

hp indigo digital press



a guide to evaluating core competencies
for operator candidates



i n v e n t



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section 1

introduction

Driven largely by the rapid evolution of computer technology, the graphic arts industry has seen significant changes in occupational categories. As a result, employers wishing to take advantage of new opportunities in the printing industry often find it difficult to determine hiring criteria that satisfy their existing needs, while affording them the flexibility to prepare for a new digital medium.

Many businesses have found that an HP/Indigo digital press offers new possibilities for their own day-to-day requirements above the beyond the capabilities of the traditional printing environment. And while most businesses agree that it is not necessary to hire a full-fledged press operator, selecting a candidate with the proper background can be a difficult process.

To better understand the qualifications required to excel in such an environment, HP has compiled a list of recommendations based upon comments and interviews with successful operators and their employers. The following overview and corresponding operator selection worksheet are designed to assist you during the operator selection process. They may be used in lieu of, or in conjunction with, your company's normal selection process to establish specific criteria for potential HP/Indigo digital press operator candidates.

section 2

measurable objects: relating operator competency to business

A competent operator has a direct impact upon two major aspects of any printing environment—equipment dependability and workflow efficiency.

2.1 equipment dependability and the operator

Most of the causes of waste and downtime are preventable. A study conducted by HP Indigo concluded that press dependability relies, in part, on an operator who exhibits specific character traits.

An HP/Indigo digital press operator who exhibits many of the characteristics that follow will positively influence press reliability by:

- performing routine maintenance, on schedule and according to procedure—this is essential to promote machine stability and dependability
- performing adjustments accurately, efficiently and according to procedure—minimizing unexpected downtime and maintenance calls
- monitoring the printing process to maintain print quality—lost productivity and wasted consumables are often attributed to output problems that go unnoticed
- understanding machine capabilities—achieving optimum print quality

2.2 workflow efficiency and the operator

“Workflow efficiency” refers to the process of increasing productivity by eliminating “reworks”—jobs that are sent through the production cycle more than once.

Measuring workflow efficiency requires evaluating the production process each time a unit of work leaves a stage in the production workflow. The measure of efficiency is determined by achieving the following objectives:

- predictable inputs
- predictable process
- proper inspection of the results (to ensure predictability at each stage of the process)

In an HP Indigo digital press environment, the operator has the potential to positively influence every aspect of a “oncethrough” workflow:

- operator influences the inputs through proper handling of consumables
- operator determines whether the process will be predictable by:
 - performing preventative maintenance routines correctly
 - ensuring that the job is set up properly
 - performing routine printing procedures, most of which require specific skills and aptitudes
 - quality inspection, adherence to procedure, visual discrimination, analysis and judgement
 - operator recognizing when routine adjustments are necessary, catching errors at the earliest possible stage to minimize reworks.



section 3

core competencies: selection criteria for prospective hp indigo operator candidates

The list below represents an overview of the suggested characteristics to look for when selecting potential operator candidates to interview. A comprehensive list of preferred character traits, ranked from the minimum to the most desirable, appears on the pages to follow.

most desirable

- understands business
- inquisitive
- dedicated
- good visualizer
- understands prepress

above average

- prefers a clean and orderly work environment
- analytical approach to problem solving
- good interpersonal communication skills
- printing and/or related production experience
- color printing experience (4-color preferably)
- takes pride in their efforts
- knows how to evaluate print quality

minimum

- willingness to learn new ways of doing things
- good mechanical aptitude
- doesn't mind getting dirty
- good visual discrimination
- good physical strength

traits not as important as expected

We note with interest that the following character traits were not found to be as important as initially expected. Although these are, in general, positive attributes, candidates who do not possess skills in the following areas, in some cases, are just as likely to succeed as those who do.

- prior computer experience
- prior experience in a traditional offset or web-press environment
- expert mechanical skills—mechanical aptitude is important but expertise is not

operator core competencies

operator characteristic

understands business

Individuals who understand what effect their actions have on the success of

inquisitive

Always asking; "Why", or "What if".

dedicated

Ready and willing to make an extra effort to exceed customer expectations.

prerequisite to most desirable

good visualizer

Press work often involves working with colored liquids and solvents.

understand prepress

Individuals who understand the mechanics of a prepress

printing and/or related production experience

Has printing press, or related production and mechanical experience. Although not a mandatory requirement, the experience may shorten the

color printing experience (4-color preferably)

Familiarity with color in printing. Not that good color vision is required (although helpful), as long as the operator is familiar with densitometry.

