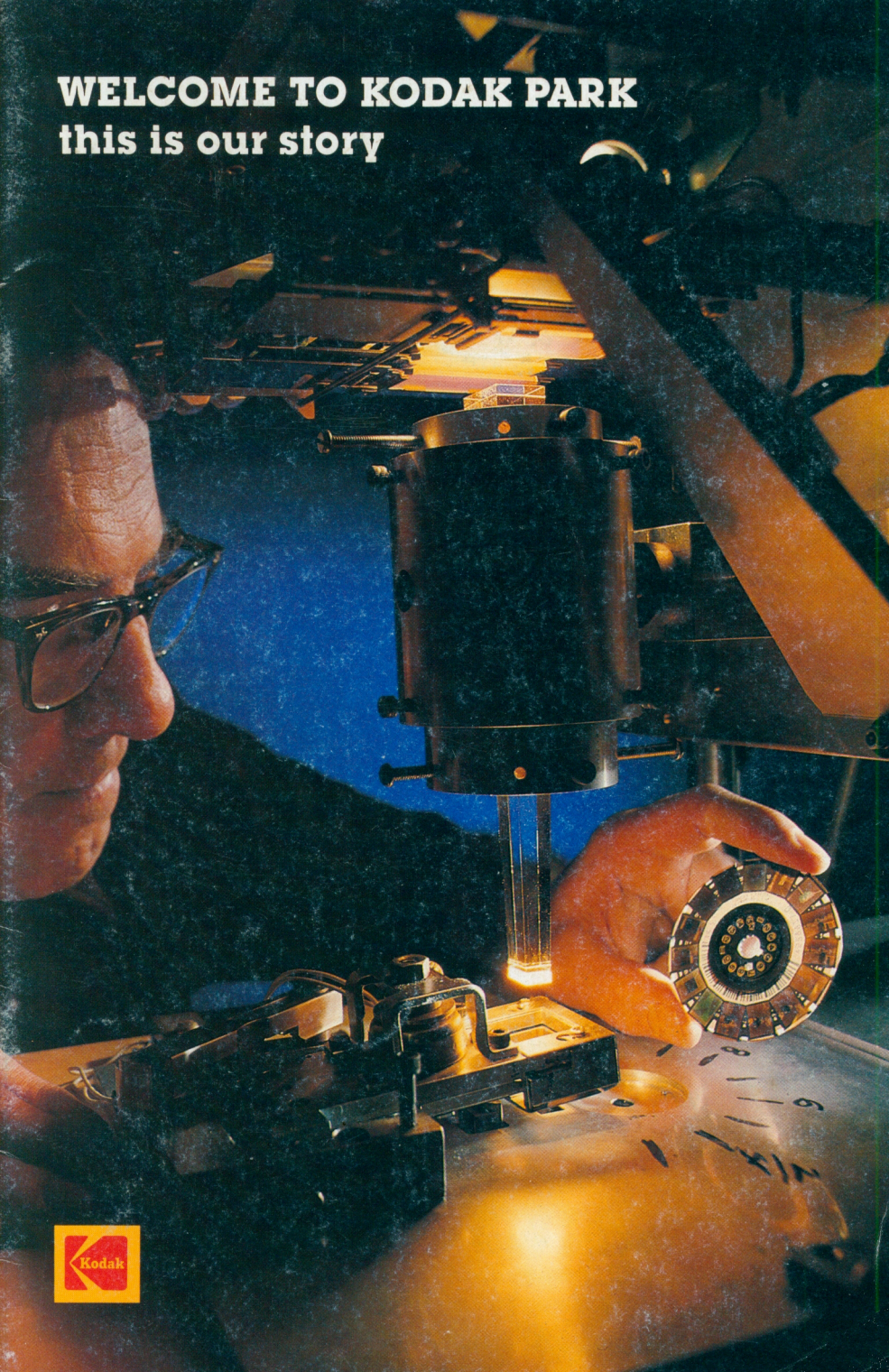
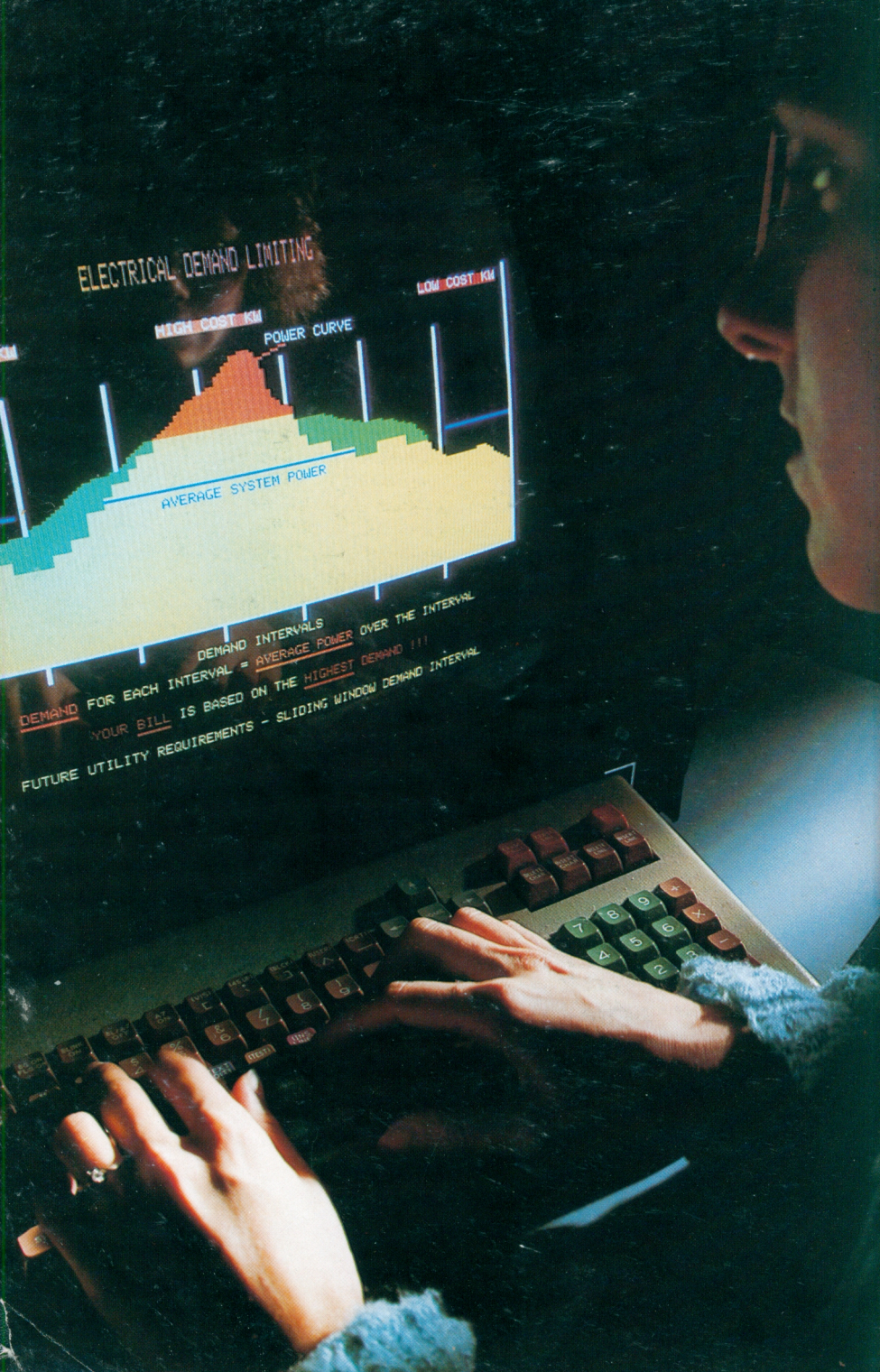
WELCOME TO KODAK PARK
this is our story




ELECTRICAL DEMAND LIMITING
HIGH COST KW
POWER CURVE
LOW COST KW
AVERAGE SYSTEM POWER
DEMAND INTERVALS
DEMAND FOR EACH INTERVAL = AVERAGE POWER OVER THE INTERVAL
YOUR BILL IS BASED ON THE HIGHEST DEMAND !!!
FUTURE UTILITY REQUIREMENTS - SLIDING WINDOW DEMAND INTERVAL

Moving Ahead

Kodak.

