

News Ink Troubleshooting Guide

- ▶ Color Too Weak
- ▶ Dot Gain on Plate
- ▶ Former Board & Pipe Roller Build-up
- ▶ Ink / Water Balance
- ▶ Linting
- ▶ Mileage
- ▶ Misting
- ▶ Mottle
- ▶ Muddy Halftones
- ▶ Page-to-Page Set-off
- ▶ Piling
- ▶ Plate Wear
- ▶ Roller Stripping
- ▶ Rub-off
- ▶ Scumming
- ▶ Show-through
- ▶ Spitting on Injector Rail
- ▶ Strike-through
- ▶ Tinting
- ▶ Toning

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Color Too Weak

Problem: Solids appear to lack density.

Cause:

1. Improper ink/water balance
2. Improper concentration of fountain solution
3. Non-uniform dampening
4. Lack of impression
5. Loss of image area
6. Improperly set form rollers

Solution:

1. Adjust to proper ink/water balance
2. Adjust fountain solution to proper conductivity
3. Clean brushes, flicker blades, etc; replace if necessary
4. Adjust blanket height
5. See PLATE WEAR
6. Adjust form rollers to proper setting

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Dot Gain on Plates

Problem: Halftones appear muddy.

Cause:

1. Plate over-exposed
2. Inadequate film-to-plate vacuum
3. Dots in film too soft; too much fringe

Solution:

1. Cut back on exposure to 4-5 steps on the UGRA scale
2. Check vacuum gauge (25-27); look for leaks
3. Check developer chemistry; recalibrate image setter

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Former Board & Pipe Roller Build-up

Problem: Accumulation of ink and lint on former board and pipe rollers.

Cause:

1. Improper ink/water balance
2. Improper concentration of fountain solution
3. Excessive ink
4. Improper maintenance, insufficient clean-up
5. Inappropriate ink for special stocks
6. Non-absorbent stock
7. Improper ink strength

Solution:

1. Adjust to proper ink/water balance
2. Check conductivity; adjust fountain solution accordingly
3. Adjust press to carry less ink
4. Clean former board & pipe rollers regularly
5. Make sure correct ink is being used; consult ink manufacturer
6. Change stock; consult paper manufacturer
7. Consult ink manufacturer to reformulate ink

NOTE: Use Teflon® tape on edge and nose of former board to prevent build-up

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Ink / Water Balance

Problem: Frequent adjustments required on press to maintain print quality.

Cause:

1. Improper maintenance
2. Glazed rollers
3. Excessive ink emulsification
4. Improper concentration of fountain solution
5. Ink density too high

Solution:

1. Check and adjust: ink form roller settings to plate and drum; water form roller setting to plate; pickup roller to chrome roller; speed setting on water motors
2. De-glaze rollers
3. Consult ink manufacturer
4. Check conductivity, then adjust fountain solution accordingly
5. Check with densitometer, then reduce ink and water to proper aim points

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Linting

Problem: Accumulation of fibers from uncoated stocks onto plates, blankets and/or ink train rollers.

Cause:

1. Ink too tacky for stock
2. Too much water reaching paper
3. Improper concentration of fountain solution
4. Improperly packed cylinders
5. Improper tension controls
6. Excessive lint on newsprint

Solution:

1. Consult ink manufacturer to adjust ink for less tack
2. Adjust to lowest possible ink/water balance
3. Check fountain solution by adjusting to proper conductivity
4. Check and repack to manufacturer specifications
5. Check specifications and adjust rolls
6. Consult paper manufacturer

NOTE: On presses with roll stands, reverse the direction of unwind

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Mileage

Problem: Too few impressions per pound of ink.

Cause:

1. Improper ink/water balance
2. Excessive waste at start-up of run
3. Low pigmented inks
4. Ink penetrates stock too quickly
5. Different specific gravities of ink
6. Stock too absorbent
7. Ink densities too high

Solution:

1. Adjust to proper ink/water balance
2. Improve start-up procedures
3. Consult ink manufacturer for stronger inks
4. Consult ink manufacturer for ink with more hold-out
5. Consult ink manufacturer for specific gravity values
6. If possible, change to less absorbent stock; consult paper manufacturer
7. Check with densitometer, then adjust to lower print densities while maintaining acceptable quality

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Misting

Problem: Excessive amount of ink being thrown from ink train rollers.

