

GOT A PROBLEM?

1. STREAKS

- Problem** – Incorrect plate-to-blanket pressure
Solution – Repack plate and blanket to correct specifications
Problem – Incorrect plate-to-blanket bearer pressure
Solution – Adjust cylinders for correct bearer pressure; contact manufacturer for assistance

PIA/GATF resources for help:

The PIA/GATF Sheetfed Printers Library (4 textbooks)
 The PIA/GATF Web Printers Library (4 textbooks)
 Troubleshooting Skills for Sheetfed Offset Press Operating workshop

2. SLUR

- Problem** – Sheet register transfer abnormal
Solution – Torque blanket evenly across the width of the cylinder
Problem – Ink form rollers set too tight to plate or oscillating roller
Solution – Release roller settings, spin form rollers to check for freeness, and reset correctly

PIA/GATF resources for help:

Color Control Bars with Star Targets
 The GCA/PIA/GATF Proof Comparator III

3. GLOSS AND CHEMICAL GHOSTING

- Problem** – A drying ink film affects the drying of previously printed ink film
Solution – Allow at least 24 hours for first printed side to dry before backing up
Problem – Slow drying inks
Solution – Add drier to ink to decrease drying time, consult with ink manufacturer about faster drying inks

PIA/GATF resources for help:

What the Printer Should Know About Ink textbook
 Paper and Ink Testing and Laboratory Services

4. MECHANICAL GHOSTING

- Problem** – Ink form rollers cannot supply enough ink coverage on form
Solution – Use oscillating form rollers
Problem – Too much water run on plate
Solution – Reduce amount of water by adding alcohol or alcohol substitutes to fountain solution

PIA/GATF resources for help:

Mechanical Ghosting Form
 Sheetfed Offset Training Simulator (SHOTS)

5. INK WILL NOT DRY ON SHEET

- Problem** – Too much water run on press
Solution – Reduce amount of water by adding alcohol or alcohol substitutes
Problem – Ink with weak pigment load
Solution – Ink with more pigment strength needed, consult with manufacturer about more suitable ink

PIA/GATF resources for help:

Paper and Ink Testing and Laboratory Services
 The Paper and Ink Experience Workshop
 PIA/GATF Ink Drying and Setting Tester

6. CONDUCTIVITY VARIES

- Problem** – Contamination of fountain solution during pressrun
Solution – Monitor conductivity regularly and have ink and paper tested
Problem – Conductivity of water supply changing
Solution – Monitor conductivity of both water and fountain solution

PIA/GATF resources for help:

Chemistry for the Graphic Arts textbook

7. DOT GAIN

- Problem** – Ink consistency poorly controlled; ink too soft
Solution – Ink with more body and higher tack is needed, consult with ink manufacturer about more suitable and stable inks
Problem – Plate exposure incorrect
Solution – Plate was either overexposed for negative-working plates or underexposed for positive-working plates, consult with plate manufacturer for correct exposure

PIA/GATF resources for help:

Color Control Bars with Midtone Dot Gain Scale
 PIA/GATF Plate Control Target

8. FOUR-COLOR JOB WILL NOT FIT ON PRESS

- Problem** – Platemaking accuracy abnormal
Solution – Do register grid test of platemaking equipment
Problem – Moisture content of paper not in equilibrium with pressroom conditions
Solution – Condition paper to pressroom temperature and humidity prior to running through the press or replace paper

PIA/GATF resources for help:

The PIA/GATF Guide to Troubleshooting for the Sheetfed Offset Press textbook
The PIA/GATF Guide to Troubleshooting for the Web Offset Press textbook

9. MULTICOLOR INK TRAPPING

- Problem** – Second-down ink is tackier than the first-down ink
Solution – Tack of inks must be adjusted for multicolor printing, consult with ink manufacturer about using tack-rated inks
Problem – Inks with improperly balanced color strength
Solution – Consult with ink manufacturer about inks with balanced color strength for running on multicolor presses

PIA/GATF resources for help:

What the Printer Should Know about Ink textbook
 Sheetfed Offset Press Operating workshop
 Web Offset Press Operating workshop

