

**NARROW WEB FLEXOGRAPHIC PRESS OPERATOR
(Time-Based)**

APPENDIX A

O*NET CODE 51-5112.00

This training outline is a minimum standard for Work Processes and Related Instruction. Changes in technology and regulations may result in the need for additional on-the-job training.

WORK PROCESSES

	Approximate Hours
A. Safety and Workplace Orientation	200
1. Learn and practice employer-specific safety protocols.	
2. Demonstrate proper safety procedures when handling, using, storing, and disposing of chemicals used in flexographic printing.	
3. Acquire basic knowledge of shop equipment, tools, and terminology.	
4. Learn base substrates (e.g., paper, films, liners, base laminations).	
5. Understand proper Lock-Out/Tag-Out (LOTO) procedures.	
6. Demonstrate proper lifting techniques.	
B. Substrate Handling	400
1. Understand proper ink technology (Water Base, UV Cure, Solvent, etc.) associated with flexographic printing.	
2. Load and unload roll stock per procedure.	
3. Verify accuracy of substrate and footage to the appropriate job	
4. Check for damage in transit/printing line (if applicable).	
C. Planning/Processing Job Orders	400
1. Understand proper color technology, ink variation: ultra-violet vs. water-base, ink adhesion, curing, varnish application and die cutting.	
2. Examine job orders; verify quantity to be printed, stock specifications, colors, inks, varnish, and die cutting, perforation, lineal scoring, etc. special printing instructions.	
3. Obtain and verify required materials.	

D. Job Preparation

950

1. Obtain or mix inks and fill ink fountains/stations.
2. Remove particles of dust or dried ink from plate.
3. Understand tension controls, splicing methods and how to adjust.
4. Verify that paper/ adhesive varnish meets the specifications for a given job.
5. Collect and inspect random samples during print runs to identify any necessary adjustments.
6. Demonstrate running solid color, screens/halftones, process-color, and multi-color work using pantone matching system (PMS) colors.
7. Change press plates, splices, or cylinders as required.

E. Press Operation

1000

1. Adjust press throughout production run to maintain specific registration and color density.
2. Understand the proper equipment and tools used in the print stations (use of printing plates, rollers, inks).
3. Demonstrate proper die handling and die maintenance.
4. Demonstrate proper drying and curing of ink and varnish.
5. Adjust bulbs, electron beam, etc. as needed.
6. Become familiar with personal tools and their use on the press line (Allen wrenches, rulers, calculators, hammer, flashlight, magnifying glass).
7. Monitor printing process on control panel or computer monitor (if available), adjust press manually and/or electronically.
8. Monitor automated press operation and defect detection systems and respond to fault, error, or alert messages.
9. Troubleshoot potential press/print defects and make proper adjustments.
10. Verify strips to appropriate target.
11. Meet and maintain various quality and functionality test requirements (e.g., barcode scanning, tape rub tests, etc.).
12. Complete all applicable paperwork and electronic functions.

F. Cleaning, Maintaining, Repairing Press **850**

1. Clean ink fountains, plates, or printing unit cylinders (plate and impression cylinders) when press runs are completed.
2. Understand how to thoroughly inspect and clean fountain roller, as well as the anilox roller.
3. Identify natural wear & tear on doctor blades, along with proper cleaning procedure post-operation.
4. Lubricate press.
5. Identify and repair minor mechanical malfunctions.
6. Perform preventive maintenance on press and auxiliary equipment and record data.

G. Interpersonal Relations (including customer service, if applicable) **200**

1. Demonstrate etiquette and courtesy.
2. Communicate orally and in writing.
3. Adhere to a code of professional ethics.
4. Maintain a good professional appearance.

Approximate Total Hours **4000**

Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to <https://dol.ny.gov/public-work-and-prevailing-wage>

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APPENDIX B

RELATED INSTRUCTION

Safety, Health, and the Workplace

1. Basic Shop Safety
2. Basic Machine Safety
3. Basic Lock-Out/Tag-Out Procedures
4. Using Personal Protective Equipment (PPE)
5. Safe Handling, Use, Storage and Disposal of All Trade-Related Chemicals and Materials
6. Familiarization with SDS (Right to Know)
7. Local, State and Federal Guidelines Affecting the Printing Industry (if applicable)
8. Sexual Harassment Prevention – must comply with Section 201-g of the Labor Law

Mathematics

1. Basic Arithmetic & Measurement
2. Trade Math (including computing percentages, weights, and measures; calculating amounts of ink and paper needed to do a job), press count calculations
3. Applications to the Trade

Trade Theory and Science

1. Introduction to the Principles of Mechanics
2. Color Theory
3. Electronics (including proper in-line press equipment, narrow web vs. wide web)
4. Materials of the Trade (Inks, Papers, Film and Various Substrates)
5. Introduction to the Flexographic Printing Process and Associated Equipment
6. Printing Operations
7. Troubleshooting; “bounces & repeats”, registration and other press problems
8. Preventative Maintenance

Business Skills

1. Oral and Written Communication Skills
2. Working as Part of a Team
3. Time Management Skills
4. Customer Service, if applicable

Other Related Courses as Necessary

A minimum of 144 hours of Related Instruction are required for each Apprentice for each year.

Appendix B topics are approved by New York State Education Department.