



Print Production and Colour Management Training: Offset, Flexo, Digital and Prepress



Print Production and Colour Management Training: Offset, Flexo, Digital and Prepress

Introduction:

Print production and colour management training, covering offset, flexo, digital and prepress quality, is a 5-day course for print house production, prepress, pressroom, colour quality and print buying teams that ends with a Colour Quality and Waste Reduction Plan for a case print operation. Print operations lose margin when colour drifts between proof and press sheet, makeready eats substrate and ink, and jobs are quoted without true plate and press-hour costs. Nominees already run or buy print jobs and work through case studies built on control-strip measurements, spoilage logs and job tickets. CoreConcept Training Center delivers this print production and colour management course.

Course Objectives:

- Map a print job from artwork receipt to dispatch and select offset, flexographic or digital printing by run length, substrate and colour demand
- Measure solids, tone value and grey balance with a spectrophotometer and densitometer and judge results against ISO 12647 targets and Delta E tolerances
- Configure ICC device profiles, rendering intents and press characterisation so contract proofs predict the production sheet
- Control preflight, trapping, imposition, RIP and computer-to-plate settings so plates and proofs leave prepress free of avoidable faults
- Diagnose offset, flexo and digital press defects and cut makeready time and spoilage with structured changeover methods
- Build print job estimates from plates, ink, substrate, press hours and waste allowances and defend them to customers

Target Audience:

- Print production management teams responsible for press scheduling, job flow, makeready time and spoilage targets
 - Prepress and platemaking teams responsible for file checks, imposition, RIP output, plates and contract proofs
 - Pressroom supervision teams responsible for offset, flexographic or digital press output and fault correction
 - Colour quality teams responsible for measurement routines, colour approval and customer colour complaints
 - Print buying and packaging procurement teams responsible for specifying, approving and costing printed work
-

Course Outline:

Day 1: Print Production Workflow, Process Selection and Current-State Review

- Print Job Workflow Map From Artwork Receipt to Dispatch
- Offset, Flexographic and Digital Process Selection by Run Length
- Substrate and Ink System Matrix for Paper, Board and Film
- Reprint and Customer Complaint Log Root Cause Grouping
- Makeready Time and Spoilage Baseline From Press Records

Day 2: Colour Science, ISO 12647 Targets and Profile-Based Colour Management

- CIELAB Colour Space and Delta E Tolerance Interpretation
- ISO 12647 Process Control Targets for Solids and Tone Value
- Spectrophotometer and Densitometer Readings on Press Control Strips
- ICC Device Profiles, DeviceLink Profiles and Rendering Intent Choice
- Press Calibration Versus Characterisation Sequence for Fingerprint Runs

Day 3: Prepress, Plate Making and Proofing Operations

- Preflight Profile Checks for Incoming Customer PDF Files
- Trapping, Imposition and RIP Settings for Each Press Process
- Computer-to-Plate Exposure, Plate Linearisation and Plate Inspection
- Contract Proof Production and Soft Proof Viewing Conditions
- Spot Colour Ink Formulation and Brand Colour Drawdown Approval

Day 4: Press Troubleshooting, Makeready Reduction and Print Job Costing

- Offset Ink-Water Balance, Slur, Doubling and Hickey Diagnosis
- Flexo Anilox Cell Volume, Doctor Blade and Dot Bridging Faults
- Digital Press Banding, Registration and Toner Fusing Fault Checks
- Quick Changeover Method Applied to Press Makeready Steps
- Print Job Estimate With Plates, Ink, Substrate and Press Hours

Day 5: Case Study: Colour Quality and Waste Reduction Plan

- Case Print Operation Data Pack of Measurements and Spoilage
 - Colour Deviation Analysis Against Process Targets for Case Jobs
 - Makeready and Waste Reduction Targets With Named Process Owners
 - Print Buyer Specification and Proof Sign-Off Protocol for the Case
 - Colour Quality and Waste Reduction Plan Completion and Defence
-

Skills You Will Gain:

- Print Process Selection
- Spectral Colour Measurement
- Colour Profile Configuration
- Contract Proof Control
- Plate Making Quality Control
- Press Fault Diagnosis
- Makeready Waste Reduction
- Print Job Estimating

Why Attend This Course:

- Deliver a Colour Quality and Waste Reduction Plan for a case print operation to the production director and the colour quality lead
- Decide whether a proof, plate or press sheet meets the agreed colour target using measured values rather than visual opinion
- Avoid reprints, rejected deliveries and underquoted jobs caused by colour drift, long makeready and missing cost allowances
- Pass on measurement routines, preflight profiles, fault diagnosis charts and estimating templates to prepress and pressroom colleagues

Conclusion:

Back at work, the participant presents the Colour Quality and Waste Reduction Plan to the production director, the pressroom and prepress supervisors and the print buying lead. Managers use it to decide which colour targets, measurement routines, proofing rules and changeover steps to adopt first and who owns each one. After the first month of production under the plan, the unit should review Delta E results, makeready minutes, spoilage sheets, reprints and quoted against actual job costs, then adjust targets and estimating allowances.

Frequently Asked Questions FAQ:

What should participants know before the print production and colour management course?

Participants should already work in prepress, the pressroom, colour quality or print buying. Bringing anonymised control-strip readings, a spoilage log, a job ticket or a customer colour complaint lets them apply the case study work to their own operation.

How does print production and colour management differ from a graphic design or packaging materials course?

It works on the press side: measurement, profiles, proofs, plates, press faults, makeready and job costing. Graphic design courses cover layout and file preparation by designers, and packaging materials courses cover pack structures, materials and transport testing.

Why does print production and colour management rely on measurement rather than visual checks?

Viewing light, substrate and the viewer change how a colour looks, so visual approval alone causes disputes. Spectrophotometer readings compared with agreed CIELAB targets and Delta E tolerances give press operators, prepress and customers one objective pass or fail decision.

What do participants take back from the print production and colour management course?

Participants take back a Colour Quality and Waste Reduction Plan for a case print operation, plus a measurement routine, a preflight checklist, a press fault diagnosis chart, a proof sign-off protocol and a print job estimating template.
