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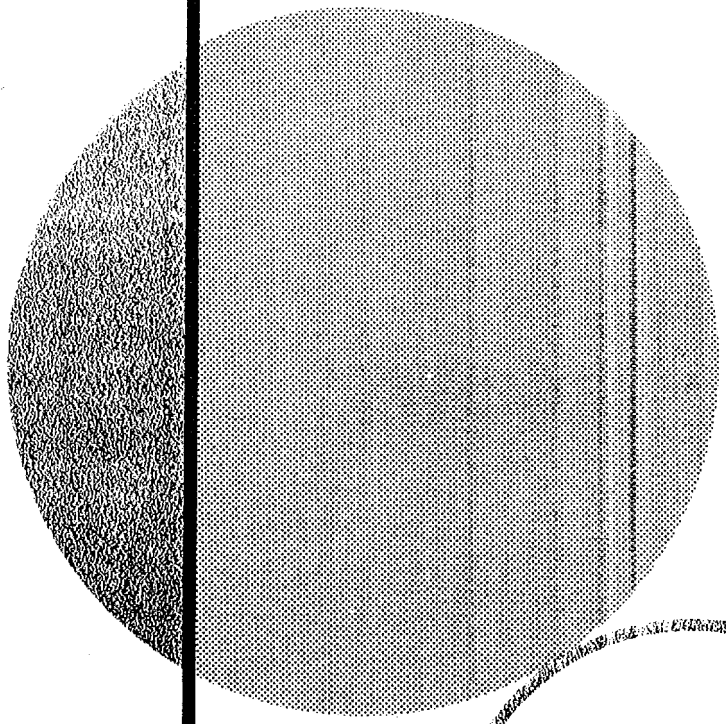
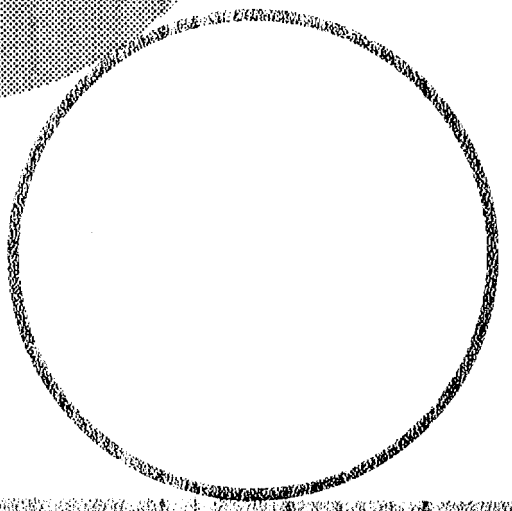
Declass Review by NGA.





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LOCATION

STAT [redacted] being located in Toronto, is strategically situated in the major engineering and industrial centre of Canada. Availability of all types of materials is second to none and personnel and equipment of the highest specialization are available.

DESCRIPTION OF FACILITIES

STAT [redacted] facilities include a design department, experimental and production machine shop, photographic laboratory, assembly area, quality control and testing. The experimental and production machine shop with its joint capability enables the plant to handle an extremely broad range of fabrication work, prototype and experimental hardware being the primary responsibility. For contracts involving high quantity production machining [redacted] draws upon the skills of the many assorted production shops located in the immediate area. STAT

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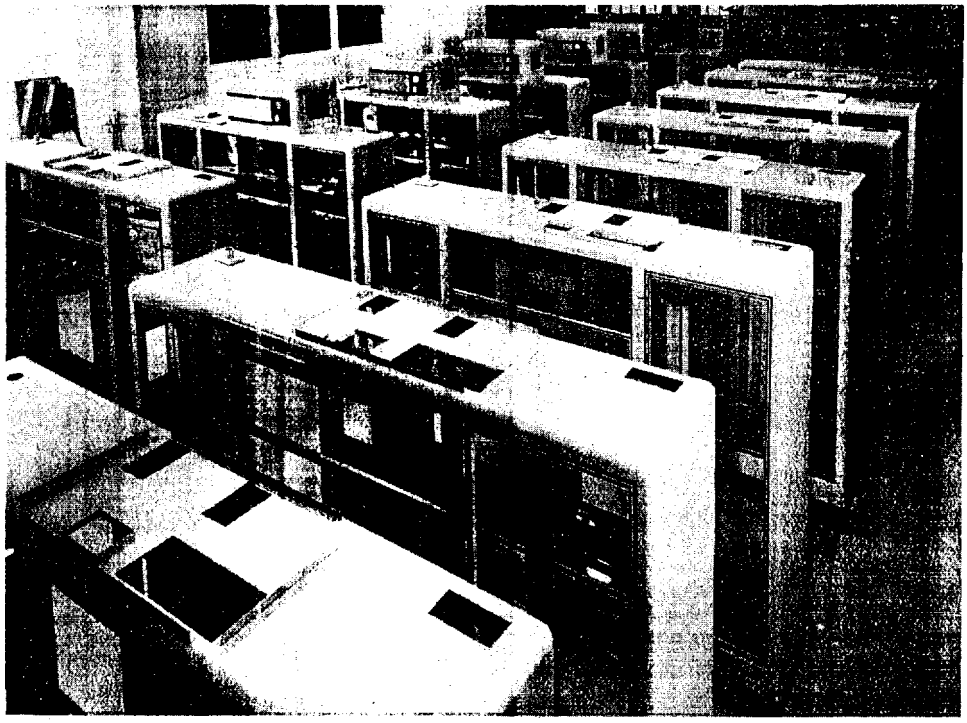
The photographic laboratory conducts complete photographic analysis and photographic quality control activities.

The research and development group are used for investigations to determine best approach methods for the design of special purpose equipment and other devices.

The assembly area staff are equipped to produce equipment made to the most stringent electro-mechanical and hydraulic construction specifications.

The plant work area is approximately 7,500 square feet.



16/35mm Microfilm Processors on the assembly line in our Toronto plant

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FOREIGN TRADE

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Since company formation [redacted] has exported the major portion of its production to the United States of America. The company has not made an effort to sell to other markets and foreign sales contacts have been established only on a word of mouth basis. Great interest in our products has been generated from many areas in the world including the United Kingdom, West Germany, Belguim and Sweden. Inquiries for our diversified lines as well as for our research and development services continue to broaden the scope of our resources.