The name brings to mind images of the familiar yellow box, the reliable camera that has been in the family for years, and the treasured snapshots passed down through generations.

Yet Kodak is moving ahead. Cameras and film that work together to give you your favorite pictures are still the cornerstone of the business, but the processes are being greatly improved and the uses for imaging techniques are multiplying.

Sophisticated technology and exhaustive research have paved the way for a new era in photography. State of the art technologies, such as computer science and robotics, now assist the men and women of Kodak in the design and development of quality products to meet the needs of consumers.

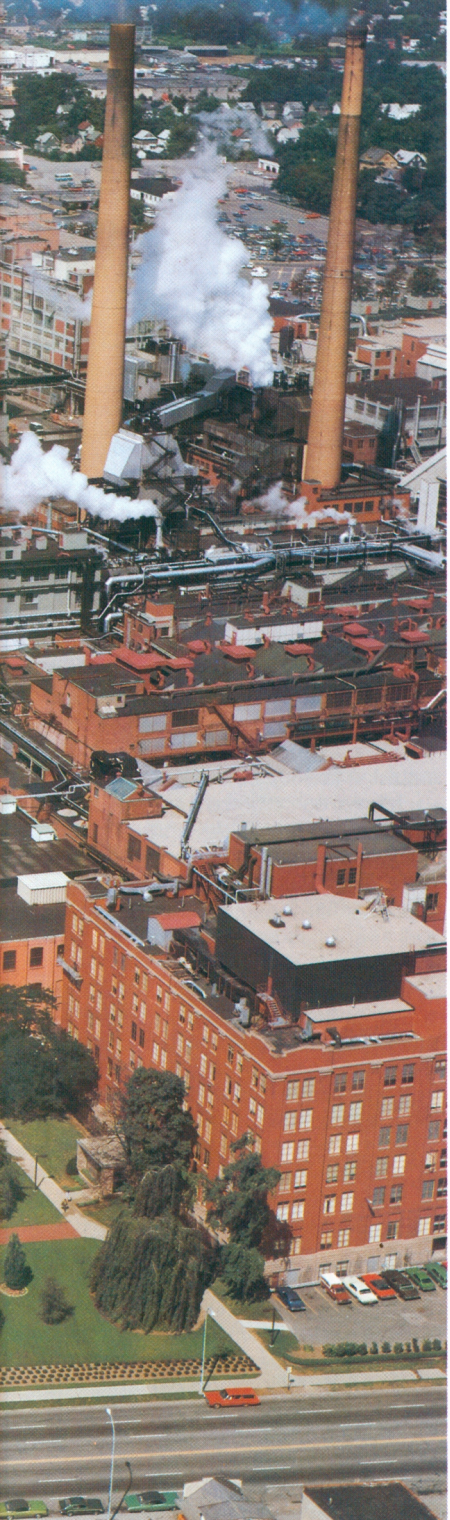
Photography, as an art and a science, continues to serve educational, health, and informational needs. The reach of photochemistry now extends to blood analysis and radiography for hospitals, phototypesetting for newspaper publishing, microfilming for convenient storage and retrieval of information, and motion picture and television films for education and the entertainment industry. The list of applications goes on and on.

All of this is in addition to the use of photography with which many of us are most familiar: snapping a picture to capture the special moments in our lives. In this area, as well, progress is undeniable. Through pioneering technological innovation, disc photography is now enabling us to take better pictures in more places than ever before. Instant photography has also been raised to a new level of sophistication with cameras and film designed to produce sharper, more colorful pictures.

Smaller cameras, faster film, higher quality lenses, "thinking" electronics—all are engineered with one goal in mind: to enable the user to consistently produce high-quality images.

The film, paper, and chemicals that are the hallmark of Kodak's photographic skill are produced at a remarkable manufacturing facility in western New York. It is more than a plant; it is actually a community in itself. It is here that the years of experience and research lead to the development, refinement, and progression of today's modern photography.

If you have ever wondered about Kodak products: Where they come from. How they work. How they're made—Kodak Park is the place to find out.



What Is Kodak Park?

The Kodak Park Division in Rochester, New York, is Eastman Kodak Company's largest manufacturing plant. Visitors are struck by the self-supporting nature of this city-within-a-city. Much of this independence grows out of necessity from the unique nature of manufacturing film and other sensitized goods.

Situated on some 2,000 acres, Kodak Park stretches more than seven miles and includes nearly 200 major buildings. A portion of the plant is pictured at left.

More than 30,000 people work here producing some 980 different types of film, more than 270 kinds of photographic paper, and more than 900 chemical formulations used in the processing of film and paper.

These products serve among others the printing and newspaper industries, the motion picture and television industries, the aerospace program, government, hospitals, schools, libraries, professional photographers and photofinishers, and amateur picture-takers.

Kodak Park is also the site of Kodak's largest U.S. color print and processing laboratories.

Kodak Colorado Division, located in Windsor, Colorado, operates as a unit of Kodak Park. Although separated geographically, Kodak Colorado Division produces some of the same films and papers that are manufactured at Kodak Park. More about this and other physical locations later.

Let's move on to look at the products manufactured at Kodak Park.

What Is Film?

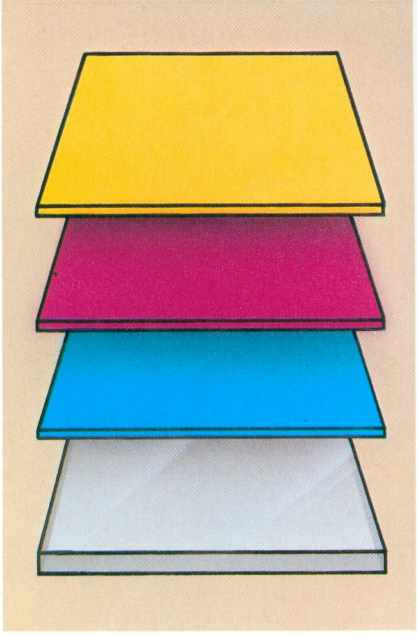
There is far more to the film that you drop into your camera than meets the eye. Within that handy plastic cartridge is a combination of components with the capability to perform the miracle of photography. The manufacture of film is an exacting and demanding skill that must adhere to close tolerances, scrupulous inspection and painstaking quality control. A contaminant-free environment is essential to maintain and preserve the purity of the ingredients.

The production of film begins with raw materials, which are carefully blended to produce the primary components of photographic film—base and emulsion.

The base is the transparent, flexible support made of high-grade plastic that gives film its bulk. The base is coated with emulsion, a very thin overlay of gelatin that carries the light-sensitive silver halide crystals that enable the film to record images.

