# 5 Downweb Streaking and Banding

#### 5-1 Prerequisites and Initial Considerations READ FIRST

Downweb streaking and banding often comes from multiple interrelated sources or is difficult to pinpoint a primary cause. As such, it is important to read all relevant information.

Generally, streaks are associated with poor nozzle health, while bands are associated with either poor nozzle health or alignment issues. Furthermore, problems with electronics or communications can cause both streaking and banding. The term "streaking" usually applies to narrow areas of missing nozzles, while "banding" usually applies to wider areas of missing nozzles or incorrect printed densities, either too light or too dark. The terms have become slightly interchangeable as a wide "streak" can be referred to as a "band" or vice versa.

Areas of missing nozzles – whether narrow or wide – fall into the category of 5-2 "<u>Problems with Poor Nozzle Health</u>" or 5-4 "<u>Electronic or Communication Problems</u>", while **areas of incorrect printed densities** fall into the 5-3 "<u>Misalignment</u>" category. Typically, missing nozzles due to electronic or communication problems do not move with the printhead. See first listed action in 5-4-1 "<u>Electronics</u> Problems".

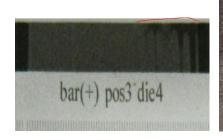
**If poor nozzle health appears on a newly installed printhead,** see 5-2-3 "<u>Air Ingested into Printheads</u>" and 5-2-5 "<u>Damage to Printhead</u>" first. During installation, air may have been introduced into the printhead or the printhead may have been damaged.

**If streaking or banding appears on all colors, but KCMY nozzle health is good,** the problem is likely with Bonding Agent nozzle health. All instructions for mitigating poor nozzle health apply to bonding agent nozzle health. Take extra precautions when managing bonding agent to avoid cross contamination with inks.

**For identification of banding problems and their locations,** a Uniform Optical Density plot is useful. This plot gives the press a near worst case scenario for banding due to incorrect printed densities.

**For identification of streaking problems and their locations,** a Startup Calibration is useful. Check reported nozzle health and the images captured by the In-line Process Control. Be aware that the Printhead Service Routine may wipe away evidence of contamination before a startup calibration, thus the root cause of the problem may not be easily identified.

### 5-2 <u>Problems with Poor Nozzle Health</u>



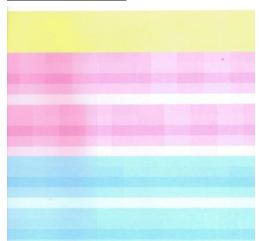








# 5-3 <u>Misalignment</u>





# 5-4 <u>Electronic or Communication Problems</u>