?

At eXtra 4 Labelling Systems, we have dealt with the GS1 DataBar family in detail and know the pitfalls in their generation. Software for controlling the label printers is already in use. It can be adapted to the respective code and printer type. The company has a special checking device that tests printed codes reliably. Compliance to applicable standards of printed GS1 labels is thus guaranteed. Moreover, the specialists have experience in introducing labelling in logistic processes and can provide competent advice to customers and their buyers.



**Fig. 1: The code GS1 128 (below) contains the GTIN as the EAN13 (above) in the first keypad, but in addition three more content items**



**Fig. 2: Logo eXtra4 Labelling Systems**