The potential market would be in the following areas:-

Film Processing Equipment

With the advent of colour television and the necessity for a high quality product in other fields, the [redacted] principle of air and liquid bearings has a good market potential.

STAT

- The Armed Forces and such groups as N.A.T.O. where aerial reconnaissance is widely used.
- Organizations who deal with the mass processing of film of all sizes.
- Television studios, especially where conversion to colour is being considered, with resultant need for new colour processors to replace existing black and white machines.
- Photo finishing and microfilming establishments.
- Sensitized photographic materials manufacturers.

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Materials Handling

The patented [redacted] air bearing system with its ability simultaneously to transport and dry material, when installed, requires approximately one-third of the normal floor space required by existing handling and drying machinery. This feature alone, which enables a plant to obtain greater production per square foot, has proven to be a very attractive sales feature. STAT

- Manufacturers of coated paper products, thin plastics, cellophanes, and other wide web materials. Companies who handle and process wide materials and wish to increase production and their overall efficiency by replacing obsolete equipment with modern and up-to-date systems.

Research and Development

Our research department is designed to provide industry with facilities to develop specialized equipment, instrumentation and components. Prototype apparatus is built and tested under the supervision of our clients. We are interested in all areas of research and development no matter how large or small the project.

- Companies who do not have an "in plant" research and development facility for new product lines and process equipment.

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TECHNOLOGY forward

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[redacted] was formed in 1961 to undertake research, development and the manufacture of film processing equipment and allied products utilizing the basic LEVITRON air and liquid bearing principle. Since the company's formation it has developed for world markets a new concept in film and paper handling. Patents have been granted on the LEVITRON, SUPER LEVITRON and SEPRATRON principles. Many other systems and components have been developed by [redacted] STAT for specific applications in widely varied industries. Our advanced technique of film and paper handling is best explained by describing each of the [redacted] systems. STAT

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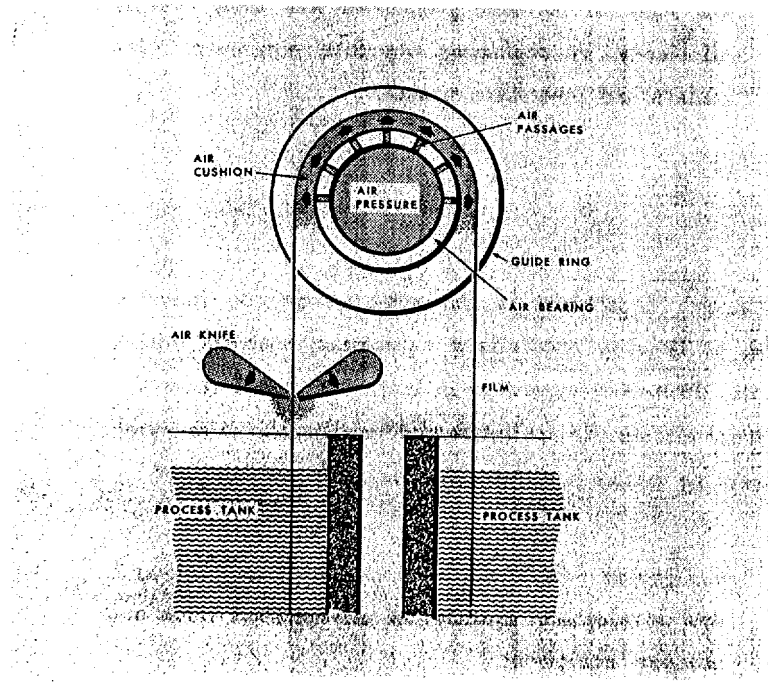
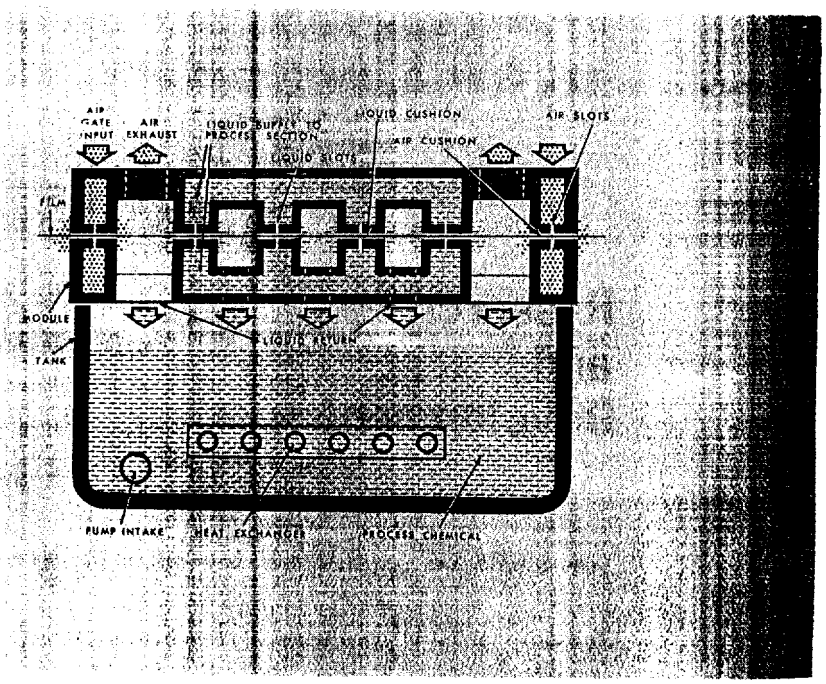
[redacted] *"LEVITRON" air bearing for purposes of transporting and drying paper, film and other strip material.*



[redacted] *"SEPRATRON" straight line multi-tank process for the development of film.* STAT