takes pride in his or her efforts

Proud of their accomplishments and contributions to the company.

knows how to evaluate print quality

Understands how to achieve optimum print quality based on machine

9 interp comm s

Listens to o
what they
communic
thoughts e

prefers a clean and orderly work environment

Press work often involves working with colored liquids and solvents. A properly maintained press promotes machine stability.

willingness to learn new ways of doing things

Doesn't approach new ideas with a negative attitude.

analytical approach to problem solving

Individuals who do not exercise cognitive thought may have difficulty with basic troubleshooting

good manual dexterity

Understands, and uses common hand tools—screwdriver, etc. Understanding how press components operate is fundamental to proper press operation and upkeep.

auditory perception

Doesn't hear or hear poorly. Gets

procedure oriented/methodical

minimum

Candidates who fall into this category possess the minimum recommended requirements for proficiency.

prerequisite to above average traits

doesn't mind getting dirty

Press work often involves working with colored liquids and solvents.

above average

These characteristics represent individuals who are distinctly better than just okay. Individuals who fall into this category should possess the minimum requirements as well.

good visual discrimination

Pays attention to detail. Press operators must occasionally monitor the printing process to maintain print quality.

good physical strength

While not labor intensive, working with an HP/Indigo press requires some manipulation of press

most desirable

These characteristics give a candidate a chance to be among the best. Individuals who fall into this category should possess the minimum requirements, with any above average characteristics providing positive reinforcement.



section 4

operator selection

An HP/Indigo digital press combines the quality of offset printing with the flexibility, economy, and ease of use of electronic printing. Selecting an operator with the proper qualifications is an important step in establishing a productive HP/Indigo digital press environment.

The following recommendations have been compiled by HP Indigo based upon the interviews and subsequent responses from successful operators and their employers. The interview questions are divided into two main categories—personal characteristics and desirable experience. They are designed to be used as a guideline to ensure consistency in the selection process.

4.1 personal characteristics

good mechanical aptitude/manual dexterity

- **experienced in the operation, adjustment, and routine maintenance of mechanical systems**
- **good troubleshooting skills**

1. Give some examples of mechanical ability. (Look for complexity of systems worked on, and sophistication of skills mentioned.)
2. What mechanical systems have you operated and maintained? (Does the answer make sense compared to the previous answer?)
3. What maintenance procedures did you perform on those systems? (Look for depth of mechanical knowledge, the complexity of the tasks performed, and the frequency of the procedures.)

4. Think about a time when you had a difficult troubleshooting problem.
 - A. What caused the problem?
 - B. How did you go about solving the problem? (Did they call for help? Other? (Look for ingenuity and level of involvement in the final solution.)

interested in learning new things

- **inquisitive**
- **good problem solving skills**

1. What recent subject interested you to the point that you investigated further?
 - A. When was this? (Look for fairly recent activity, not years ago.)
 - B. What made it interesting to you?
 - C. How have you pursued the interest? (Look for continued pursuit of the subject, or some type of closure.)
2. Think of a situation in which to solve a problem you really had to think about what could be causing it. Tell me about the incident. (Look for consistencies with the troubleshooting answer above. Do the answers correspond? What picture do the answers give you about the candidate's thought process?)

methodical

- **understands value of preventative maintenance**
- **detail oriented**
- **follows procedure well (process driven)**

1. How would you define "preventative maintenance"? (Response should reflect that the purpose of PM is to keep equipment operating dependably and prevent breakdowns.)
2. What procedures do you perform on a daily basis? Weekly? Monthly? (Answers can include home, as well, and are not limited to maintenance.)
3. Tell me about a time when you were following an established procedure at work and you thought of a better way to do it. How did it come about, and what did you do? (Ideal response: showed initiative; brought the suggestion up for approval; had it implemented as a standard procedure.)

customer satisfaction oriented

- **understands importance of customer needs**
- **sensitive to deadlines: responds well, delivers on time**

1. Describe when your efforts had an impact on meeting customer quality requirements.
 - A. What was the situation? What would I have seen you doing? (Look for resourcefulness; turning a potential problem into a positive outcome.)
 - B. What's the worst deadline crunch you ever faced? How did you feel about it? How did you handle it? (Experienced press operators will have numerous examples.)
2. Think of a time when satisfying your customer was an accomplishment or challenge. What was the situation? How did you handle it?
(Responses should show an understanding of what the customer wanted, whether or not the candidate felt the demands were reasonable, and if the demand was met.)



