Installing Your First Automatic

Avoid installation delays and additional costs by being completely prepared when your new press arrives at your door.

By Deborah Sexton

You've put a lot of thought into buying your first automatic press including identifying your needs, checking out your options, and negotiating a good deal. Now all that's left is setting it up, flipping the switch, and you can start printing garments, right? Not quite. Purchasing is only the first step in successfully adding an automatic to a shop. The second, which often doesn't get enough attention, is installing it.

If you want to get off to the best possible start with your new piece of equipment, it's going to require time and effort. Your manufacturer will send you a complete list of things that needs to be in place BEFORE the technician arrives. Not being prepared may not only delay installation, but result in unexpected and unnecessary additional costs.

As with the purchase of an automatic, preparation is key to a successful installation. An important part of preparation is communication. You need to determine in advance:

* What the installation service includes and what the tech rep's duties are

* What issues you must address prior to press installation that will enable the tech rep to provide the best possible service.

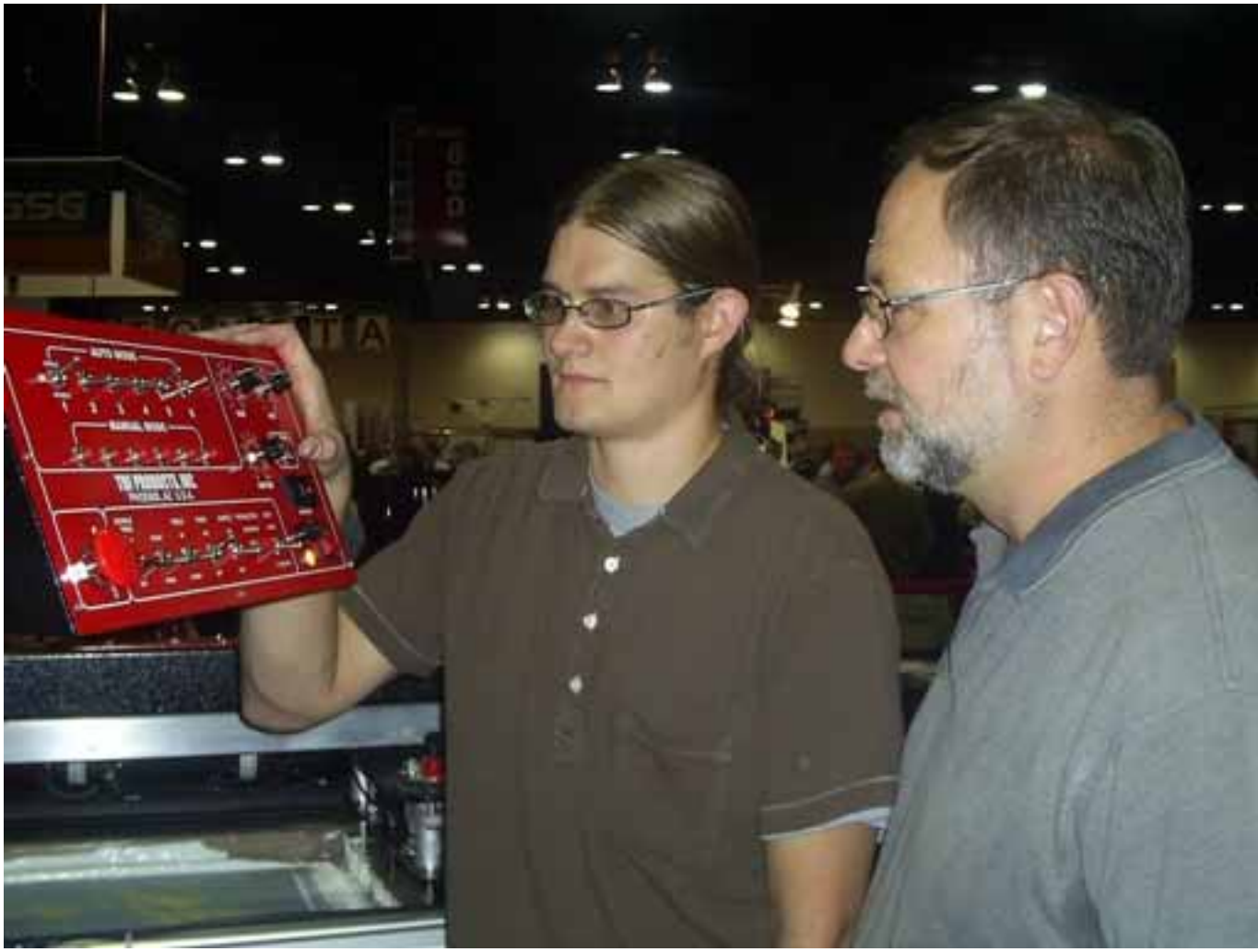
It is critical that everyone understands the tasks that need to be done and who will perform them. The job of the tech rep during installation is to get the machine working and make sure the customer understands its functions and correct operation. When the buyer expects the tech rep to