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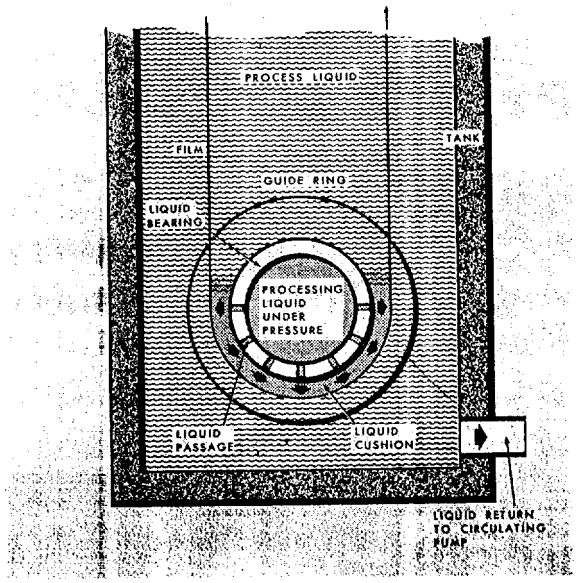
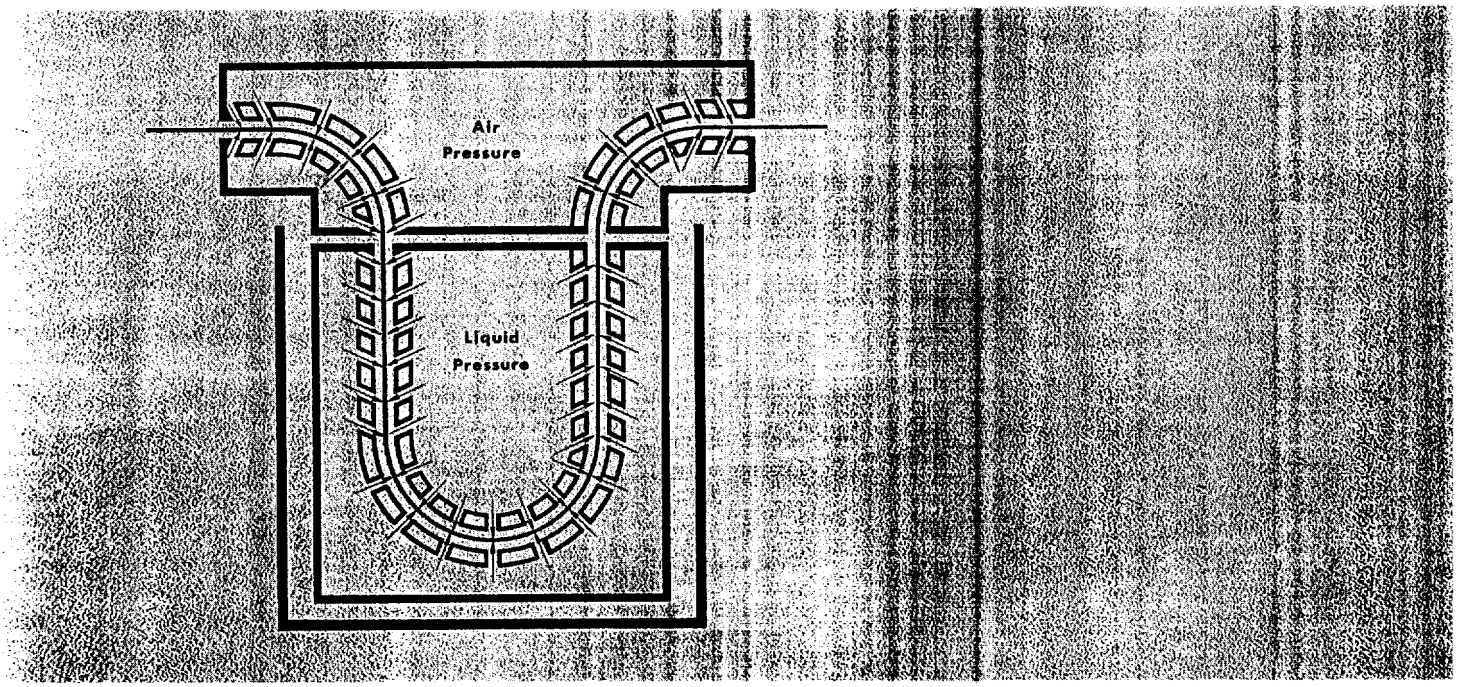


STAT [redacted] *"LEVITRON" liquid bearings designed for the purpose of processing motion picture film.*

STAT [redacted] *"SUPER LEVITRON" principle of transporting and direction control of materials supported only by air or liquid cushion guide channels.*