flexible work schedule/appropriate pay scale

- **available for overtime to meet customer schedules**

1. How much did you earn in the past year?
2. Hourly or salaried?
3. How much of that income was base pay?
4. How much of that income was overtime?
5. How much of that income was bonus?
(Answer will, among other things, reflect an hourly worker's availability for overtime)
6. How many hours did you work in a typical week?
7. (Optional): Have you ever worked a rotating work schedule? How did you adapt to it?
(Look for willingness to be flexible in order to get the job done.)

team oriented

- **works well with others in the shop**
- **communicates well with others to coordinate efforts and resolve questions together**

1. Imagine that you have a day off, free of obligations. What would you do?
(Look for social activities. A mixture of activities reflects an ability to balance priorities. Note that some good team workers enjoy some solitude on their day off, so be flexible in your interpretation.)
2. Think about the most disagreeable person you've ever had to interact with.
 - A. What was the situation? How did you deal with it?
(Look for willingness to make the end result more important than personal feelings.)
 - B. What made the person disagreeable to you?
(Watch out for traits that may have a negative impact on co-workers!)



4.2 desirable experience

All of the following experience is desired, but no part is mandatory. Most successful HP Indigo digital press operators started with limited experience in at least one of these areas. But the more the candidate knows, the less they'll have to learn before becoming fully proficient.

offset press operation

1. Describe your experience in offset press operation. (Look for depth of experience.)
2. Let's say a print job consisting of a layout and some photographs enters your shop. Describe what happens to the job at each step in the production workflow? (Look for understanding that early decisions affect the entire process.)
3. In your experience, what's the most common customer mistake that leads to doing a job over? Why does it keep happening? (Look for realistic stories that reflect real-world experience, and mention how it could be avoided.)
4. What's the most common printer's mistake that leads to doing a job over? Why does it keep happening?
5. Tell me things you look for when you do a press check/press proof. (Look for depth of candidate's real-world experience and the ability to take responsibility for the whole process—e.g., paper, folds/trims, print quality, color, color proofing, prepress errors, job ticketing.)
6. How do finishing and bindery affect your job? (Look for an understanding of the relationship between finishing and bindery, and prepress setup.)
7. What can an operator do to streamline the production process in the shop as a whole? (Examples: know what job is on the press; preparing for the next job; calibration from job to job.)



color theory and practice

1. Describe your experience with process color.
2. Give some examples of color corrections you've recently been involved with. (Fluent responses imply color experience; hesitance suggests limited experience.)

computer prepress/preflight knowledge

• able to identify whether a file has been prepared correctly for offset printing

1. What does "preflight" mean to you?
2. What kinds of mistakes can it detect? (e.g., missing fonts, page orientation, missing artwork, trapping)
3. What's a CT file? (a file format for continuous tone images)
4. Have you ever created PostScript® files using QuarkXPress®, PageMaker®, Adobe Illustrator®, or a similar application? If yes, what problems did you run into when you tried to print them? (Look for common problems: e.g., page orientation, missing fonts or graphics, etc.)
5. Where did you learn to create Postscript® files? (Important because getting it right isn't intuitive or easy.)

experienced in computer use

• PC, Mac, and /or UNIX

1. Describe any computer-controlled system you've worked with, and your exact function in operating the system. (Was it just data input? Job setup? System upkeep? How comfortable/confident is the candidate?)
2. Have you ever worked with a system that required a multi-step startup process? (If "yes") Describe the startup process. (Look for procedure orientation.)





4.3 general questions

The following questions are the sort that are useful in any field to help determine if there is a good fit between a job candidate, the specific job, and the place of employment. The questions are open-ended; ask them and listen carefully to how the candidate responds.

1. What kind of environment do you work in best?
2. If you could create your own job, what would it be?
3. If I called one of your previous supervisors what would he or she say about you?
4. Why would you want to work on an HP Indigo digital press? (Notice whether they've done any homework, e.g., keeping up with the trade magazines or researching the product before coming to the interview.)
5. What got you into the printing field, and what keeps you in it?
6. Where do you see this industry going?
(It's good if the candidate has a forward-thinking view of the industry, with a mind open to new ways of doing things.)
7. If money were not an issue, what would you want to be doing and why? (Look for imagination and goals that sound realistic, not a contrived "interview answer." Also compare with #2 above, looking for compatibility of answers.)
8. Now that I've finished asking you questions, let's turn the interview around and you can ask me anything you want. (Tells you what's important to them and what's driving their thoughts, in addition to letting them ask questions.)



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hp indigo digital printing

the right press, the right operator,
the right solution

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