GS1
India

Here's what you lose if your GS1 BarCodes don't scan...

...and all that you gain is an angry customer!

Ensure scannable barcodes with
GS1 BarCode Verification Service

GS1 - The global language of business

Why should GS1 BarCodes be scannable?

GS1 BarCodes enable automated data capture with speed and 100% accuracy. In turn, this eliminates errors frequently encountered in recording of product data for Point of Sale billing, goods receipt/dispatch operations, stocks management and reconciliation at Retail stores, Warehouses, Distribution Centres, etc.

Through scanning of GS1 BarCodes, Retailers, manufacturers and other Supply Chain trading partners are able to run several critical business applications related to demand forecasting, automated replenishment, track & trace, recalls, FIFO management, item master alignment/updation etc. smoothly and in real time.

You can therefore appreciate how critical GS1 BarCodes are to businesses.

Now, imagine what happens when the GS1 BarCode does not scan. It breaks automation in the Supply Chain and requires manual intervention... at great cost, inaccuracy and delay.

Penalties, blacklists, reprinting...

Many Indian and international Retailers penalise suppliers for non-scanning barcoded products... And if this happens repeatedly, the supplier gets delisted. This trend will only get stronger in the coming days.

What this implies is that you may need to junk the entire lot of packaging material, reprint and only then be able to supply your products to the market. A totally avoidable cost, loss of goodwill and delays.

Would you want your Retailer to hold you responsible for non-scanning barcodes? Certainly not. So, make sure your GS1 BarCodes scan, each time, every time, anywhere and everywhere.

This is made possible through GS1 India's barcode verification service. To know more, read on...

Follow the specifications

When you register with GS1 India, you get a CD containing detailed GS1 Specifications for printing scannable GS1 BarCodes on your products, packages and consignments. The contents can also be obtained from the download section of our website, www.gs1india.org. Follow the specifications faithfully. You really cannot afford to be casual about this. If your packaging design needs to be altered, then please do so.

Key points to remember while printing GS1 BarCodes

GTIN

First and foremost, ensure that the 13-digit GTIN (Global Trade Item Number) is correctly generated. If you have an internal product code, map it to the GTIN in your item master application. But make sure only the GS1 BarCode is printed on your product packaging since it is only the GS1 code which will get recognised uniformly by all trading partners, including Retailers.

Size

The recommended size of GS1 BarCodes on a consumer item is given in the GS1 Specifications. Reduction in height of GS1 BarCode is not advisable as it reduces omni-directional scannability, and may result in scanning difficulties at Point of Sale (POS) counters.

Print contrast

In general, higher the contrast, better will be the scan rate. If using a transparent or semi-transparent packaging material, do not rely on the colour of the contents to provide a background colour. Print an opaque (white or light coloured) background so that there is no error.

Spectral reflectance

Spectral reflectance refers to the light reflecting property of the surface on which the GS1 BarCode is printed. If the surface is shiny and reflects too much light, it will impair scannability. It is advisable to use low reflectance inks to print the background and GS1 BarCode.

Colour

Barcodes must have dark bars (black, brown, blue & green) printed on a light background (white, light yellow, orange, pink). Never use red as colour of bars. Black bars on a white background works best as it offers highest contrast. Please refer to the colour and size guide provided in the CD for detailed guidelines on permissible colour combinations.

Recommended colours for bars

Recommended colours for barcode background

Quiet zones

Also called 'light margins', quiet zones refer to the space surrounding the GS1 BarCode. GS1 Specifications provide detailed guidelines on the *minimum* clear space to be left around the barcode as quiet zone. No printed matter or any other mark should encroach upon this space.

11X   7X   (X = Nominal Bandwidth or width of the thinnest bar/space)

8 901016 000508

Location & orientation

Placement of the GS1 BarCode as per GS1 Specifications will help personnel at the POS check-out counters locate it easily. Some important considerations on location and orientation are as below:

For definite shaped products: Lower right corner on the rear of the package. The barcode should be on a flat surface with picket fence orientation.