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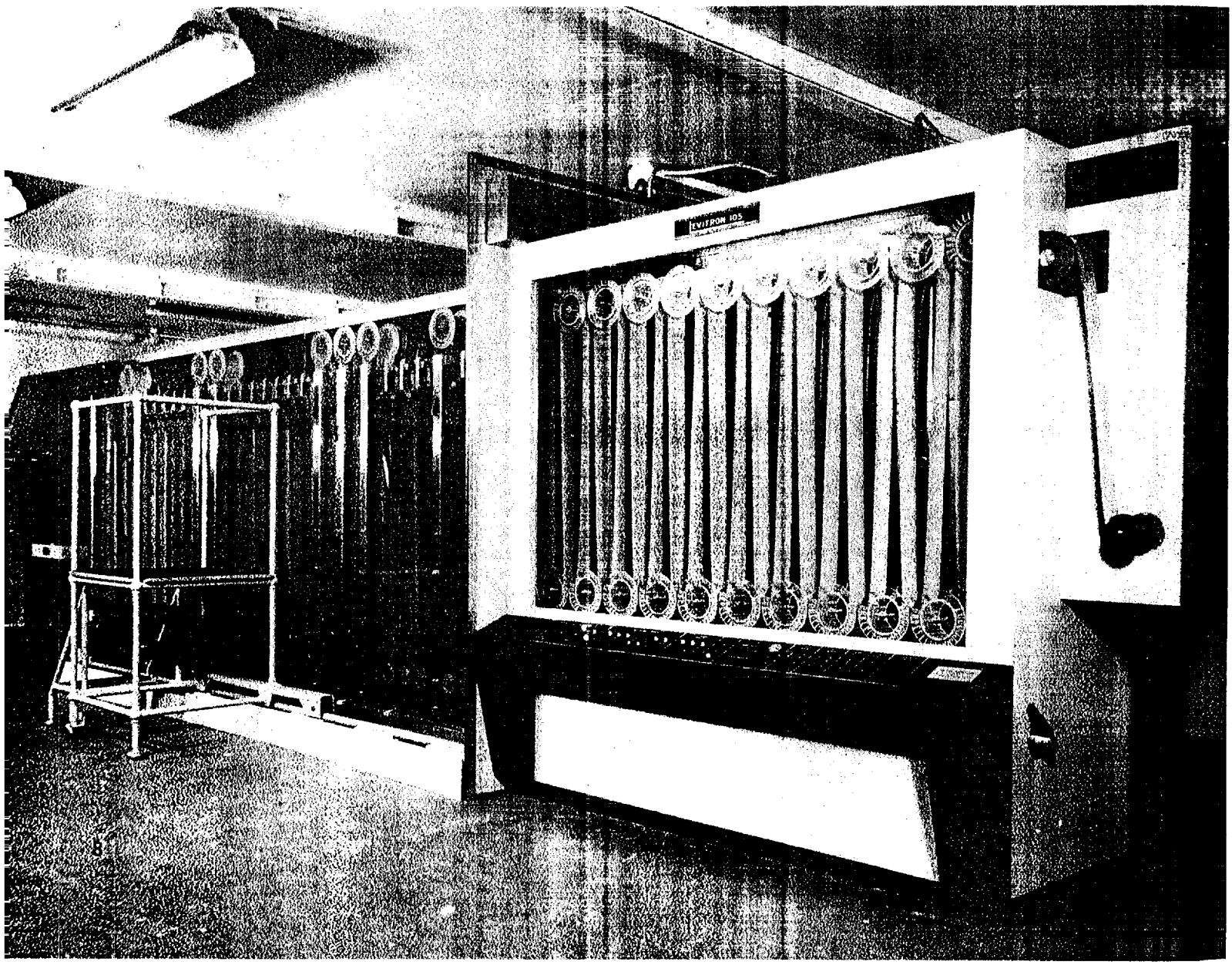
THE LEVITRON SYSTEM

Primary advantages

- NO MECHANICAL CONTACT
- ELEVATED TEMPERATURE PROCESSING POSSIBLE
- STRESS, DISTORTION AND SCRATCH-FREE FILM
- NO MOVING PARTS
- MINIMUM MAINTENANCE
- REDUCED MACHINERY SPACE



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Until the introduction of the LEVITRON principle the generally accepted procedure in continuous film processing machines was to transport the film, in mechanical contact, over moveable rollers from tank to tank and through the drying chamber. This method of film handling, while satisfactory, could never continually produce excellent quality film. The problems of chemical build-up with resultant film scratching, film stress, distortion and chemical wear and tear on the hundreds of moving parts are additional disadvantages of many conventional film processors.

STAT In each of the [redacted] patented processes the design of machines is such that during the film handling from dry to dry state, there is no mechanical contact. This new breakthrough in film handling has reduced the problems of damaged film to a minimum and has permitted the elimination of hundreds of moving parts meaning that costly machine down time and maintenance has been reduced to very low levels.

With the LEVITRON air and liquid bearing the film is processed and at the same time transported over stationary bearing surfaces through which air or liquids pass and support the film. This has the effect of creating an air or liquid cushion which, in the liquid section of the processor, provides extreme turbulation for developing film and gives an eveness of development across the length and width surpassing existing methods.

The air bearing in the dryer section provides high impingement at controlled temperatures and at the same time provides a medium on which to transport the film from the liquid section to ultimate film wind-up. In today's advanced state of the art there is a continuing requirement for the processing of film at high temperatures and, with the resultant softening of delicate emulsions, this elevated temperature technique precludes the use of standard roller type processors and any mechanical contact transport system.

Levitron 105mm High Speed Microfilm Processor with automatic controls

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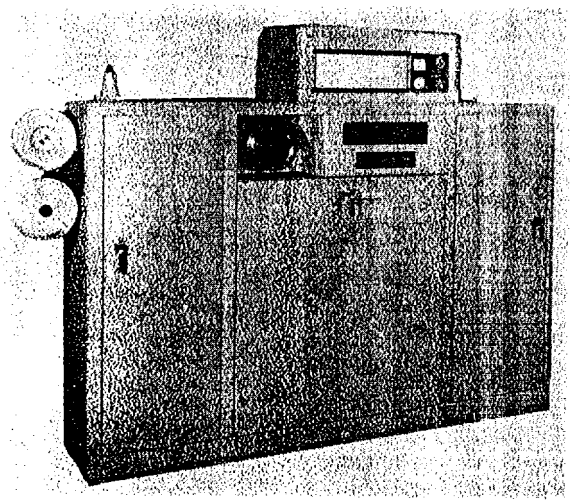
In the LEVITRON system the web material rides on, and is transported by, a cushion of air or liquid. Both the air and liquid cushions are introduced into the LEVITRON system through stationary bearings.

These types of bearings consist of a cylindrical member and two spaced apart flange members, which can be adjusted for variable widths. The cylindrical member has slotted openings through which the air or liquid supply is distributed, thus forming the support cushion. The spaced flange members are provided with moulded air relief valves for "bleeding off" excess pressure when the required riding height of the strip material has been reached. These bleed off channels are located in the flange members and compensate for small variations in air or liquid pressure, which ensures that critical pressure regulation is unnecessary.