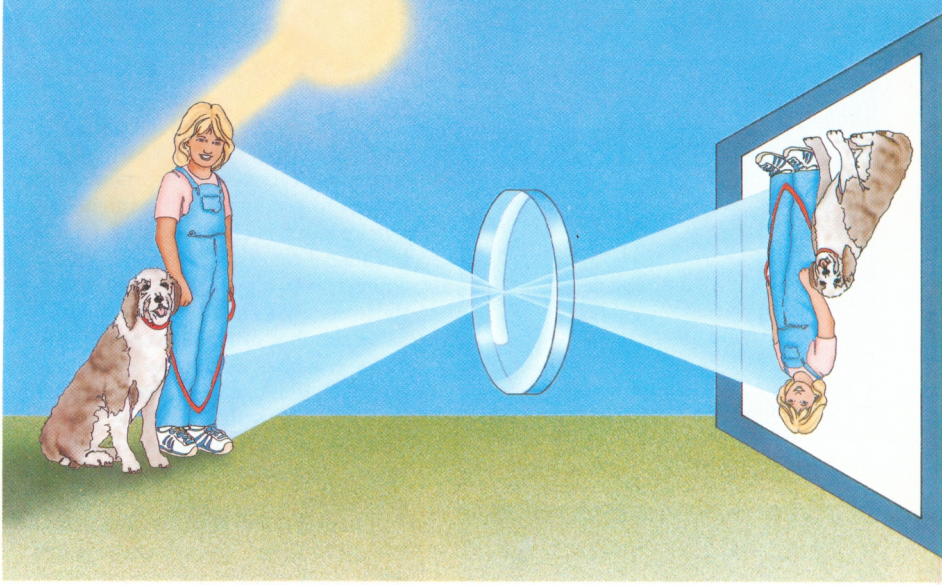
Base was once made of glass, but today only special applications such as astronomical photography require glass plates. The transition from glass to plastic made photography a far more convenient process. The modern, thin, flexible base allows film to be produced in discs and rolls as well as in sheets. This development makes possible such diverse products as x-ray sheet films, amateur and professional still-camera films, instant-loading cartridges and discs, and amateur and professional motion picture films.

The base-emulsion combination is basically the same in black-and-white as well as in color film. In color film, however, the structure is more complicated. Several layers of light-sensitive emulsion are coated on the base, with each layer constructed to respond to different colors of the spectrum. Most layers hold photography's key ingredient, silver halide particles. Others contain color-forming coupler layers, as well as spacers and protective overcoats.



A greatly simplified view of film: thin layers of color emulsion (from the top: yellow, magenta, and cyan) on a much thicker clear plastic base.

When light or other forms of radiant energy strike an emulsion layer, the photographic process begins.



When you take a picture, light reflected from the subject passes through the camera to the film.

How Does Film Work?

When you take a picture, you are setting into motion an amazingly precise chemical and physical chain of events. All that you ever see is the finished product: your snapshot. But let's take a closer look at how that snapshot was produced inside your camera.

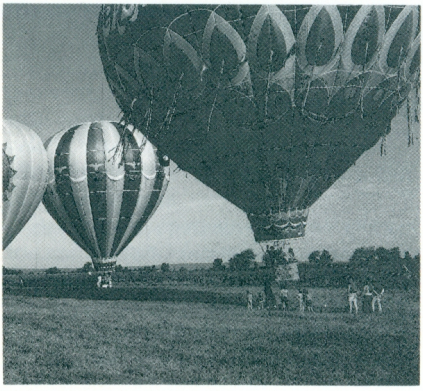
It all begins when you click the shutter. In that fraction of a second, light is reflected from your subject and travels through the camera lens to the film. When the silver halide crystals in the film's emulsion are exposed to light, they react to form a "latent" image. Now your subject has been captured, just as you saw it when you took the picture, in the film's emulsion layer. A "latent" image, however, cannot be seen. It must be developed through the use of special chemicals to produce a photographic print as we know it.

Let's start by looking at conventional black-and-white photography. Developing film is actually the process of using chemicals to make the latent image visible. The developer solution reacts only with those silver halide crystals that were exposed to light, and produces dark grains of silver that remain on the film—visibly. The grains of silver that were not exposed to light remain undeveloped and are later washed away.

Color film, however, is more complex in its composition, manufacture and processing. It also starts with the clear plastic base. But the base is covered with not just one layer of emulsion, as in black-and-white film, but with several layers. There are often 10 or more layers, arranged one on top of another. The light-sensitive layers hold appropriate silver halide crystals in suspension. These various layers are responsive to different colors of light.

During processing (developing) of the film, color dyes replace the silver. Three dyes—yellow, magenta (red-purple), and cyan (blue-green) react in combination to form the full range of colors necessary to create a brilliant and pleasing final image.

Black and white negative



Black and white print

When you view a negative, you see a reverse representation of your subject. The brightest areas of the original scene appear as the darkest areas on the negative—these dark areas indicate heavy concentrations of the light-sensitive silver grains.

The darkest areas of the original scene appear as the brightest areas of the negative—these bright areas indicate places where there was either no light reflected onto the film, or places in the actual scene that were dark.

How Does Film Work?

Continued

That is not the end of photography's chain of events. Certain films—called "reversal" types—can be processed even further to produce a self-contained positive image. It is called reversal-type film because it reverses the images on it from a negative to a positive. Examples of these are slides and home movies. The same film that originally captured the image has been developed into a material on which you can view that image. What you see when you project the image with light (as in a slide projector) is what the lens of the camera saw when you took the picture.

However, color negative and black-and-white films, like the ones you may use in your camera, remain in a negative state. Certain steps must be taken in the darkroom or processing lab before you have your snapshot.

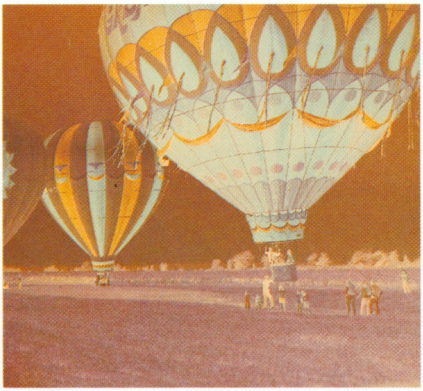
To create a positive image, light must be passed through the negative and onto photographic paper. The paper contains special light-sensitive silver compounds and other chemicals that allow it to capture the image from the negative exposed to it. This process of exposing the negative image on photographic paper is called "printing."

After the paper is printed with your image, final steps are taken to complete the procedure and provide the high quality of the print. The printed paper is put through its own developer. Then excess silver halide salts are removed with a "fixer," and the print is washed thoroughly. Once it is dried completely, you have a fully developed snapshot.

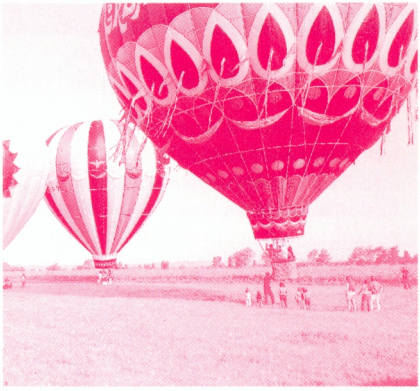
This careful process is carried out with each negative on all of your film.

Now that we know how film works to produce your favorite pictures, let's look at how that film is made at Kodak Park.