Pouches: Flattest surface on the rear of the pouch, as close to the centre as possible. Picket fence orientation is ideal.

Cylindrical products: Close to the natural base of the product. The barcode should be in ladder orientation with human readable number on the left.
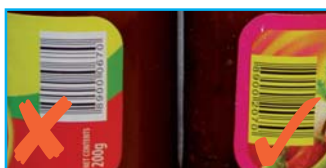
In particular, ensure that the GS1 BarCode is not...
- ✘ hidden under flaps.
- ✘ overlaid by folds of transparent packaging material (shrink wraps).
- ✘ bent awkwardly after the product is filled inside a flexible package.
- ✘ crumpled, distorted or rendered invisible to the scanner in any way.

Printer's devils

Smudged, crooked or curved bars, bubbles, flecks, scratches, etc. can reduce scannability. Modulation and bar width gain are two other common errors introduced during printing of barcodes. Instruct your printer to be careful with the printing process so that your GS1 BarCodes are absolutely error-free.

Common mistakes in barcoding

Based on a random sample survey of GS1 BarCodes on over 1000 different consumer items, the following mistakes in barcoding that may reduce barcode scannability have been identified:

1. Height reduction (truncation): Observed in over 50% cases. Results in loss of omni-directional scannability.
2. Printing defects: Bar width and modulation problems.
3. Placement issues: Faulty barcode orientation and placement.
4. Representation errors: Incorrect generation of 13-digit GTIN, mismatch between human readable and machine readable product codes (GTIN), errors in check digit calculation.

Ensuring GS1 BarCode scannability

GS1 India offers a GS1 BarCode verification service to enable comprehensive barcode diagnostics. Avail of this service at a nominal fee and be sure that your GS1 BarCodes are in accordance with GS1 Specifications.

Ideally, verification should be done before bulk printing, at the artwork stage, to ensure that correct GS1 BarCodes are reproduced the first time itself. This will help you avoid reprinting to rectify mistakes or rejecting large quantities of printed material. For complete diagnostics, the recommended practice is to verify the final product package as it will appear on the Retailer's shelf. This is especially important for flexible packages (pouches), shrink-wrapped packages, etc. where the barcodes may become unscannable after the product is filled in or after additional packaging has been done. Verification should be done even if the products have been released in the market as it will help in identifying errors, which can be rectified in future print runs. We shall offer recommendations for modifications, if any, in our Verification Report, after carrying out verification tests with ISO/CEN/ANSI certified verifiers.

Scanning is not verification

Do remember that scanning at your end does not equal verification. It is entirely possible that a barcode that you can scan successfully at your premises does not scan at the Retailer's or buyer's end. This happens because there are hundreds of different kinds of scanners which yield conflicting results.

Also note that scanners can either scan a barcode or reject it. A verifier, on the other hand, can evaluate a barcode minutely on criteria like print contrast, magnification, light margins, bar width, representation, check digit calculation, etc. In addition our experts will also check the correctness of location of the barcode, legality of company prefix number and several other scannability parameters as laid down in the GS1 Specifications.

This will eliminate guesswork and fear of repeated rejections at Retailer's/buyer's end. GS1 verification reports are accepted by Retailers worldwide and are even a pre-requisite for acceptance of products by many retailers worldwide.

Once your GS1 BarCodes have been verified and subsequently rectified by you as per the recommendations of GS1 India, you can be rest assured that your GS1 BarCodes will scan in almost any scanning environment.

How to avail of GS1 India's barcode verification service

Send a packaging sample of each product with the GS1 BarCode printed on it, along with the requisite fees, favouring GS1 India, New Delhi. For updated fee details, look up www.gs1india.org. You will receive the report within a week of receipt of your payment and samples at our office.

Get your GS1 BarCodes verified... and ensure complete peace of mind!