Levitron 16/35mm Automatic Microfilm Processor designed for daylight operation

Until the introduction of the LEVITRON bearing the drying and transport of coated stock and other wide web width materials has been made difficult by the necessity of not mechanically touching the coated surface while transporting material during the drying cycle. The problem has been overcome in the past by the use of festoon stick and belt type dryers, as well as others. All types require contact with the uncoated base side, also considerably more space is necessary due to their mechanical inability to direct, without touching, the material

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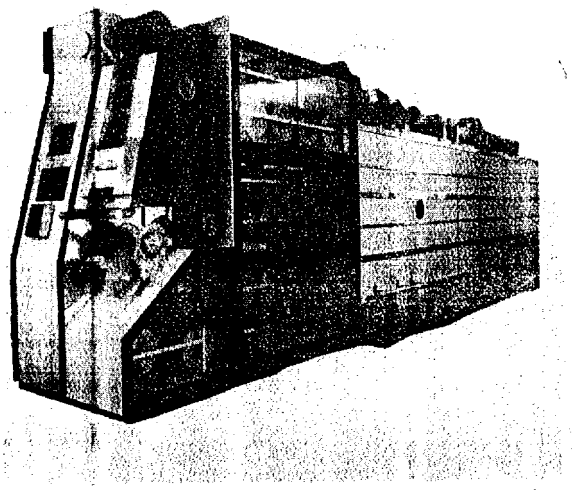
into a compact, folded serpentine path while at the same time applying high velocity impingement air for drying.

STAT [redacted] LEVITRON air bearing allows the close folding and redirection of coated strip material in any desired path by virtue of its "no touch" air cushion feature. This drying system does not have moving parts in the transporting path. The complete elimination of moving components results in reduced maintenance and repair costs, and consequently provides for increased production. Precise temperature and humidity control are only two of the many other features of this system.

An installation of a LEVITRON air dryer instead of a normal belt or festoon dryer would result in a 60% to 70% reduction of required floor space. A potential increase in production speed can therefore be realized by the addition of further drying compartments or by the introduction of additional production equipment installed in the floor space which would normally be allocated for a standard type dryer.



Levitron 70mm to 9½" Adjustable Colour Film Processor with remote, automatic control

Multiple coating of strip material normally requires a number of single coating and drying sequences. Each coating is applied separately, and completely dried prior to recoating. By the use of LEVITRON air bearings as a transport medium between stations, multiple coating without interstage drying is achieved.

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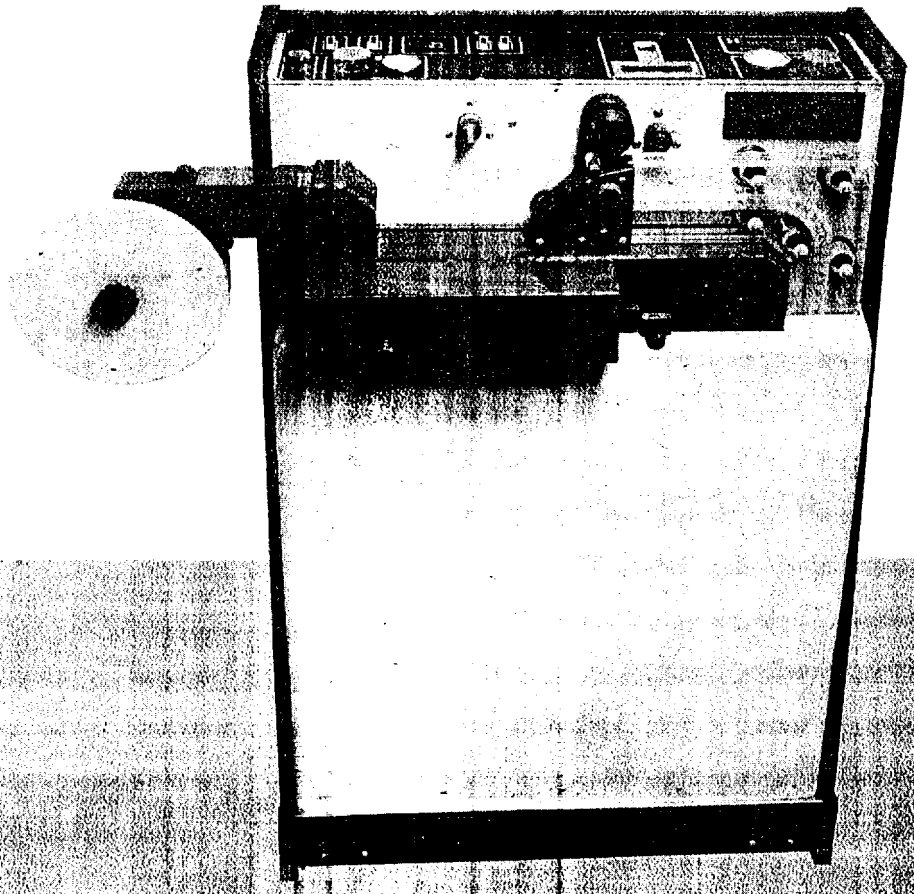
THE SUPER LEVITRON SYSTEM

Primary advantages

- NO MECHANICAL CONTACT
- ELEVATED TEMPERATURE PROCESSING POSSIBLE
- STRESS, DISTORTION AND SCRATCH-FREE FILM
- NO MOVING PARTS
- AUTOMATIC THREADING
- MINIMUM MAINTENANCE
- COMPACT DESIGN



Super Levitron 16mm Quick Access Film Processor of a compact design

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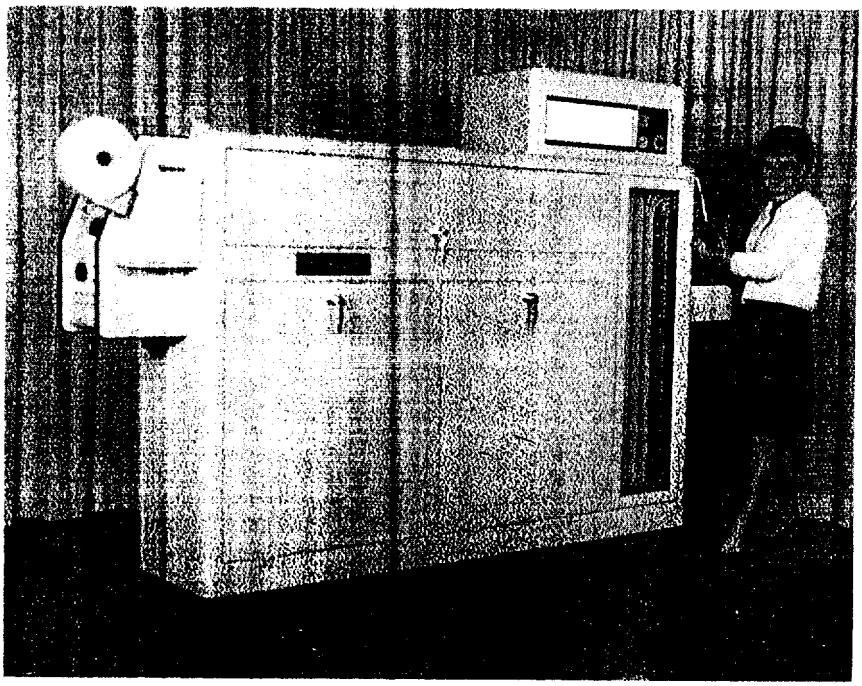
The SUPER LEVITRON principle combines [redacted] "no touch" feature of film handling with an unconventional method for the transporting of film. The system uses air and liquid cushions for transporting and moving the film throughout the processing