Yellow dye

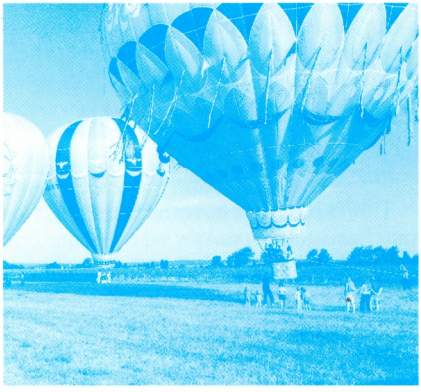


Color negative



Magenta dye

Color print



Cyan dye

Color slide

A color masking dye is added to the color negative to compensate for the cyan and magenta. This allows for true colors to be rendered in the final print.

How Does Kodak Park Make Film?

It is important to realize that there are basically two types of film support: acetate base—used in motion picture film, roll film, and many other commercial and consumer film; and Estar base—used in x-ray film, disc film, instant film, the graphic arts industry, and certain scientific applications.

The starting point for these sophisticated and specialized products is the raw materials critical to the process, shown above. These include wood fibers, cotton linters, bars of refined silver, petro-chemicals, hide trimmings and bones, pure water and inorganic halide salts.

Here are the major steps necessary to produce film at Kodak Park.

—Cotton linters and pure wood pulp (reacted with chemicals at Tennessee Eastman Company to make cellulose esters) are dissolved to form "dope."

—The dope is filtered and poured onto huge, slowly turning wheels. It is then dried to form a plastic—cellulose acetate.

—Silver, the essential light-sensitive material, is dissolved in nitric acid. The resulting silver nitrate is crystallized, dried, stored in barrels and shipped to Kodak's emulsion-making operations.

—Gelatin is produced from animal hides and bone trimmings.

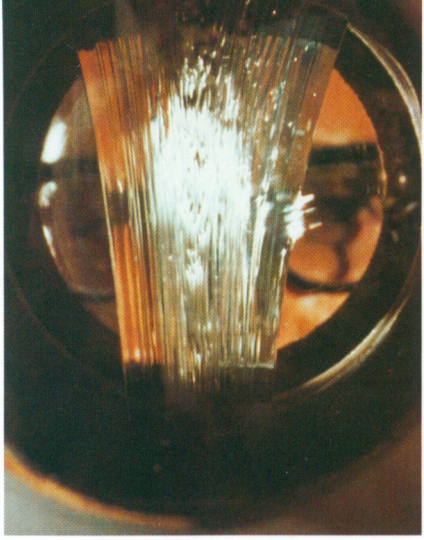
—The silver nitrate crystals are combined with inorganic halide salts in the presence of gelatin, and other chemicals are added to produce a photographic emulsion.

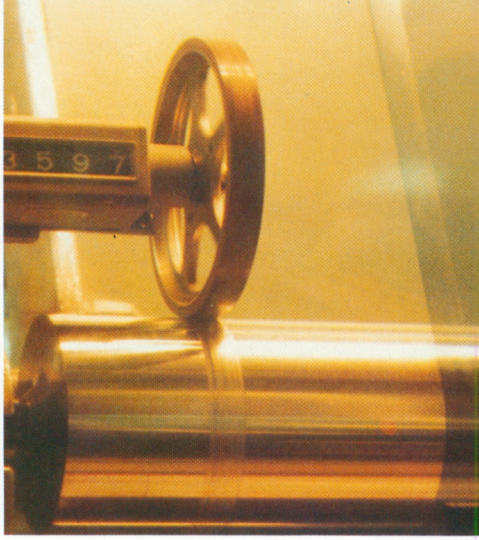
—This emulsion is then coated onto the film base in layers.

—The film, base and emulsion, is slit to proper widths and packaged as rolls, reels, or cartridges.

—Film is stored, under proper protective conditions, then shipped to dealers.

This is basically how the film you purchase goes from raw material to finished product. Let's take a more detailed look at the production of base and emulsion.





Building The Base

Film base is the actual foundation on which photography is built. It is the thin, flexible support of clear plastic that carries the light-sensitive emulsion through the camera.

The base for many of Kodak's popular consumer films is made of cellulose acetate, which in turn comes principally from cotton linters and wood pulp.

The dry cellulose acetate pellets are dissolved in solvents to produce a clear, honey-like liquid called "dope." The dope is very carefully filtered to remove any dirt or undissolved material. It is also subjected to a partial vacuum to assist in the removal of suspended and dissolved air that could result in bubbles in the final product.

To form the plastic sheet, the dope must be cast out into a thin layer and the solvents must be removed. This is accomplished by piping the dope to machines containing giant, highly polished roll coating wheels weighing more than 30 tons, measuring 18 feet in diameter and more than 5 feet wide.

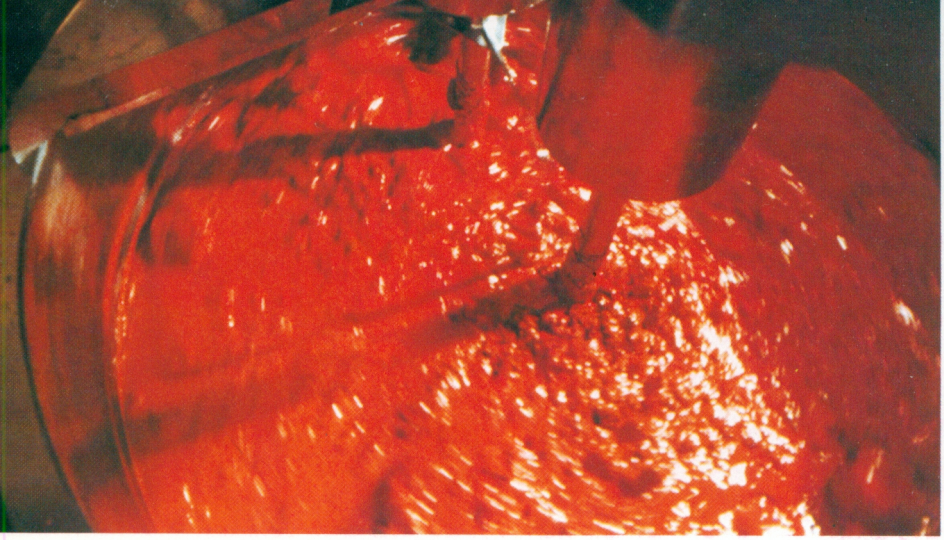
A constant flow of dope is spread in a thin, uniform layer over the surface of each wheel as it slowly revolves. Since the film must be of uniform thickness, this operation is conducted with tremendous attention to detail. The standard thicknesses of film base run from about 2/1,000 to 8/1,000 of an inch.

As the wheel turns, solvents—no longer needed—evaporate from the dope to permit it to be separated from the wheel. This process produces a solid sheet of continuous, clear plastic—strong enough to bear its own weight after just one turn of the huge wheel.

The base is then thoroughly dried in a drying chamber. It is then rolled on cores in long, take-off rolls up to 12,000 feet in length. This cellulose acetate base is then ready to go to the sensitizing division for emulsion coating.

However, not all bases produced at Kodak Park are cellulose acetate. Polyester film base—Estar—is used in a variety of applications. It is different in both its chemical nature and its method of manufacture. Stretching the base after casting gives Estar base its excellent dimensional stability.

This base allows for a durable and extremely rigid film that can be produced very flat. Maintaining a flat film plane is important for maximum sharpness in printing. The new disc film is a prime example of an Estar base film, and will be discussed in greater detail near the end of this book.



Preparing The Emulsion

The process of producing emulsion starts with silver. The key light-sensitive ingredients of emulsions are generally silver salts. No other material has yet been found that can match silver's performance when reacting to light.