provide training in screen making, printing, etc., and/or is not prepared for installation, one way or another, it ends up costing him.

He may have to pay for extra days or hours the tech rep has to stay. Or if there is a flat rate for installation in a stated amount of time, the time the tech rep has to spend on things like getting the power hooked up or setting up the air compressor may cause the customer to lose training time on the machine. It's also important to be clear about how the manufacturer charges for and schedules installation and what charges (food, lodging, etc.) are included.

Getting Ready

Just because you've ordered your press doesn't mean you should stop doing your homework. Just as researching your needs and the options for meeting them helps ensure a wise buy, delving into the issues surrounding the installation of an automatic press can help the process go faster and more smoothly. Good sources of information include trade publications, seminars, and other printers. The manufacturer also may have materials available with tips and guidelines for preparing for the new arrival.



Maximize the time your tech has to train you on how to use the machine by being ready when he arrives. Otherwise, valuable training time may need to be spent burning a screen to do a test run or hooking up a compressor.

Like the purchase of an automatic, preparing for its installation raises considerations in a number of areas, both in-house and external. If you did your pre-purchasing homework, you've already determined you have room for an automatic, the personnel to operate it, and the equipment to support it. Now you need to focus on the details of integrating it into your shop layout and how you're going to get it where it's going. The following guidelines can help.

Up-Front Logistics

Clear span. A six-color machine requires a minimum of a 10-foot-diameter circle, within which there are no obstructions (e.g., columns). Ideally, there should be 2 to 3 feet of walking space all the way around the machine. You can save space by putting one side of the press against a wall, but you'll have to walk part way around the machine in each direction when setting up a job.

Ideally your new press will be installed on a cement floor. If your floor is wood, it may need to be modified to evenly distribute the weight. Photo courtesy of Acme Screen Printing, Cheektowaga, N.Y.

Floor. A concrete floor is preferred. Wood floors may require extra support or other modifications to spread out the weight of the equipment, and you should discuss this with the manufacturer prior to installation.

Power. First off, you have to make sure you have the proper power for your new automatic in the area where you are installing it. Your electrician will need to know the machine's specifications—how many amps it draws, whether it is three-phase, 220, etc., taking into account

any features or attachments that impact its power requirements. The machine specs will determine whether a cord can be dropped from the ceiling. If so, the cord should be long enough to fall to the floor. (Extra wire can be cable-tied during installation.)

It is important to have the specs on any attachments as well. If your press has a flash dryer, you'll probably have to allow for it to run off a 220-volt, dedicated 20-amp outlet. A single-phase, 20-amp flash, for example, may dictate a heavy-duty twist-lock plug as well as a cord that reaches the floor and a slightly lower-gauge (heavier, fatter) wire than is typically called for, as this flash draws 100 percent load when operating.

Air compressor. The air compressor is a particularly important consideration; running power to it should be your first priority. You will need at least a 7.5 horsepower compressor for a small press and that requires a 30-amp, 220 breaker. Air compressors are typically available with a service contract. Buying one is a smart, proactive thing to do. That way, the dealer takes care of all the routine maintenance like changing fluid and filters. It's one less thing the printer needs to think about to keep the press running and making money.