Super Levitron self threading 16mm Film Processor designed for daylight operation

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sequence. During this time the film is floating freely while travelling through the liquid processing and drying chambers. Unlike the LEVITRON principle of supporting the film on a cushion of either liquid or air on one side only, the SUPER LEVITRON supports the film on both sides and transports the film throughout the entire processing sequence through air and liquid channels. It is these channels and their unique characteristics as a transport system which form the heart of the SUPER LEVITRON system. Liquid is used as the transport medium in the wet section. Air is used as the transport medium in the dryer section, as well as the link-over sections between tanks. The film floats freely while travelling through both process and drying channels and without mechanical contact from feed-in to take-up.

There are two equal pressure plenums which feed through angle slots directly into the film channels. The air or liquid flows from the film channel through pressure relief holes located at the film edge in the guide channel and is exhausted into the return chamber.

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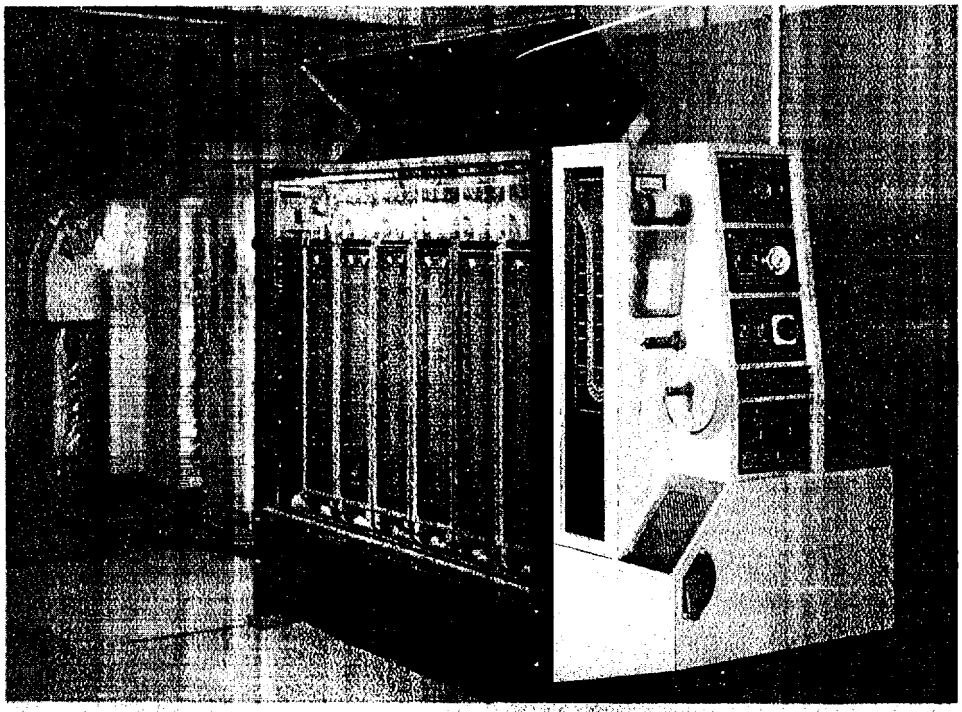
When the film is introduced into the channel it is forced away from the angle slots by the pressure flow. When it reaches the pressure relief holes its movement is limited by opposing pressure flow. The film will therefore continue to maintain the central



Super Levitron self threading 70mm Aerial Reconnaissance Film Processor of modular design

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position, as any deviation from the central position will restrict the flow from the angle slot on the near side and the increasing pressure will return the film to the channel centre. A state of equilibrium exists at this point and the film remains in a central position. The angled slot imparts a directional flow to the liquid or air, and the skin friction produced will impart a forward motion to the film

With the SUPER LEVITRON system of utilizing the air or liquid flow to support and move the film, a typical SUPER LEVITRON processor is self-threading. In this system the highest possible uniformity of processing is achieved throughout the width and length of roll film from the high turbulation of the liquids and their controlled application onto the photographic emulsion. The efficiency of the drying system is extremely high, without using elevated temperatures.

Because the only moving part within the entire process is the film itself, there is virtually no machine wear. Costly maintenance and down time is thereby kept to a minimum.