Kodak starts with silver bullion—99.99 percent pure—which comes in bars weighing about 75 pounds each. These bars are dissolved in nitric acid, and the resulting liquid is pumped into stainless steel crystallizers where it is concentrated, stirred, and cooled. Silver nitrate crystals form in these crystallizing tanks. The crystals are then removed, soaking wet, and spun in a centrifuge to remove most of the moisture. After drying, the crystals are redissolved, recrystallized and dried again to increase their purity. The dry silver nitrate is now ready for use in film emulsion.

The material which allows the formation of silver halide crystals is an extremely pure gelatin, made from the extraction of chemically treated animal hide trimmings and bones. The blended gelatin is carefully mixed with an inorganic halide salt, and the silver nitrate is added according to precise formulas. The gelatin acts as the vehicle to stabilize the crystals. From this combination, silver halide crystals are formed, suspended in the gelatin.

The main difference in the roughly 400 different types of emulsion that Kodak Park makes is in the average crystal size and the range of crystal sizes. These determine the film's characteristics, such as sharpness, contrast, and the degree of light sensitivity (known as film "speed").

Since Kodak is one of the world's largest consumers of silver, the conservation of this resource is given top priority. The precious silver involved in the process of photography is the subject of a major, established recovery program. Silver is recovered by Kodak Park from its own industrial processes, scrap film and other waste materials.

Coating Emulsion Onto Base

Now that the base and the emulsion have been manufactured to exacting standards, it is time to combine the two in a process known as emulsion coating.

This operation is monitored by skilled technicians utilizing highly sophisticated control equipment. It has to be, since several layers of extremely thin coatings—together measuring only a fraction of the thickness of a single human hair—must be applied to the base with precise uniformity.

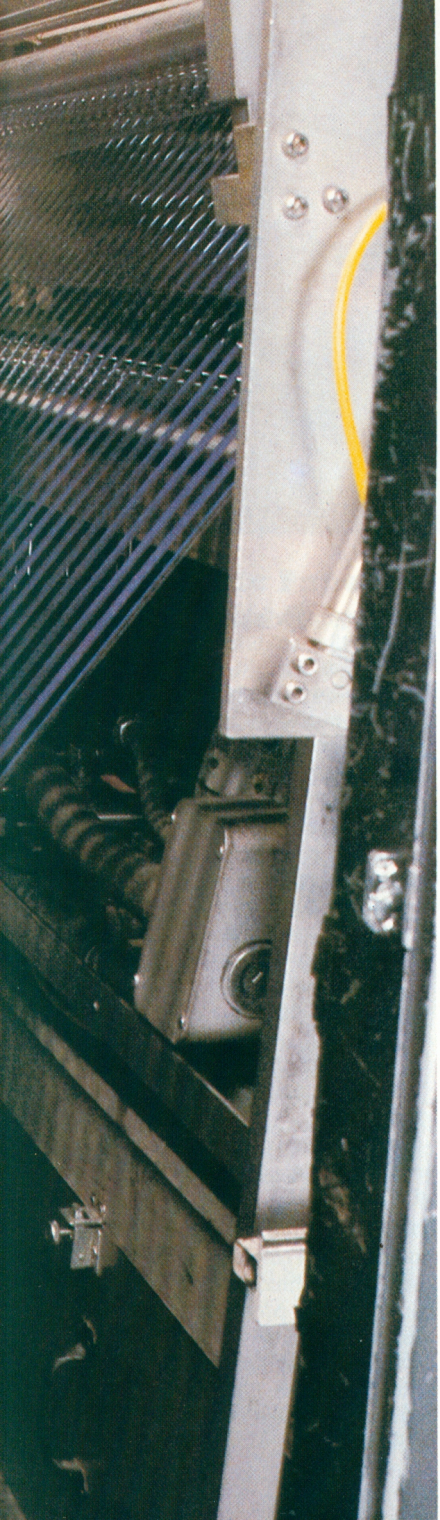
The emulsion is first piped to large machines where, in a continuous operation, rolls of base are unwound and the liquid emulsion is applied. There is little margin for error because uniformity of thickness is essential. Consider that a dried layer of some emulsions is only a few one-hundred-thousandths of an inch thick and must be held to one-millionth of an inch in accuracy. Add to this the complexity of color products, which require several layers of emulsion coating, and x-ray films which must be coated on both sides—and the necessary level of sophistication becomes evident. And remember, since the emulsion is now light-sensitive, this entire process must be carried out in total darkness.

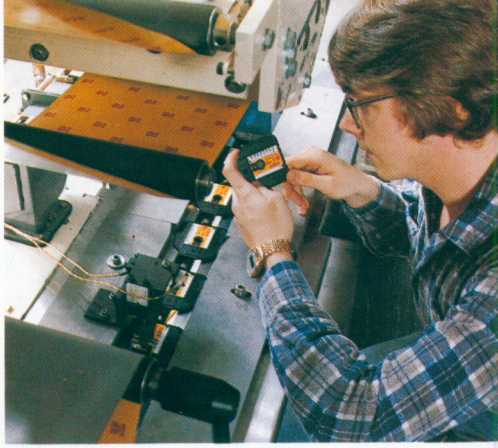
Coating is done through the use of complex, high-precision equipment in long, dark, multistory coating rooms. All of the intricate machinery used in this process is designed, built and maintained by Kodak's own engineers and highly trained craftsmen.

The emulsion coating rooms are scrubbed as clean as any hospital surgical area, and the attendant Kodak technicians dress as might be expected in an area where a dirt particle could be disastrous. They wear specially laundered clothing from head to toe, work in carefully filtered air, and pass through high-pressure wind tunnels that allow them to stay dust-free.

After the film is coated, it is carried through a chilling box to set the emulsion. It then passes through drying sections where water is removed and the dry film is conditioned to a predetermined relative humidity. Finally, it is again wound in long, wide rolls.

The operation is complete, and through the act of emulsion meeting base—photographic film is born. It now has the unique ability to record images, yet it still must be cut to sizes that a camera can accommodate.



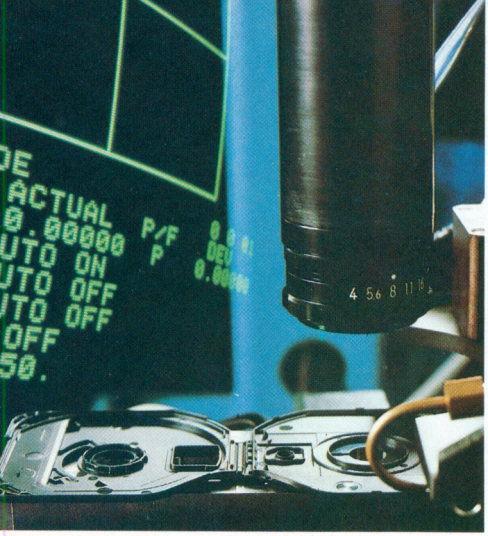


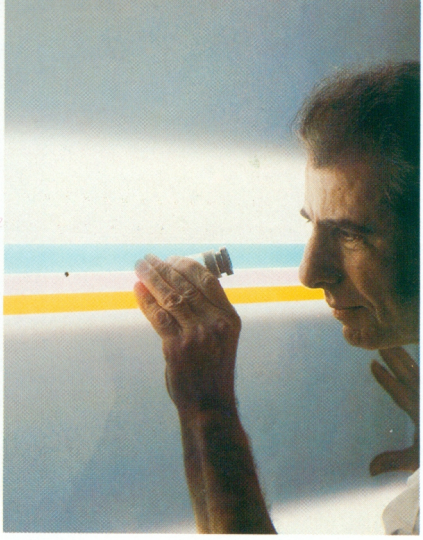
Cutting And Packaging

Now the film—still in the dark—is ready for the final manufacturing steps. The large rolls are slit into narrower widths for working purposes, then cut further to the desired lengths and widths.

