The right print quality for shipping labels

Read our tips!

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1. Print quality of shipping labels

Did you know that parcels are sometimes delayed by poorly printed shipping labels, because we cannot scan the barcode? That's why we ask you to pay close attention to the print quality of your labels. This way we can sort your parcels smarter and deliver them faster. With more satisfied customers as a result!

To measure the print quality, we give the barcode on your shipping label a score from A to E on the ISO/ ANSI scale. Do the barcodes have a score of A or B? Great! We can scan your shipping labels properly.

Do your labels have a lower score? Then we cannot scan your labels (properly). We have to scan your label by hand and create a new one. This may delay your parcels.

Want to improve your printing quality? With our tips you can print perfect labels easily. That way we can deliver your parcel faster and without errors!

2. What does a good barcode look like?

Here you see a barcode with an A rating. Good to know: a barcode doesn't have to be black. Grey barcodes are often easier to scan.

Example:
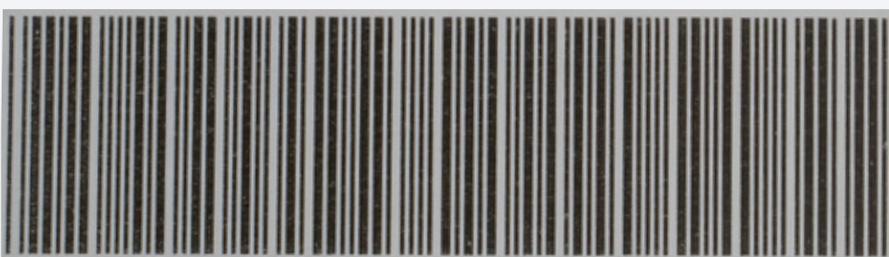
3. Step-by-step plan for easy-to-read and scannable barcodes

Use a few simple steps to check whether your barcodes are easy to read and scan.

I. Prior notice:
Check whether prior notices of the shipment(s) have been sent correctly and on time. Your parcel cannot be scanned without prior notice. Read more about prior notice.

II. Resolution:
Check whether the resolution (dots per inch (DPI)) of the label files (e.g. ZPL, JPG, or PDF) is the same as the resolution (DPI) of the printer (setting). Read more about resolution.

*Please note: do not print PDF files with Zebra printers!

III. Improving printing quality
Read more about the causes of reduced or non-readable barcodes. See if the solutions will help you improve print quality. Read more about the causes of reduced print quality.

IV. Still need help?
Don't hesitate to contact us, we will be delighted to help.

4. Prior notice of parcels

All parcels require prior notice of despatch before they reach us. Is the prior notice not received or received too late? Then we lack the correct data to deliver your parcel. Your parcel will then be impossible to scan. That is why you should always check whether the prior notices for your parcels have been received correctly. This way you can be sure that you are sending a prior notice for your parcels correctly:

1. The prior notice channel (MijnPostNL, API, plugin) returns a message stating that the prior notice was received correctly.
2. You can see in the track & trace data that a shipment has been pre-notified.
   a. The MijnPostNL business portal has a track & trace module where you can look for shipments. Read more about track & trace.
   b. Your plugin shows when a shipment has been pre-notified.
   c. In the track & trace data shared via the back-end (API), scan code "A01" indicates that an advance notice has been received.
3. In the MijnPostNL Zakelijk portal, under 'Insight into your dispatch behaviour', you will see a trend overview of parcels for which no advance notice has been received. You can also see on your monthly invoice for each customer number how many parcels have not been pre-notified (correctly). Please contact your account manager if you have any questions about this.

5. Most common causes of reduced scannable barcodes

A. Heat
Printing labels at too high a temperature can cause the black stripes to bleed at some places in the barcode. This causes the bars to become too wide, resulting in one or more extra widths of black and white bars. Black becomes wider and white becomes narrower. Because barcodes have a fixed number of widths of black and white bars, every extra width affects the readability of the barcode.

A barcode does not have to be black; grey is often more scannable.