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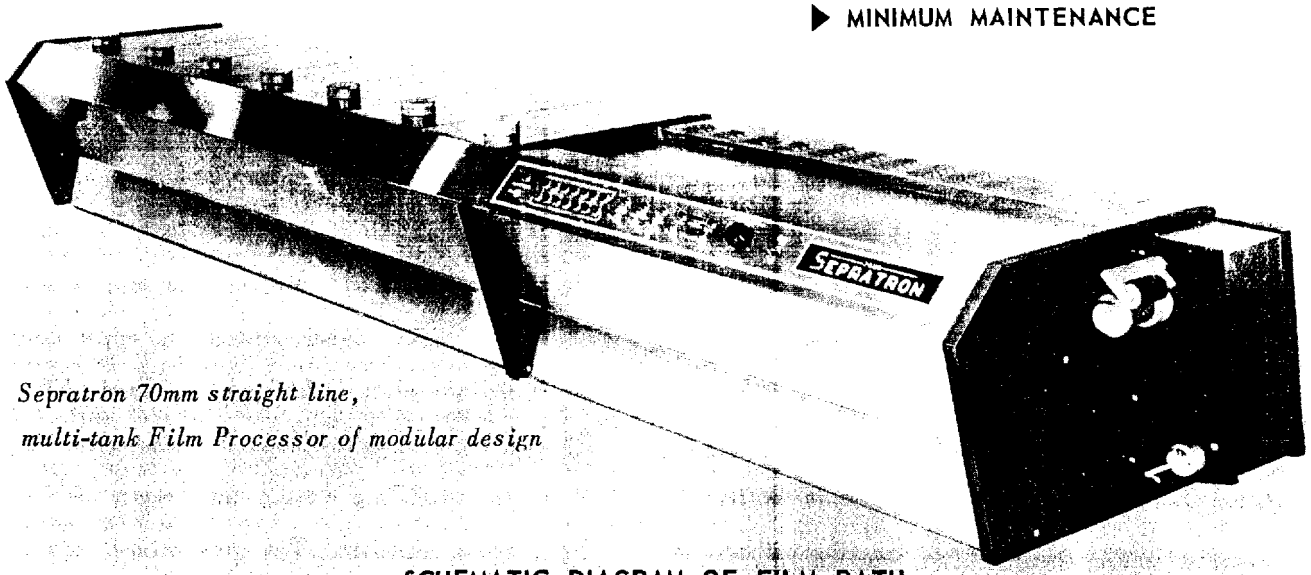
The [redacted] System

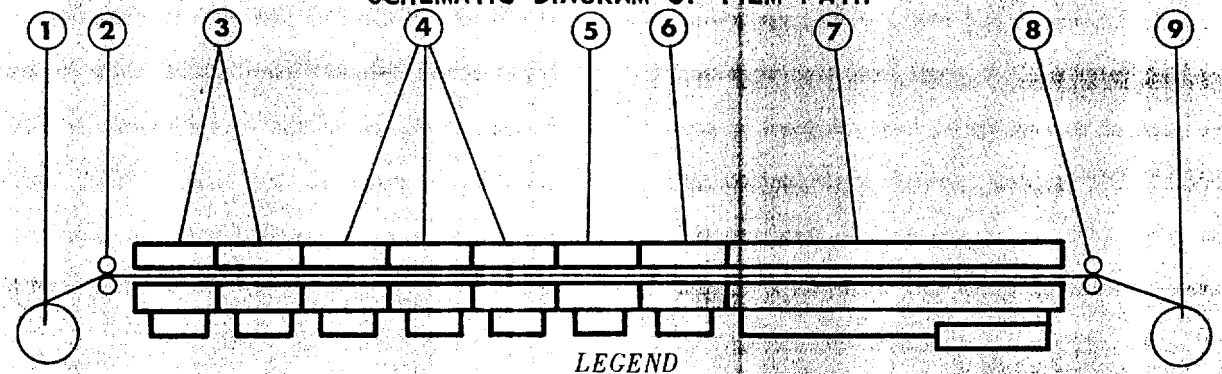
Primary advantages

- NO MECHANICAL CONTACT
- ELEVATED TEMPERATURE PROCESSING POSSIBLE
- STRESS, DISTORTION AND SCRATCH-FREE FILM
- NO MOVING PARTS
- FROM DRY TO DRY IN SECONDS
- OFFICE EQUIPMENT STYLING
- MINIMUM MAINTENANCE



Sepratron 70mm straight line, multi-tank Film Processor of modular design

SCHEMATIC DIAGRAM OF FILM PATH



LEGEND

1. *Magazine*
2. *Input tension rollers*
3. *Develop chamber*
4. *Fix chamber*
5. *Wash chamber*
6. *Treatment chamber*
7. *Dryer chamber*
8. *Take out drive rollers*
9. *Take up*

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The SEPRATRON principle of film processing also incorporates the [redacted] "no touch" feature along with another new concept of film handling. The "straight through" film path is utilized as opposed to the generally accepted method of transporting film in a serpentine path. The SEPRATRON principle is based on a system of applied pressure balance. Process liquids in processing chambers and air in air gates and the dryer section are jetted onto a horizontally transported film strip in such a manner as to totally support, process and transport the film without mechanical contact, and at the same time avoid chemical inter-mix. A great reduction in size, plus lack of moving parts, has achieved in the SEPRATRON system design a reduction of wear and tear maintenance and has greatly decreased machine down time with the resultant increased productivity.

The straight through film path impingement process, and an extremely efficient dryer, combine to produce a high speed, quality processor system whose time from dry to dry can be measured in seconds. The core of the SEPRATRON system is the liquid module which forms the basic unit. In this unit liquid is supplied under equal pressure to upper and lower module plates which are unitized. The film path between the two module plates consists of a slot extending through the length of the the process chamber. The pressurized liquid is forced into the film path area through opposing impingement slots. The liquid then returns through openings to the liquid reservoir via a centrifugal pump to the impingement slots. When the film is inserted into the film path area it is supported and held in a central

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position by the force of the impingement action of the upper and lower liquid jets.

The circulating liquids of the process chamber are effectively confined by the addition of air gates located at the entrance and exit of the process chamber. Squeegee action of these air gates prevent carry over and reduce chemical inter-mix normally encountered in standard film processors. The unique design of the SEPRATRON air gate provides not only liquid separation, but "touch free" film transportation as well.

By connecting in series a suitable number of process chambers (liquid modules), it is possible to form a complete wet section of a film processor.

Drying chamber construction is based upon the same chamber circulatory system. The use of air only throughout the section, plus proper temperature control with heaters, produces a high efficiency impingement drying chamber capable of rapid and thorough film drying.

Consistent high quality is provided by the impingement action of the process liquids during processing. The high chemical turbulation of the SEPRATRON film processor system avoids uneven development.

The SEPRATRON system of processing, largely because of its ability to handle film on a "straight through" path has been designed in an office machine configuration. This feature has been particularly well received in the United States, where large quantities of 35mm SEPRATRON microfilm processing units have been sold.