If it's motion picture film, it must be perforated accurately to operate precisely in the camera and projector, producing a steady, continuous image on the screen. In sheet film, such as for x-rays, the film is cut to proper size, notched with identifying code symbols and packaged flat. For instant-loading film, the film must be carefully threaded into cartridges for proper registration in the camera. Disc film is manufactured in a similar way, but after the film is coated and slit into narrower rolls, the individual disc film units are stamped from these narrow slit rolls by punch presses. Other films are wound on spools or in magazines, with backing paper for light protection. Many are also protected by a hermetically sealed film wrap to keep out moisture, or packaged in protective cans.

After this film is once again inspected, it is packaged in yellow cartons, dated, and transferred to air-conditioned storerooms that are temperature and humidity controlled to await shipment. When these steps are completed, Kodak Park has available some 18,000 variations in types or sizes of film to satisfy customer needs.





Commitment To Quality

Thousands of people at Kodak Park possess unique and specialized skills. They have diverse training, backgrounds and experience. Yet, they all share a common objective: quality assurance. That is, doing the job right the first time.

Throughout the process of manufacturing photo-sensitive goods, this commitment to quality stands out. By constantly monitoring and evaluating products and procedures during the manufacturing process, nearly all imperfections can be accurately detected and eliminated long before they can reach the consumer.

A few examples:

—In film manufacturing areas the surrounding air is completely changed and filtered every 6 minutes, and the temperature and humidity are carefully adjusted to optimum conditions for the film.

—Lint-free uniforms that have been specially laundered are worn on certain jobs to maintain an environment free of contaminants.

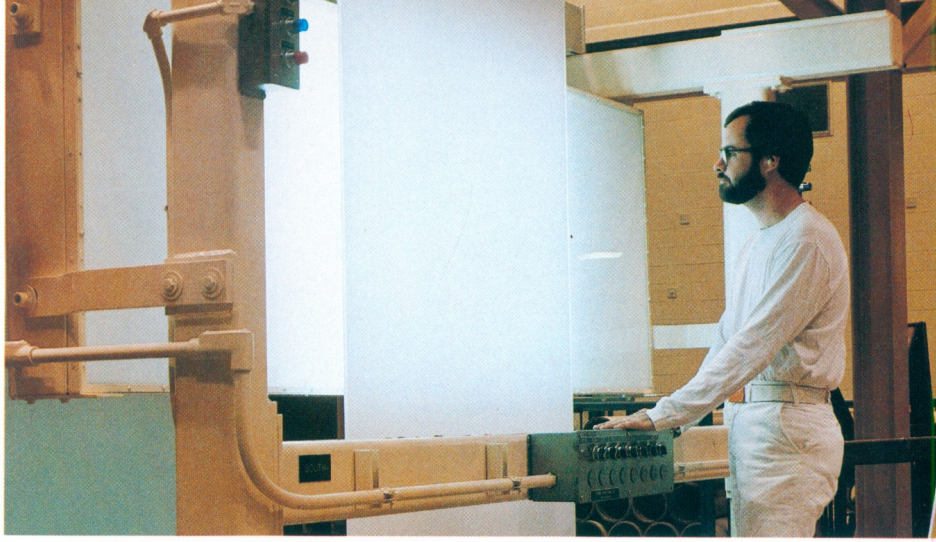
—Certain commercial cosmetics are banned in sensitive areas because they contain chemicals that could contaminate film.

—Since many products are extremely susceptible to dust, dirt, radioactivity, and other impurities, manufacturing areas are kept meticulously clean by continuous vacuuming and scrubbing.

—Testing techniques resemble actual conditions met by picture-takers. Film is studied in simulated temperature and humidity levels ranging from general U.S. averages to such extremes as sizzling Death Valley and the northwest rainy season.

—All materials—cartridges, wrapping paper, boxes, etc—are designed and tested to eliminate any "photographically active" substances. In other words, no naturally occurring or manufactured chemicals that could alter the performance and sensitivity of Kodak products are allowed in contact with those products.

This is just a sampling of the work that is conducted each day to provide the consumer with a high-quality product. Kodak people employ a wide variety of analytical techniques, from quality control during product design to quality assurance during manufacture to quality awareness activities, to make sure that Kodak goods are uniform and perform consistently when purchased anywhere in the world.



Photographic Paper— What It Is And How It's Made

The entire process of photography depends as much on the performance of photographic paper as it does on the film. This is no ordinary paper; its distinctive characteristics make color and black-and-white prints a reality.

Kodak Park makes nearly all of its own paper. "THIS PAPER MANUFACTURED BY KODAK" on the back of a customer's finished prints underscores a complex story of paper production.

Kodak photographic paper is far removed from the paper on which the pages of this book are printed. It must possess special qualities. First, it must be "chemically clean"—containing no metal particles, tree resins, or undigested wood chips.

Further, the paper must be photographically inert; that is, nothing chemically in the paper may interfere with its light-sensitive emulsion, or later on, with the processing.

Next, the paper must be white and bright. This is necessary to give the colors in a photograph their brilliance.

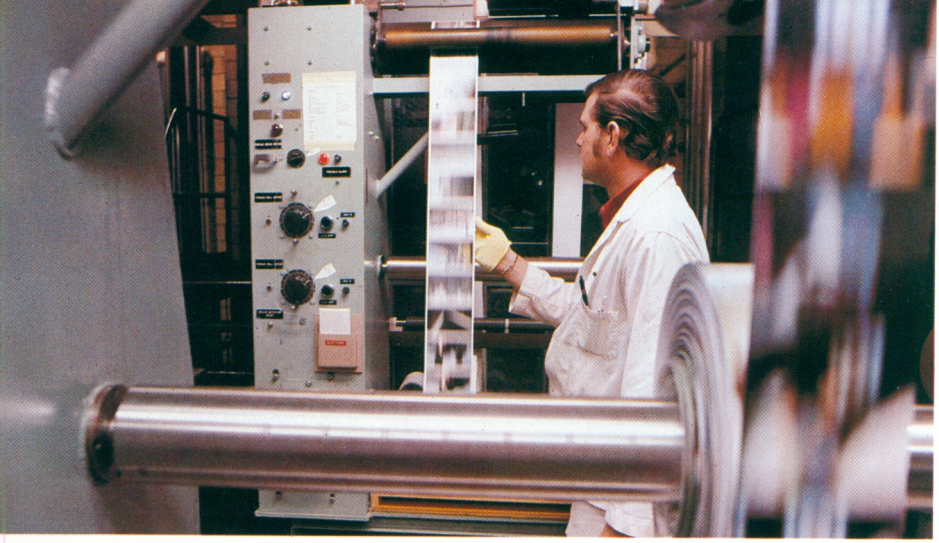
This paper must also have extraordinary "wet strength." It must be able to tolerate repeated wetting and drying without breaking down. It is this durability that allows for the processing of pictures, at home or in a photo lab.

Now that we know what makes this paper so special, let's look at how it's manufactured.

Kodak begins with pure wood cellulose pulp from only selected kinds of woods. All the pulp is prepared to exacting specifications and thoroughly tested before acceptance. Similar high standards of purity apply to all other materials that go into the making of these papers at Kodak Park's own mills.

In the first stages of paper-making, sheets of pulp are placed in huge water-filled vats, where whirling blades whip the pulp into a slurry. Dyes and other chemicals are added.

