

Scanner Selection Guide

There's a variety of different scanning technologies available. At EyeC, we're proud to provide the most comprehensive scanner selection with our print sample testing systems. So customers may rest assured we can offer the best scanner to suit their needs, yet, depending on the nature of the particular application and the specific features of the printed items to be scanned, each and every one these scanning technologies comes with a set of pros and cons.

This Scanner Selection Guide has been created to help find the most cost-effective scanning solution for the task at hand.

Scanning Technologies

Glass Plate Type Scanners



This is the most popular scanning technology, offered for a variety of sample sizes from small to extra-large, suiting everything from incoming inspection and narrow web application to the largest printing presses. Operation and sample handling are simple and image quality is great. The technology can easily be upgraded to handle special tasks such as barcode reading, barcode grading and even 3d imaging to accommodate verifying and grading embossed Braille.

Smaller sample sizes can be covered using off-the-shelf standard scanners calling for a cost-effective solution. Medium and large format scanners, however, are manufactured in small numbers, hence tend to be pricy.

Roller-Fed scanners



Roller-fed scanners are a cost-effective alternative for medium and large format applications. Due to the nature of the scanning process, this type of scanner introduces a size limitation for the width of an object only, not for the length. Image quality is great, equal to what glass plate scanners are offering.

Down sides of this technology are:

- **Sample Handling**
Sample handling can be cumbersome, especially for larger samples. Thin print samples have to be kept perfectly straight during the entire process to avoid wrinkling. Heavier stock material has to be supported to avoid slippage that may cause image distortion.
- **Smearing**
If used in the press room, this technology comes with restrictions regarding uncured press samples. If you can still smear the fresh ink with your fingers, “defects” may be introduced during the sample loading as well as during the scanning process. This may result in the operator second-guessing the inspection results making sure each particular finding has been caused by the printing process, not the sheet handling and scanning.
This can be partially ameliorated by using a sleeve for each press sample. This solution, however, means you’re introducing a wearable item to the process.
- **Barcodes and 2d codes**
These scanners provide sufficient image quality for *reading* codes. Yet when it comes to *grading*, certain physical restrictions regarding the correct calibration prevent them from remaining in compliance with applicable standards, such as ISO, EAN, UPC, DIN, GS1 etc. The bottom line is: With these scanners you can read (decode) barcodes and 2d but not grade them in compliance with all applicable standards. These restriction are not limited to EyeC’s inspection systems, they are the result of limitations associated with this scanning technology.
- **Contamination and cleaning**
Especially when used in the press room, the effect of a piece of dust can be widely different between a glass plate scanner and a roller-fed one. On the glass plate scanner, you’ll get one false alarm you need to manually verify and manually accept, on a roller-fed scanner you’ll see a whole line of “defects” going from top to bottom resulting in hundreds of false alarms.
Therefore, when used in a press-room environment, a stringent cleaning policy is key for roller-fed scanners.
- **Braille**
Roller-fed scanners cannot be upgrade to optically measure the height of embossed braille,

Moving Table Scanning Technology (obsolete)



These scanners come with a precisely finished metal table carrying the print sample. The entire table moves underneath the field of view of a line scan camera mounted on top viewing down. This is the most expensive scanning technology around, so we recommend it only where no other alternative can be used.

The main advantage is its touchless operation. You can use it for print samples that are soaking wet coming fresh from a press with no UV curing and no powder coating at all. Down sides are

- Cost
- Size
- Image quality is reduced for samples wider than 34"

Scanners for Cylindrical Object sand multi-page test samples



We do offer special scanning solutions for cylindrical objects (cans, vials etc.) as well as scanners for multi-page objects. Please refer to product sections for "[ProofRoller](#)" and [ProofBook](#)" for more details.

Selection Chart

Technology	EyeC Product	Format	Image Quality	Qc Lab	Press Room	Uncured samples	Barcodes / 2D codes	Braille
Glass-Plate								
XXS	Proofiler 300DT	8.5" x 11.7"	++	++	+	+	opt	opt
XS (1)	Proofiler 400DT S	11.7" x 17.0"	++	++	+	+	opt	opt
XS (2)	Proofiler 400DT E	12.5" x 18.5"	++	++	+	+	opt	opt
S	Proofiler 600DT	18.4" x 24.8"	++	++	+	+	opt	opt
M	Proofiler 1200DT	36.0" x 50.0"	++	++	+	+	opt	opt
L	Proofiler 1700DT	48.0" X 70.0"	++	++	+	+	opt	opt
Roller-Fed	Proofiler 1100CS	42.0" width	++	++	0	-	(1)	NO
Moving Table	Proofiler CF	Custom	+	++	+	++	(2)	(2)
ProofBook	ProofBook	11.7" x 17.0"	++	++	+	+	opt	NO
ProofRoller	ProofBook	7.9" Ø x 8.25"	+	++	+	+	(1)	NO

++) very good

+) good

0) ok

-) not recommended

Opt) optional

(1) optional, code reading only, grading not available

(2) optional up to 28" x 42"

NO not available