10. SCUMMING

- Problem** – Insufficient moisture on plate
Solution – Increase amount of fountain solution on plate, check dampening system rollers settings
Problem – Ink viscosity too low
Solution – Ink with more color strength and body is needed, consult with ink manufacturer

PIA/GATF resources for help:

The PIA/GATF Guide to Troubleshooting for the Sheetfed Offset Press textbook
The PIA/GATF Guide to Troubleshooting for the Web Offset Press textbook

11. TINTING

- Problem** – Ink pigment not compatible with fountain solution
Solution – Have ink and fountain solution tested, then consult with ink manufacturer and fountain solution supplier
Problem – Roller wash contaminating ink
Solution – Use a proper roller wash to clean rollers

PIA/GATF resources for help:

What the Printer Should Know about Ink textbook
Chemistry for the Graphic Arts textbook

12. WEB FAN-OUT

- Problem** – Web tension greater at infeed unit than between printing units
Solution – Decrease infeed tension of web, check for excessive blanket squeeze
Problem – Uneven moisture content across web
Solution – Narrow the web by using bustle wheels at each printing unit

PIA/GATF resources for help:

The PIA/GATF Guide to Troubleshooting for the Web Offset Press textbook
 Press Testing Consulting

13. HICKEYS

- Problem** – Dried ink particles
Solution – Keep press and rollers clean and in good condition
Problem – Coating particles and dust from paper
Solution – Consult with paper supplier and install sheet and web cleaners

PIA/GATF resources for help:

What the Printer Should Know about Paper textbook
 Paper and Ink Testing and Laboratory Services

14. STATIC IN THE PRESSROOM

- Problem** – Lack of moisture or dissipation of static electricity
Solution A – Maintain relative humidity between 40% and 50%
Solution B – Install static eliminators on press feeder and feedtable

PIA/GATF resources for help:

Changes in Temperature and Relative Humidity Directly Affect Paper (SecondSight Article)

15. UNEVEN INK COVERAGE ON SHEET

- Problem** – Ink film thickness inconsistent across sheet
Solution – Use densitometer to measure and help maintain ink densities
Problem – Ink rollers stripping
Solution – Clean rollers with roller wash and water; change fountain solution

PIA/GATF resources for help:

Print Analysis and Laboratory Services
 Sheetfed and Web Test Forms

16. IMAGE BLINDING

- Problem** – Excessive gum in fountain solution causes plate image to become water receptive
Solution – Replace fountain solution with one properly mixed
Problem – Excessive acid or alkaline fountain solution
Solution – Remix fountain solution for appropriate pH

PIA/GATF resources for help:

Dampening Solutions Primer and 18 Tips on How to Maximize the Performance of Dampening Systems (SecondSight Article)

17. INK EMULSIFICATION

- Problem** – Fountain solution emulsifies ink
Solution – Cut back on amount of dampening and reset dampeners
Problem – Ink is too soft
Solution – Ink with more body is needed, consult with ink manufacturer, have ink reformulated

PIA/GATF resources for help:

What the Printer Should Know about Ink textbook
 Advanced Sheetfed Press Operations workshop
 Advanced Web Press Operations workshop

18. PROOFS DO NOT MATCH PRESS SHEET

- Problem** – Dot gain characteristics of prepress proofs do not match dot gain characteristics of press
Solution – Use PIA/GATF press test form to “fingerprint” dot gain characteristics of press

PIA/GATF resources for help:

Sheetfed and Web Test Forms
 Press Testing Consulting

19. MOTTLE

- Problem** – Uneven absorptivity of paper
Solution – Conduct K & N ink tests and consult with paper manufacturer
Problem – Inks not trapping properly
Solution – Use a different process series of inks

PIA/GATF resources for help:

Paper and Ink Testing and Laboratory Services
What the Printer Should Know about Ink textbook
What the Printer Should Know about Paper textbook

20. SLOW MAKEREADIES

- Problem** – Lack of focus on premake-ready activities
Solution – Develop and implement a quick makeready program
Problem – Mechanical problems reduce productivity and profitability
Solution – Develop and implement an effective and systematic maintenance program

PIA/GATF resources for help:

Quick Response Makeready Consulting
 Slashing Makeready workshop

**Call PIA/GATF's Technical Hotline
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