The resulting watery mixture is fed into one of Kodak's large paper-making machines, where most of the water drains away while a continuous sheet of paper forms along a steadily moving horizontal wire screen. This web of paper is dried and squeezed through a series of heavy steel rollers to produce paper of uniform thickness with a smooth surface. At the end of the machine, the paper is wound into large rolls.



Photographic Paper

Continued

Physical and chemical tests are then performed on the rolls to provide product quality.

To prepare paper for emulsion, a coating of barium sulfate and gelatin is applied to certain paper grades. More commonly today, papers receive a coating of a pigmented resin, polyethylene. The polyethylene is moved through a hopper, heated, and extruded through a die onto both sides of a moving web of paper. The face coating of pigmented resin produces a brilliant white surface, enhancing the appearance of the subsequent prints and providing a variety of pleasing surface textures.

The light-sensitive emulsion layers are then applied to this resin-coated paper base on large coating machines in the dark. The sensitized paper then travels through a drying alley and is again wound into large rolls, also in the dark.

At this point, the paper undergoes extensive physical and photographic testing for quality assurance. Once they have met quality standards, the rolls are ready to be slit and cut into various customer sizes, sheets and rolls, and packaged.

In this way, Kodak makes more than 270 different kinds of photographic paper. These range from paper for color or black-and-white snapshots to papers for portraiture. Kodak also produces products for the graphic arts industry, such as phototypesetting papers for newspapers, as well as instrumentation-recording papers for scientific applications.

The complexity and precision of paper manufacturing demands that Kodak Park maintain an in-house capability to design, fabricate, and utilize sophisticated production and analytical equipment in each of the manufacturing steps.

In addition, Kodak Park produces lighttight backing papers for roll films, and various types of protective wrapping papers that come into contact with the highly sensitive, emulsion-coated photo papers and films. For this purpose, they must be completely free of contaminants. These products are produced to the same demanding standards as photographic paper, with quality assurance at every step.

Chemicals

Most people would not associate Kodak with the high level of chemical sophistication and innovation that the company has achieved. Yet, chemicals are vital to all of the manipulations involved in the manufacture of photographic film and paper. More than 1,000 chemicals are manufactured for use in-house. In addition, more than 500 new chemical products, primarily for development purposes, are made in Kodak labs each year.

Chemicals are not only important to the production of film and paper, they are essential in photographic processing. For this, Kodak Park produces chemicals for the home darkroom enthusiast, as well as the largest commercial processing houses in the country. More than 1,300 different photo chemicals are produced, both in liquid and powder form, for sale to customers. These are used for film and paper processing and other photographic purposes.

Expanding this chemical technology even beyond photography, Kodak Park produces more than 4,200 synthetic organic chemicals primarily for sale outside the company. These chemicals are manufactured, purified or repackaged, and supplied to research institutions, laboratories, universities, and a wide range of other industries.

Quantities of these chemicals can vary from a gram of special compounds for research purposes, to batches of solution weighing 10,000 pounds, to thousands of tons of dope manufactured each week for film base. The products can also range in complexity from a small package of a single chemical to a processing kit containing 23 items.

Kodak Park is the home for much of the complex chemistry involved in new technologies, such as that for instant photography. For example, the pouches which contain the developer fluid in instant color film are produced here.

No matter what the size, cost, or complexity—painstaking quality controls are applied here as in all other phases of production. These chemical products allow the transfer of images, the very essence of photography, so the purity of the ingredients and the accuracy of the processes are strictly monitored and tested before any chemical is released for use or sale.

More About Kodak Park

Rochester, New York, is an urban area with a population of approximately 700,000. Within it lies what may seem at first to be an almost self-contained community—Kodak Park—employing more than 30,000, the largest number of Kodak people at one plant.

As in any successful community, there must be supporting people and facilities to take care of vital needs and allow operations to run smoothly. For Kodak Park these include:

—Its own fully equipped fire department and security force.

—Medical facilities, staffed by a total of nearly 70 doctors and nurses and operated around the clock.

—Its own waterworks, each day supplying more than 40 million gallons of the specially treated water Kodak Park requires in its manufacturing.

—Three electrical power plants and related utilities that meet the demands for lighting, heating, cooling, driving the machinery, and satisfying all the other energy needs of almost 200 major buildings.

—Its own railroad, with more than 19 miles of in-plant track, 4 diesel locomotives and 43 rail cars.

—Approximately 27 miles of paved streets, 28 miles of fencing, and 152 acres of parking lots.

—22,000 telephones.

—A food service department that each day bakes its own pies and cakes by the hundreds, makes thousands of gallons of soup, operates 31 cafeterias, and prepares and serves 23,000 nutritious, well-balanced meals.

—One of the largest plastic injection molding operations in the U.S., along with a metals fabrication group that makes such essentials as spools, cans, and magazines for still and movie film; discs and cartridges for instant-loading film; file boxes for color slides; darkroom safelight lamps; and plastic bottles for darkroom chemicals.

—A group that plants and maintains all landscaped areas at Kodak Park and other Kodak Rochester facilities.

—A laundry to process the special clothing many production and laboratory people must wear.

—A printing division that offers more than 20 printing processes, many of which are not found in ordinary commercial printing plants. It prints everything from labels and film instruction sheets to telephone directories and scientific publications.

—A paper box division that makes boxes by the millions, in which Kodak film, paper, cameras, and glass plates are packed.

—Transportation services that provide in-plant, inter-plant, and tour bus operations on a scheduled basis.

—A comprehensive, in-plant snow removal operation.

—A large group of people to design, build, and maintain the sophisticated production equipment required for Kodak's unique manufacturing processes. Due to the unusual nature of the industry, much of the necessary equipment simply cannot be economically obtained outside the company.

—The largest of Kodak's 10 U.S. color film and processing laboratories, which processes and prints millions of the pictures taken every year by American picture-takers.

—A construction division that erects new buildings and makes additions and alterations to existing structures, to keep pace with the plant's growth and changes.

—Modern waste treatment facilities, designed to eliminate liquid and solid wastes in a safe, environmentally responsible manner.

Even with all of these facilities working together in this city whose population is greater than that of Beverly Hills, California or Key West,

Florida, Kodak Park makes no claims of total self-sufficiency. On the contrary, the plant pours millions of dollars a year into the economy for supplies and services purchased from more than 13,000 outside vendors.

With all of its capabilities, Kodak Park's greatest asset remains its loyal and experienced people. Through their skill and dedication, the company is able to produce the quality films and related products that serve you, the consumer. Their talents stand behind the products you buy that bear the name "Kodak."

About Instant Photography

Visualize yourself in a roomy Kodak color processing lab. Picture all of the equipment necessary to capture an image on film, develop it into a negative, and print that image on photographic paper. Imagine the complex physical and mechanical steps to be carried out, and the person skilled in the entire operation.

Now shrink that imaginary darkroom down to a 3 13/16" x 4" sheet of plastic. You have Kodak instant color film.

That little sandwich pack is a product that simulates much of the traditional photographic method but in a strikingly untraditional way:

—you snap the shutter,

—an image is recorded (on film),

—a plastic sheet glides from the camera,

—development inside the sheet begins (think of chemicals, printing, the darkroom),

—and in a few short minutes, you have your picture.

But behind this deceptively simple process stands Kodak Park's extensive know-how in producing film, paper and chemicals—and the equipment necessary to allow their interaction.