If you are installing a refrigerated air dryer (chiller) as well, again you need to know the voltage requirements and amperage. A 230-volt, single-phase unit drawing 34 amps will need to be hard-wired into the compressor, while a 115-volt, 15-amp chiller has a standard three-prong plug, so it simply needs an outlet nearby.

The buyer also is expected to supply the air compressor hose and fittings. A 1-inch rubber air hose with swivel connections on both ends is a good choice, although a ¾-inch hose will suffice for runs of less than 50 feet. Air hoses generally are available at larger local hardware stores or can be ordered from industrial supply houses such as Grainger.

The best approach is to run the hose up the wall to the ceiling, then drop it down the middle of the machine. If the machine has a hollow center shaft, the hose will run right through it and the final connection can be made under the machine. Be sure to properly secure all air hoses by clamping them down at least every 36 inches, as a broken air hose can cause bodily injury if it whips around and hits someone.

Related upgrades. If you haven't modified your other equipment in anticipation of automating, you need to before installing the press. Remember, you're probably going to move up to larger screens (23 by 31 inch), which may call for a larger exposure unit and washout sink. Depending on your projected output, you also may need to consider purchasing a new dryer.

Finally, there is the matter of personnel. For optimal production, you're going to need at least a loader, an unloader, and someone working the dryer. In addition, it helps to have a person to scrape and maintain the ink levels and continuously lay down blank goods.

Bringing It Home

Once you've addressed the issues in your shop relating to the new press, you need to think about getting it there. This involves both working with your dealer and shipper and taking a look at a few other things in your shop.

Moving it. An automatic press is a big piece of equipment. The truck is going to pull up and open its back door. Unloading the press is your responsibility. A hand pallet jack and a forklift are typically all you need to get the press into your shop. Our company recommends a 5,000-pound capacity forklift with 6-foot blades, although extended blades may provide an extra margin of assurance.

If possible, it's a good idea to "test-drive" the forklift you plan to use to make sure it can handle the size and weight of the press (the manufacturer can provide this information), and that there is sufficient room for maneuvering on your loading dock or in your delivery area. Once the press is off the truck, you will usually be able to move the printer base (the heaviest part) with just the pallet jack, which also comes in handy moving the press into the exact desired position.

Clearance. You also need to make sure the doors and passageways to your facility are high and wide enough to allow the press to pass through. A smaller automatic typically requires a minimum clearance of 84 inches; however larger machines may require additional clearance; so it's smart to get exact measurements from the manufacturer if your space is tight.

Scheduling shipping. Each freight company has different policies regarding notification of delivery, with some charging extra for calling you in advance or scheduling delivery within a specified time frame. Freight companies generally don't guarantee delivery on a certain date, however, there are some things you can do to narrow the delivery window a little so you can better target your forklift rental, personnel, etc. Getting the tracking number of the shipment is key.

Generally, the best thing to do is call the delivering terminal a few days before the shipment is scheduled to arrive and see if they can give you an anticipated delivery range.

