QS-Barcode Recognition

QS QualitySoft GmbH offers effective software for recognizing barcodes from digital images and Adobe PDF documents. The images are scanned or faxed forms or from digital cameras. Various barcode types can be recognized. The most common use for barcode reading is fast and reliable identification and indexing of documents for archiving.

Linear barcodes with QualitySoft:

- all common types are possible
- unlimited numbers of barcodes can be recognized on one imade
- all angles (even 45°) are possible
- checks on suspected barcodes increases reliability .

Linear Barcodes supported

Code 39 / Code 39 extended, Code 2/5 Interleaved, Code 2 of 5 industry and many others Code 11, Code 32 / Italien Pharmacode, Code 93 / Code 93 extended, Codabar Code 128 / Codablock F EAN 128 / UCC 128 EAN 8 / EAN 13 with addons UPC A / UPC E Patchcode, Pharmacode (one track) Two Track Pharmacode and 2D Pharmacode on demand

Even **two dimensional** bar codes can be recognized. These barcodes use little space and can contain much information. You can code both alpha-numeric characters and binary data. Due to integrated error correction 2D barcodes are more tolerant towards data errors that occur while printing or scanning. The common industry standards "Aztec", "Data Matrix" (ECC200 and ECC000, ECC050, ECC080, etc.) "PDF 417" and QR Code are supported.



Aztec Code is used for the Online Tickets of Deutsche Bahn (German Railway). The sample code contains 292 bytes.



Data Matrix was designed for small parts marking and is currently used for small electrical parts, by the pharmaceutical industry for unit dose packaging, by the automotive industry and by NASA.

The PDF417 barcode consists of several lines. You can encode the whole character set, up to 1850 characters. It is variable in width and height.





The QR Code (Quick Response Code) was designed in Japan and can contain a lot of japanese characters (Kanji). It is often used in Asia.

More information about barcodes and sample images can be found in our bcTester download. Or send us an email with your questions.

Barcode Recognition - Products

QS-DocumentAssembler (Windows Application)

"Barcode Recognition - No Programming Required!" - "QS-DocumentAssembler" works true to this motto. This Windows application recognizes barcodes from scanned documents and processes documents automatically based on barcode data. Document sorting, indexing and grouping is performed based on the selected settings.

QS-Barcode SDK (Software Development Kit)

"Use barcode recognition in your own application" - With **QS-Barcode SDK** (software development kit) it is quick and easy to integrate barcode recognition in any environment. The SDK comes with many integration examples (C, C#, Java,..). Extensive developer documentation details the integration process and contains all relevant interface information.

Download a free evaluation copy of "QS-Barcode SDK " or "QS-DocumentAssembler" from <u>www.qualitysoft.de/download-2/</u>

Availability and Prices:

Get the latest information on prices and what's available by visiting www.qualitysoft.de

Download our **freeware** barcode reader **bcTester** (<u>www.bctester.de/en</u>) and discover whether your barcodes can be read with "QS-Barcode"!

Technique / Barcode Quality

Scanning for archives is usually done with a resolution of 200 or 300 dpi. For correct barcode reading at such low resolutions, barcodes must be printed clearly; in particular, the bars must not be too narrow. Recommended is a maximum of 2 characters/cm at 200 dpi and 3 characters/cm at 300 dpi. E.g. an 8-digit bar code should have a width of 4 cm to be read properly at 200 dpi.

For scanning 2D barcodes you may need to use a resolution of 400 dpi if the bar code is smally printed. One module ("data rectangle") should be at least 5 pixels after scanning.

In addition to scanner resolution and barcode width, reliable recognition also depends on other factors such as quality of printer and paper, scanner preferences, barcode type, height and width of barcode, number of characters in the barcode. For more details have a look at our white paper **bcTipps_en.pdf** in the download area on <u>www.qualitysoft.de</u>.

Before "QS-Barcode" is used in daily routine, it is strongly recommended to perform a larger test using the suggested bar code under real production conditions.

A Selection of Our Valued Customers

BancTec USA, Barclay Card International, Boss AG Bremen, Capital Bank Graz, Cendris UK, Credit Suisse, CSF Italy, DataChem Chemnitz, Demag Cranes & Components GmbH, Dicom Italy, Deutsche Post Direkt, elsag Solutions AG, Fraunhofer Inst. Magdeburg, Gerling Versicherungs-AG, Kyocera Mita, OBI Baumaerkte, Océ Deutschland, OneReason Switzerland, SER, Siemens, Softline Austria, T-Mobile Bonn, TechniSat, Thyssen-Krupp, Traussnig Spedition Austria, T-Systems, German Government Tax Offices