Photographic Process Workers and Processing Machine Operators

(0*NET 51-9131.01, 51-9131.02, 51-9131.03, 51-9131.04, 51-9132.00)

Significant Points

- Little or no employment growth is expected as digital photography becomes commonplace.
- Most receive on-the-job training from their companies, manufacturers' representatives, and experienced workers.
- Job opportunities will be best for individuals with experience using computers and digital technology.

Nature of the Work

Both amateur and professional photographers rely heavily on photographic process workers and processing machine operators to develop film, make prints or slides, and do related tasks, such as enlarging or retouching photographs. *Photographic processing machine operators* operate various machines, such as mounting presses and motion picture film printing, photographic printing, and film developing machines. *Photographic process workers* perform more delicate tasks, such as retouching photographic negatives and prints to emphasize or correct specific features.

Photographic processing machine operators often have specialized jobs. *Film process technicians* operate machines that develop exposed photographic film or sensitized paper in a series of chemical and water baths to produce negative or positive images. First, technicians mix developing and fixing solutions, following a formula. They then load the film in the machine, which immerses the exposed film in a developer solution. This brings out the latent image. The next steps include immersing the negative in a stop-bath to halt the developer action, transferring it to a hyposolution to fix the image, and then immersing it in water to remove the chemicals. The technician then dries the film. In some cases, these steps are performed by hand.

Color printer operators control equipment that produces color prints from negatives. These workers read customer instructions to determine processing requirements. They load film into color printing equipment, examine negatives to determine equipment control settings, set controls, and produce a specified number of prints. Finally, they inspect the finished prints for defects, remove any that are found, and insert the processed negatives and prints into an envelope for return to the customer.

Photographic process workers, sometimes known as *digital imaging technicians*, use computer images of conventional negatives and specialized computer software to vary the contrast of images, remove unwanted background, or combine features from different photographs. Although computers and digital technology are replacing much manual work, some photographic process workers, especially those who work in portrait studios, still perform many specialized tasks by hand directly on the photo or negative. *Airbrush artists* restore damaged and faded photographs, and may color or shade drawings to create photographic likenesses using an airbrush. *Photographic retouchers* alter photographic negatives, prints, or images to accentuate the subject. *Colorists* apply oil colors to portrait photographs to create natural, lifelike appearances. *Photographic spotters* remove imperfections on photographic prints and images.

Working Conditions

Photographic process workers and processing machine operators generally spend their work hours in clean, appropriately lighted, well-ventilated, and air-conditioned offices, photofinishing laboratories, or 1-hour minilabs. In recent years, more commercial photographic processing has been done on computers than in darkrooms, and this trend is expected to continue.

Some photographic process workers and processing machine operators are exposed to the chemicals and fumes associated with developing and printing. These workers must wear rubber gloves and aprons and take precautions against these hazards. Those who use computers for extended periods may experience back pain, eyestrain, or fatigue.

Photographic processing machine operators must do repetitive work at a rapid pace without any loss of accuracy. Photographic process workers do detailed tasks, such as airbrushing and spotting, which can contribute to eye fatigue.

Many photo laboratory employees work a 40-hour week, including evenings and weekends, and may work overtime during peak seasons. Almost one-fourth work part time.

Employment

Photographic process workers held about 28,000 jobs in 2002. Almost one in four photographic process workers were employed in photofinishing laboratories and 1-hour minilabs. More than one in six worked for portrait studios or commercial laboratories that specialize in processing the work of professional photographers for advertising and other industries. An additional one in six were employed by general merchandise stores, and one in ten in the printing, publishing, and motion picture industries.

Photographic processing machine operators held about 54,000 jobs in 2002. About four in ten worked in retail establishments, primarily in general merchandise stores and drug stores. About three in ten worked in photofinishing laboratories and 1-hour minilabs. Small numbers were employed in the printing industry and in portrait studios and commercial laboratories that process the work of professional photographers.

Employment fluctuates somewhat over the course of the year. Typically, employment peaks during school graduation and summer vacation periods, and again during the winter holiday season.

Film process technicians operate machines that develop exposed photographic film to produce negative or positive images.

Training, Other Qualifications, and Advancement

Most photographic process workers and processing machine operators receive on-the-job training from their companies, manufacturers' representatives, and experienced workers. New employees gradually learn to use the machines and chemicals that develop and print film.

Employers prefer applicants who are high school graduates or those who have some experience in the field. Familiarity with computers is essential for photographic processing machine operators. The ability to perform simple mathematical calculations also is helpful. Photography courses that include instruction in film processing are valuable preparation. Such courses are available through high schools, vocational-technical institutes, private trade schools, and colleges and universities.

On-the-job training in photographic processing occupations can range from just a few hours for print machine operators to several months for photographic processing workers such as airbrush artists and colorists. Some workers attend periodic training seminars to maintain a high level of skill. Manual dexterity, good hand-eye coordination, and good vision, including normal color perception, are important qualifications for photographic process workers.

Photographic process machine workers can sometimes advance from jobs as machine operators to supervisory positions in laboratories or to management positions within retail stores.

Job Outlook

Slower-than-average growth is expected for photographic process workers and processing machine operators through the year 2012. Most openings will result from replacement needs, which are higher for machine operators than for photographic process workers.

In recent years, the use of digital cameras, which use electronic memory rather than film to record images, has grown rapidly among professional photographers and advanced amateurs. As the cost of digital photography drops, the use of such cameras will become more widespread among amateur photographers, reducing the demand for traditional photographic processing machine operators. However, conventional cameras, which use film to record images, are expected to continue to be the camera of choice among most casual photographers. Population growth and the popularity of amateur and family photography will contribute to a continuing need for photographic processing machine operators to process the film used in conventional cameras, including increasingly sophisticated disposable cameras. This need will prevent what otherwise would be even slower growth in the number of these workers.

Digital photography also will reduce demand for photographic process workers. Using digital cameras and technology, consumers who have a personal computer and the proper software will be able to download and view pictures on their computer, as well as manipulate, correct, and retouch their own photographs. No matter what improvements occur in camera technology, though, some photographic processing tasks will still require skillful manual treatment. Moreover, not all consumers will want to invest in the software. Job opportunities will be best for individuals with experience using computers and digital technology.

Earnings

Earnings of photographic process workers vary greatly depending on skill level, experience, and geographic location. Median hourly earnings for photographic process workers were $9.72 in 2002. The middle 50 percent earned between $7.84 and $13.08. The lowest 10 percent earned less than $6.79, and the highest 10 percent earned more than $17.43. Median hourly earnings were $9.75 in photofinishing laboratories, the largest employer of photographic process workers.

Median hourly earning for photographic processing machine operators were $9.05 in 2002. The middle 50 percent earned between $7.53 and $11.63. The lowest 10 percent earned less than $6.53, and the highest 10 percent earned more than $15.60. Median hourly earnings in the two industries employing the largest numbers of photographic processing machine operators were $10.15 in photofinishing laboratories and $7.20 in health and personal care stores.

Related Occupations

Photographic process workers and processing machine operators need specialized knowledge of the photo developing process. Other workers who apply specialized technical knowledge include clinical laboratory technologists and technicians, computer operators, jewelers and precious stone and metal workers, prepress technicians and workers, printing machine operators, and science technicians.

Sources of Additional Information

For information about employment opportunities in photographic laboratories and schools that offer degrees in photographic technology, contact:

➤ Photo Marketing Association International, 3000 Picture Place, Jackson, MI 49201.