Installation and Training

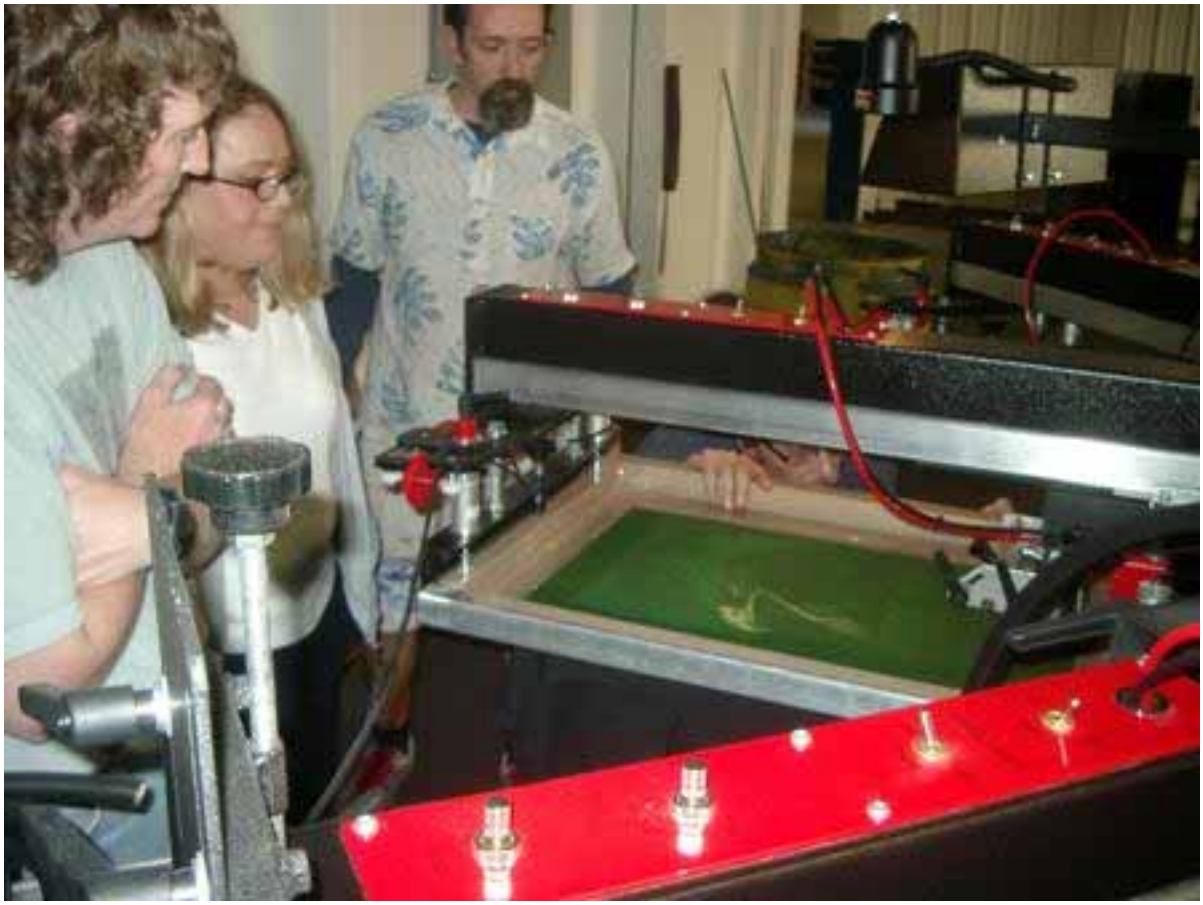
The actual installation of an automatic press typically takes 12 to 16 working hours. The tech rep will require the assistance of one of your employees for about an hour to install the print and pallet arms.

Your tech rep will need between 12 and 16 hours to completely assemble an automatic press.

Operator training. Have a couple multicolor jobs burned on 23-by-31-inch screens ready to go. Make sure the images are burned at the correct height (6.5 inches down for a full-front print). You have only about 1 inch of vertical and 2 inches of horizontal adjustment on press. Burn your "tallest" film positive 6.5 inches down from the top inside edge of the screen closest to the operator. Make a note of how far down and over from the inside of the screen one of the

registration marks is. When you burn the rest of the screens, make sure that same registration mark is down and over the same distance s on the first screen.

If you purchased a flash, it is a good idea to run one of your practice jobs on dark garments so you learn how to operate the flashing features.



Ideally, all employees who will need training on the new automatic can be gathered for the time the tech spends explaining the functions, maintenance, and repair on the machine.

The technician will go over all the operating features of the press as well as any required maintenance. If you have done your job properly in preparing for your new press—including obtaining the requisite working knowledge of screen printing—the tech rep will be able to give his

full attention to doing what he does best—getting your shop up to speed and producing on your new automatic.