Cause:

1. Excessive ink on rollers
2. Improperly set or worn rollers
3. Improper ink/water balance
4. Improper fountain solution concentration
5. Ink viscosity too low

Solution:

1. Check with densitometer, then adjust press setting to carry less ink
2. Adjust rollers to proper settings; replace if necessary
3. Adjust to proper ink/water balance
4. Check conductivity and adjust fountain solution accordingly
5. Consult ink manufacturer to reformulate ink

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Mottle

Problem: Solid areas not of uniform density, resulting in uneven appearance.

Cause:

1. Improper ink/water balance
2. Excessive linting on blanket
3. Improper blanket-to-blanket packing or blanket-to-plate packing
4. Improperly set or worn form rollers
5. Uneven dampening distribution

Solution:

1. Adjust to proper ink/water balance
2. See PICKING/LINTING
3. Check packing with Colight or Baldwin gauge and repack to manufacturer specifications
4. Adjust rollers to proper settings; replace if necessary
5. Clean sock rollers, brushes, flicker blades, etc.; replace if necessary

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Muddy Halftones

Problem: Halftones lack sharpness in highlight areas.

Cause:

1. Excessive ink on plate
2. Poor materials for reproduction
3. Improperly processed plate
4. Excessive dot gain
5. Excessive linting
6. Improper form roller settings
7. Improper ink/water balance
8. Glazed blanket

Solution:

1. Adjust to carry less ink
2. Check and improve reproduction process
3. Check for improper exposure of plates using Gray Scale (Stouffer Scale)
4. Check for dot gain on press and/or plates; adjust densities; remake plates
5. See LINTING
6. Adjust setting to manufacturer specifications
7. Adjust to proper ink/water balance
8. De-glaze or replace blanket

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Page-to-Page Set-off

Problem: Ink from printed side of page setting off an adjacent page of finished product.

Cause:

1. Improperly set folder nip rollers
2. Excessive ink
3. Improper concentration of fountain solution
4. Improper ink/water balance
5. Non-absorbent stock
6. Second fold rollers too tight

Solution:

1. Adjust nip rollers to manufacturer specifications
2. Check with densitometer, then adjust press settings to carry less ink
3. Adjust fountain solution to proper conductivity
4. Adjust to proper ink/water balance
5. Change stock, consult paper manufacturer
6. Adjust second fold rollers to proper pressure

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Piling

Problem: Build-up of ink on printing plates.

Cause:

1. Highly pigmented inks
2. Improperly set or uneven rollers
3. Ink too tacky
4. Improperly packed cylinders
5. Blankets too tacky
6. Emulsification of ink

Solution:

1. Consult ink manufacturer to adjust ink formulation
2. Check specifications and adjust rollers; replace if necessary
3. Consult ink manufacturer to reformulate ink with less tack
4. Check specifications and repack cylinders
5.
 - a) Consult blanket manufacturer,
 - b) Treat blanket or change to less tacky blanket, or
 - c) Change blanket wash
6. Use minimum amount of ink and water necessary for the particular form

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Plate Wear

Problem: Gradual loss of image area where plate has eroded.

Cause:

1. Improperly processed plates
2. Improperly set Ink and/or water form rollers
3. Excessive linting
4. Improper concentration of fountain solution
5. Improperly packed plate and blanket cylinders
6. Running plates beyond capabilities
7. Inks much too strong
8. Poorly ground ink
9. Form rollers too hard

Solution:

1. Adjust plate developing process using Gray scale (Stouffer scale)
2. Adjust settings to manufacturer specifications
3. See LINTING
4. Check conductivity and adjust fountain solution accordingly
5. Adjust to manufacturer specifications using Colight or Baldwin gauge
6. Change to higher quality plates for longer plate life
7. Reduce ink strength to improve lubrication
8. Consult ink manufacturer to rework ink
9. Replace form rollers

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Roller Stripping

Problem: Rollers do not accept ink.

Cause:

1. Rollers contaminated by hydrophilic material
2. Excessive emulsification of ink on ink train
3. Improper roller setting
4. Improper concentration of fountain solution
5. Copper worn off ink drum
6. Dampening system contaminated with press chemicals

Solution:

1. Clean ink rollers thoroughly and re-copperize
2. Adjust to proper ink/water balance
3. Adjust rollers to proper settings
4. Check conductivity and adjust fountain solution accordingly
5. Re-copperize ink drum, reduce dampener setting
6. Drain and flush dampening system; revise wash procedure

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Rub-off

Problem: Printed surface has insufficient rub resistance.