Example:
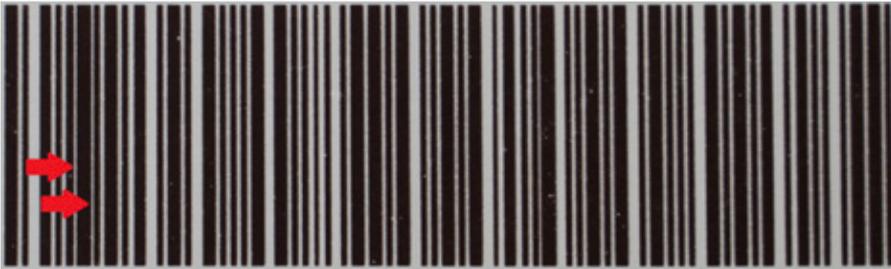
Solution:
Reduce the print heat in the printer settings. The heat can go to zero or the lowest possible setting. Note that after lowering the print heat to "0", the labels may still not light up. Printer settings may override computer printer settings. To remedy this, you can update the printer driver.
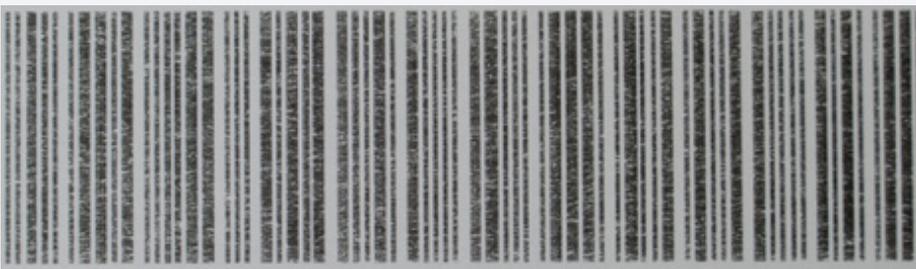
B. Speed
Is a label printed too fast? Then the heat is not distributed properly. The label will then be too light.

Solution:
Reduce the print speed so that there is a good balance between speed and heat.

Example:

C. Resolution

Does the resolution of the printer differ from the resolution of the print file? Then the printer has to guess where exactly to print. For example, a printer with a resolution of 200 dots per inch (DPI) cannot properly handle a 500 DPI file. It is therefore better not to print PDF files (often 500 DPI or more) with Zebra printers (often 200/300 DPI). A JPEG or ZPL file with the correct resolution can be printed very well with Zebra printers.
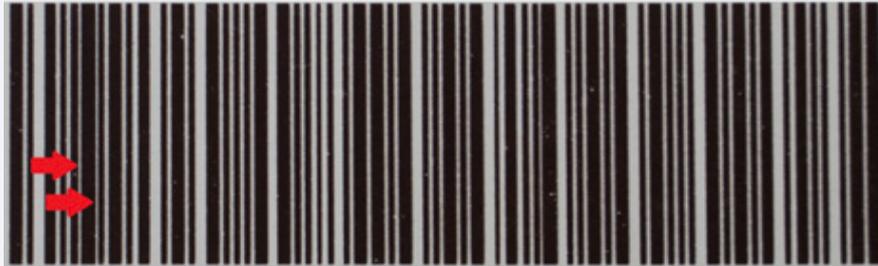
Solution:

Make sure that the dots per inch (DPI) of the files to be printed are as close as possible to the dots per inch (DPI) of the printer. Forexample, a printer(setting) with 200 DPI prints best (label) files of 200 DPI.

Example 1:

Example 2*:

*Attention: a different resolution can result in widened black bars. The result will look very similar to the barcode with the cause "Heat".
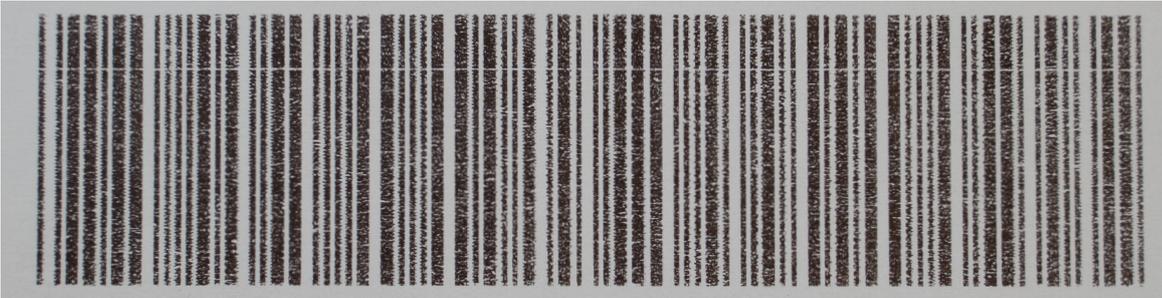
D. Dirty or damaged printhead
White stripes through the barcode label are a signal that the printer head is dirty or damaged.

Solution:
Clean or replace the printer (head). Regular cleaning prevents bits of paper, dust and toner from accumulating in the printhead. Many printers have a self-cleaning option. Can't work it out? Contact your printer supplier.