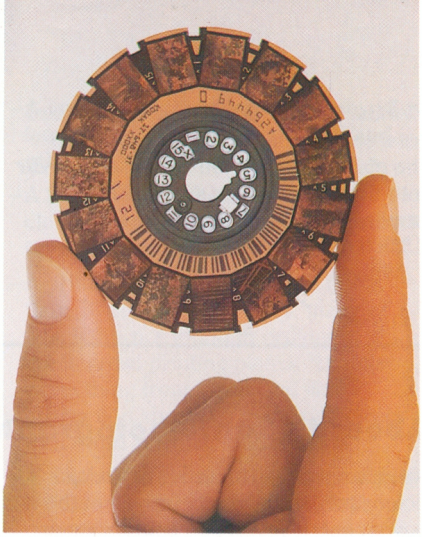
Within each picture element, 350 different chemicals, each with a specific purpose, work in combination in 18 different layers in a carefully timed reaction sequence.

Beyond this accomplishment, Kodak chemists have recently produced

improved instant film with brighter color, more sharpness and clarity: Kodamatic instant color film. By slightly changing the size of the silver halide emulsion grains, they have made the film more sensitive to light. All of this results in a film nearly twice the speed of former Kodak instant color films.

The line of Kodamatic instant cameras uses the new film and features folding cameras that fire their own built-in flash every time, a close-up lens, and automatic focusing to produce pleasing, evenly lighted pictures, indoors or out.

The result is a new system for instant photography that gives better pictures more often. And this means tens of millons of photographs every year that magically reproduce what the photographers saw the instant the picture was taken.



About Disc Photography

A new era in amateur picture-taking has been ushered in through Kodak commitment and innovation. Decision-free disc photography is the latest chapter in a familiar story benefitting the consumer.

Far removed from George Eastman's pioneering days when photography required a pack-horse load of equipment, disc photography's convenience stems in part from the development of Kodacolor HR disc film, manufactured at Kodak Park. This unique film doesn't wind in a roll, as in most traditional films. It is configured in a circular wheel, or disc. Crisp images are recorded on the disc's extremely small negatives—negatives which rotate into place in the camera after each exposure.

Never before have cameras so simple offered such remarkable results—more good pictures, more often, in a wider variety of conditions. At the touch of a button, the new disc camera will analyze the scene . . . set the proper exposure . . . activate the built-in flash if necessary . . . take the picture . . . advance the film to the next frame . . . and recharge the flash, all in slightly more than a second. And all within a camera that easily fits in the palm of a hand or slips into a shirt pocket.

The new disc film is a key to this innovative system. Traditionally, the goal during research and development is to improve a film's speed, sharpness, or grain—without compromising quality. In the case of disc film, Kodak researchers set out to improve all three characteristics simultaneously, and the results are impressive. The new film is twice as fast as Kodacolor II film, and is the sharpest, finest grain Kodacolor film emulsion ever developed. It is a color negative emulsion coated onto an Estar base to achieve maximum flatness and rigidity. Combine these qualities with the camera's four-element, fixed-focus, glass lens and integrated microprocessor circuits to judge light level and set shutter speed—and consumers have the most convenient, affordable, and sophisticated camera system that Kodak has ever manufactured.

From initial design and development stages to final shipment, Kodak has combined its knowledge of the traditional photographic process with electronic achievements, technological advancements and state-of-the-art manufacturing to offer users a camera system of fine quality.

Eastman Kodak Company

With all that you've read about Kodak Park facilities, the manufacture of film, paper, and chemicals, and the miracle of photography, it may seem hard to believe that this is only part of Eastman Kodak Company.

Kodak stands for progress, and the technology necessary to drive that progress. This includes technology in areas that George Eastman could never have imagined over a century ago when he began his company. However, as diverse and expanding as these advances may appear, they all developed from our basic skill in imaging. And from Eastman's persistent experimentation to make a cumbersome, primitive system better.

Kodak has grown from its modest beginnings in Rochester, New York, into a worldwide enterprise of tremendous innovation—an enlightened, responsible business with insight.

As we've stated, Kodak Park is the company's largest complex. Much like the company, this plant has grown from its initial 16 acres in 1891 to its current 2,000 acres.

With Kodak Park standing as a symbol of longevity, Kodak Colorado Division in Windsor, Colorado, represents the newest addition to the company's manufacturing capabilities. Although 1,600 miles from Kodak Park, Kodak Colorado uses identical machinery and methods employed at Kodak Park, has the same stringent quality controls, and produces some of the same film and paper products.

If you think of Kodak Park as producing sensitized "soft goods" for photography, the company's "hard goods" are designed, developed, and manufactured at Kodak Apparatus Division (KAD). Many identify KAD as a manufacturer of fine photographic equipment, such as Kodak still cameras, slide projectors, and precision lenses. However, KAD actually produces more than 870 different products at its three major Rochester plants. These cover a wide range of goods and include equipment for aerospace applications, entertainment, microfilming, office copying, electronic information handling, x-ray processing, chemical blood analysis, and photo processing. The KAD plants are in separate Rochester locations from Kodak Park.

One of the key factors in Kodak's growth and diversity is its commitment to research and development, currently totalling an investment of about $2 million every working day. The company was one of the first in industry in the world to establish its own laboratories strictly for pure and applied scientific research, set apart from the everyday manufacturing operations. From that original concept in 1912, Kodak Research Laboratories in Rochester have grown to about 2,000 scientists, engineers, technicians, and support personnel. Kodak also maintains six other research units operating in the U.S. and abroad, employing about 8,000 people worldwide for research and development. The Rochester research facilities are located adjacent to Kodak Park.

This emphasis on research encompasses all Kodak product areas, and many of the results of this work are being applied today in ways far removed from photography. The products that have evolved from this research have become an integral part of our day-to-day living.

For example, Kodel polyester and other fibers are used in clothing and home furnishings such as curtains, sheets, and bedspreads; plastics for lightweight, break-resistant soft drink bottles; as well as toys, steering wheels and eyeglass frames; textile fibers for sleeping bags and ski jackets; health and nutritional products such as vitamins and other natural concentrates, and a wide variety of chemicals used by pharmaceutical, food and animal feed

Eastman Kodak Company

Continued

producers, and many other industries.

This expansion in chemicals, fibers and plastics is triggered by the advances made by Eastman Chemicals Division. ECD had its beginning more than a half century ago when a component, Tennessee Eastman Company, was founded. Today there are Eastman Chemicals Division plants in five different states.

Kodak also has eight major and numerous satellite distribution centers in the U.S. Each is designed to store sufficient quantities of fresh photographic material under monitored, climate-controlled conditions and is geographically positioned to deliver goods and services to dealers and customers quickly and efficiently. The largest such center is at Kodak Park.

Seven regional education centers have been established to train professional photographic people how to better use and service their products. The goal: to enable customers to achieve the best results possible from Kodak products.

The company's administrative headquarters is a two-block-square office complex in downtown Rochester.

Overall, Kodak has manufacturing installations in eight states—New York, Colorado, Tennessee, Texas, South Carolina, Arkansas, Massachusetts and California—and in eight countries abroad—France, England, Germany, Australia, Argentina, Brazil, Mexico and Canada.

Located adjacent to Kodak Park is the multi-building Kodak Research Laboratories complex.

Kodak products and services are available in nearly all countries of the world. The skill and care that go into the manufacture of these products provide a uniform product, wherever and whenever it is purchased. And reliable Kodak service organizations stand behind all of the equipment that you buy.

There are more than 136,000 Kodak men and women working for you around the world, including nearly 92,000 in the United States.

Now that you know more about us, our products, and our processes, we at Kodak hope to serve you even better.

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