Cause:

1. Improper ink/water balance
2. Ink density too high
3. Improper concentration of fountain solution
4. Poor maintenance — especially rollers
5. Non-absorbent stock
6. Switch to low-rub inks

Solution:

1. Adjust to proper ink/water balance
2. Check with densitometer, then adjust press to carry less ink
3. Check conductivity and adjust fountain solution accordingly
4. Improve maintenance
5. Consult paper manufacturer for more absorbent stock
6. Consult ink manufacturer

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Scumming

Problem: Non-image area of lithographic plate accepts ink in random areas.

Cause:

1. Improper process plate (Test plate by honing non-image area with pencil eraser; if scum disappears in honed area, plate is the probable cause)
2. Improper concentration of fountain solution
3. Improperly set, worn or hard dampening and ink rollers
4. Ink insufficiently resistant to water (off standard)
5. Dampening system in poor condition
6. Plate not fully desensitized
7. Plate improperly exposed to light or heat

Solution:

1. Remake plate; adjust plate-making process
2. Check conductivity, adjust fountain solution
3. Adjust rollers to proper pressure; check durometer and replace if necessary
4. Consult ink manufacturer to reformulate
5. Adjust, clean or replace sock roller, brushes, flicker blades, etc; replace if necessary
6. Adjust plate making process
7. Store plates under cool, dry and dark conditions

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Show-through

Problem: Reverse side of printed page visible.

Cause:

1. Insufficient opacity in newsprint
2. Impression too heavy

Solution:

1. Change to more opaque newsprint
2. Reduce impression setting

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Spitting on Injector Rail

Problem: Excessive ink spilling over end of injector rail.

Cause:

1. Improper ink/water balance
2. Improper rail setting
3. Improper concentration of fountain solution
4. Improper ink train roller settings
5. Improperly zeroed page pack columns
6. Improper canister pressure
7. Inappropriate ink body and tack
8. Ink film too thick

Solution:

1. Adjust to proper ink/water balance
2. Reset rail (top and bottom) to manufacturer specifications
3. Check conductivity and adjust fountain solution
4. Reset rollers based on manufacturer specifications
5. Reset page pack column to zero, per manufacturer specifications
6. Adjust canister to proper pressure
7. Consult ink manufacturer for ink with appropriate body and tack
8. Reduce ink film thickness

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Strike-through

Problem: Excessive ink absorbing onto paper stock.

Cause:

1. Stock too absorbent
2. Change in basis weight of newsprint
3. Insufficient ink hold-out
4. Excessive ink

Solution:

1. Change to a less absorbent stock, consult paper manufacturer
2. Revert to original basis weight
3. Consult ink manufacturer for ink with more hold-out
4. Check with densitometer, then adjust press settings to carry less ink

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Tinting

Problem: Emulsified ink transfers to printed sheet as background tint.

Cause:

1. Improperly processed plates
(Test by honing non-image area with pencil eraser; if scum disappears in honed area, plate is probable cause)
2. Improperly stored plate
3. Improper ink/water balance

Solution:

1. Remake plate; adjust plate making process
2. Do not slip sheet plate after coating, store plates away from moisture and humidity
3. Adjust to proper ink/water balance

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME

News Ink Troubleshooting Guide

Toning

Problem: A severe form of tinting.

Cause:

1. Improper concentration of fountain solution
2. Ink bleeds into fountain solution
3. Ink insufficiently resistant to water (off standard)
4. Improper ink/water balance
5. Improper setting of dampener or ink rollers
6. Paper chemicals contaminate ink train

Solution:

1. Check conductivity and adjust fountain solution accordingly
2. Consult ink manufacturer for ink with nonbleeding pigment
3. Consult ink manufacturer to reformulate
4. Adjust to proper ink/water balance
5. Check and adjust dampener and ink rollers to manufacturer specifications; check durometer and replace if necessary
6. Consult paper manufacturer

- ▶ Flexography
- ▶ Publication Gravure
- ▶ Sheetfed Offset
- ▶ UV
- ▶ Web Offset
- ▶ News Ink
- ▶ HOME