



Using Scandense Digital QC Image for Paper Process Control



Quality Control 40 Years Ago

- **Film Processing Quality Control**
 - Process a film control strips and read densities
 - Track the deviation from aim for a handful of parameters w/ colored pens using Y-55 chart paper.
- **Paper Processing Quality Control**
 - Process a paper control strip and read densities
 - Track the deviation from aim of a handful of parameters w/ colored pens using Y-55 chart paper.
- **Printer Quality Control**
 - After paper process is in control, print & process a printer test.
 - Plot deviation of printer tests and make appropriate corrections to printer balance.



Changes in 40 Years

- Film & paper and film & paper processing are much more stable
- Modern minilab printers
 - Use a closed-loop for daily setup
 - Are more stable
 - Correct images better
 - Can compensate for many paper process problems



Minilab Quality Control Today



- Film and paper processing quality control
 - Much the same as 40 years ago except that many labs use software programs to evaluate, plot and store data
- Printer quality control
 - Internal closed-loop feedback is used, i.e. a test print made automatically and density read by printer
 - Printer control is assumed
 - Data is not presented to the operator
 - QC is not done on prints



Impact of Today's QC On Minilab Operations

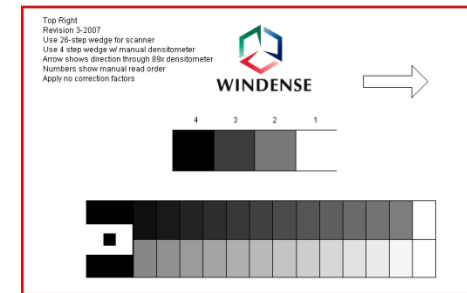


- Film processing QC – No change
- Paper processing QC – Run as before but . . .
 - Time and money is spent correcting minor paper process issues if automatic printers are successfully making corrections for minor process issues and are making perfectly good prints
- Minilab printer QC –
 - There is no quality control on the product that is sold, i.e. prints!
 - Operators have a tendency to discount traditional processing quality tests since they know the prints “look good”

Using Scandense QC Digital Paper Process Tracking



- Film process control – As before
- Paper process
 - Get paper process in control
 - Print a Scandense Digital QC print as a reference
 - Track the paper process by printing and plotting a Scandense Digital QC image daily
- If the “Digital Process” is OK, prints are good
- If the “Digital Process” shows a problem . . .
 - You have a problem w/ outgoing prints but do not know if it’s a printer problem or a process problem
 - Run a traditional paper process control strip to determine which and correct as required.





Scandense QC Digital Notes



- If traditional paper process control says you have a problem, your prints may or may not be affected
 - If your prints are not affected, chasing process problems is wasting time, money & control strips.
- If the “Digital Process” says you have a problem, you have a problem
 - Run a traditional paper process control tool to troubleshoot and isolate the problem to the printer or the process
- Minilab printers cannot correct for DMax or Stain problems. If there is a DMax or Stain problem, it is a process problem!
- Minilab printers can correct for some film processing problems but traditional quality control should be run on film as the film is customer property