Example:

Maintenance
Printers are an indispensable part of the order fulfilment process. If a printer breaks down, the orders can't go out. Regular maintenance is therefore essential - especially for printers that work long hours. Annual maintenance prevents problems and keeps your printer in top condition.

E. Shiny label sheets
Printing barcodes on shiny label sheets can cause the ink to spread. Ink then takes longer to dry. As a result, the barcode cannot be scanned immediately. In addition to reduced ink adhesion, shiny sheets cause light reflection. When scanning the label, light reflection can make the label unreadable, even if the scan quality is high.

Solution:
Use different, i.e. non-shiny label sheets. An intermediate solution is to let the ink dry longer by lowering the print speed.
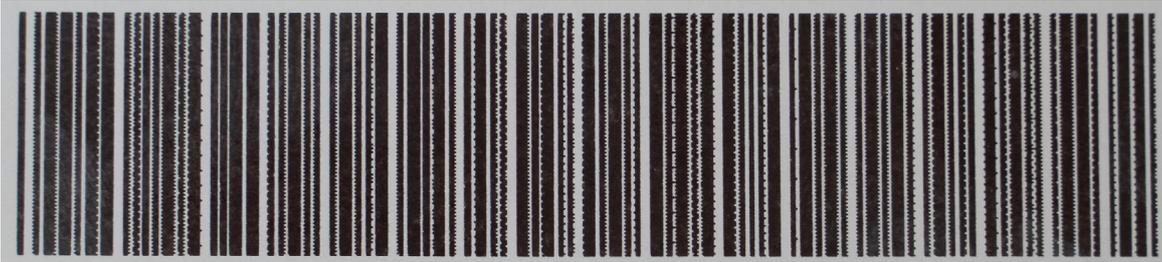
Example:
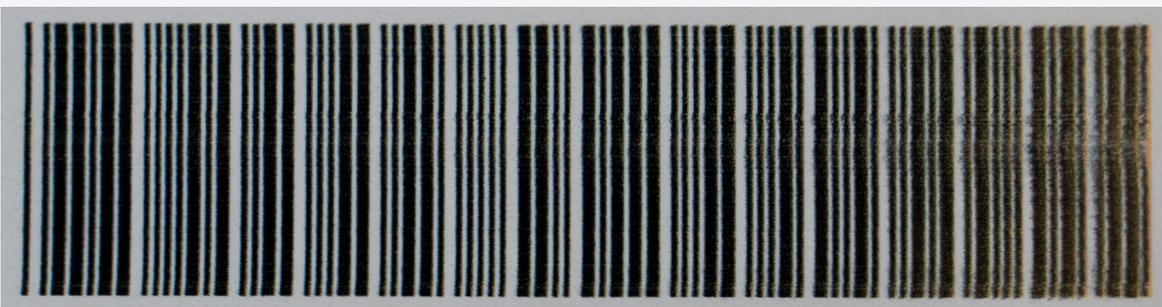
F. Rasterization

The black bars show a lattice pattern. This is caused by a specific printer setting called gridding, rasterization or something comparable.

Solution:
Turn off the printer setting "gridding".

Example:

6. Help and advice

We will be delighted to help you create good quality labels by testing labels for scannability and giving you advice on how to improve them.

Our technical team is ready to provide additional help with the creation of readable and scannable labels. Please send an email to **insidesales@postnl.be** and include the following information:

• Sharp pictures of the labels
• Your customer number(s)
• The method(s) of creating the digital label (MijnPostNL, API, plugin, other)
• The file type(s) of the labels that will be printed. If possible, state the DPI value
• The printer type(s) used to print the labels. If possible, state the DPI setting

Something goes amiss with the prior notice
Is it clear that something has gone amiss with the prior notice, but do you not know exactly what is wrong? Our technical team is ready to help you. Send an e-mail to **insidesales@postnl.be**. Include the following in your request:

• Your customer number(s).
• Your prior notice method(s) (MijnPostNL, API, plugin, other).
• The shipping products that are used for the shipments. Specific product codes help us provide more targeted assistance.
• An overview of barcodes which have not been pre-notified.
• A number of sample prior notices.
• If possible the time of prior notice.

Good to know: We are happy to help, but ultimately you are responsible for the quality of the labels you supply. Unfortunately, we cannot advise you on label printers and cannot answer any specific technical questions about printers. Your printer supplier, fulfilment party or IT integration partner will probably be able to help you.