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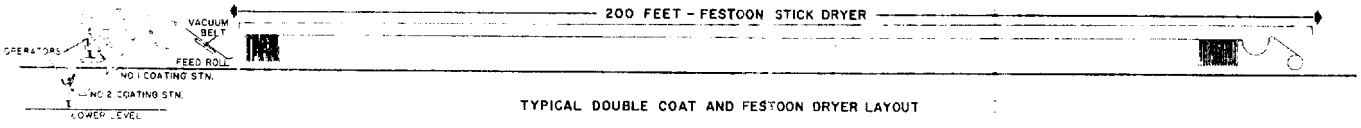
RESEARCH AND DEVELOPMENT

STAT [redacted] since its formation, has developed a number of new products which have attracted considerable interest in film processing companies and paper handlers.

In addition to the standard lines established by the company a number of machines have been designed and built to customer specifications. Some of these are as follows:



TYPICAL DOUBLE COAT AND FESTOON DRYER LAYOUT

TYPICAL DOUBLE COAT AND LEVITRON DRYER LAYOUT

COMPARISON LAYOUT OF EQUAL SPEED DRYER SYSTEMS

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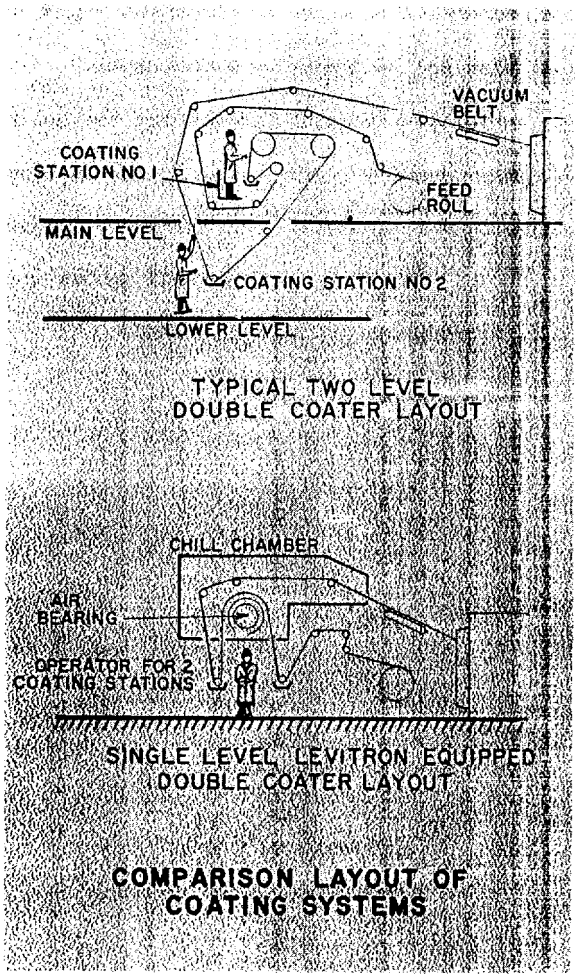
A 70mm processor in a modular style to handle double sided emulsion type film.

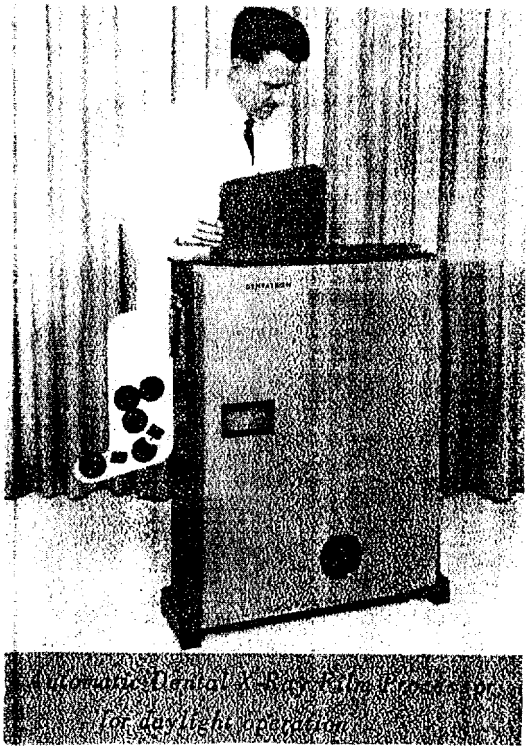
A processor for 4" x 5" cut film with automatic loading and magazine ejection.



An adjustable 70mm to 9½" colour film processor utilizing the LEVITRON principle of processing.

An automatic 5 minute closed loop 16mm projection unit.

A dental x-ray film chip processor designed to transport, automatically, x-ray film chips from dry to dry throughout the entire processing sequence without mechanical contact.



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A 16mm gun camera processor utilizing the SUPER LEVITRON principle.

A 105mm microfilm processor with the LEVITRON stationary air and liquid bearing principle.

STAT [redacted] is working in close co-operation with the National Research Council of Canada on the design engineering and fabrication of a microwave film and paper dryer. The company has also received innumerable small development type requests from manufacturing companies involving the solution of problems that occur in industries which do not have an "in house" research group.

[redacted] has the desire to serve industry in the research and development of new products. The company's ability to do so effectively is illustrated by its own achievements and world wide patents.

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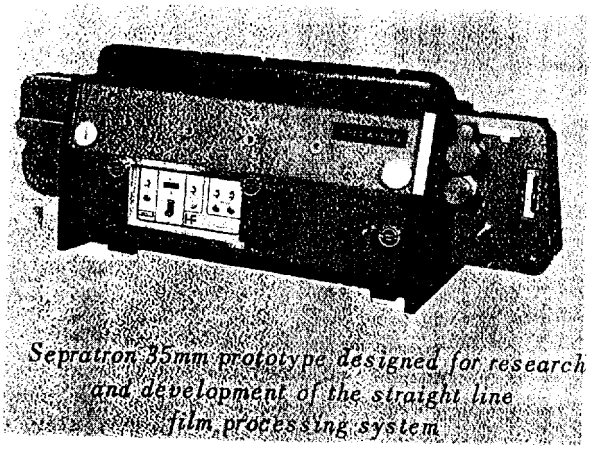
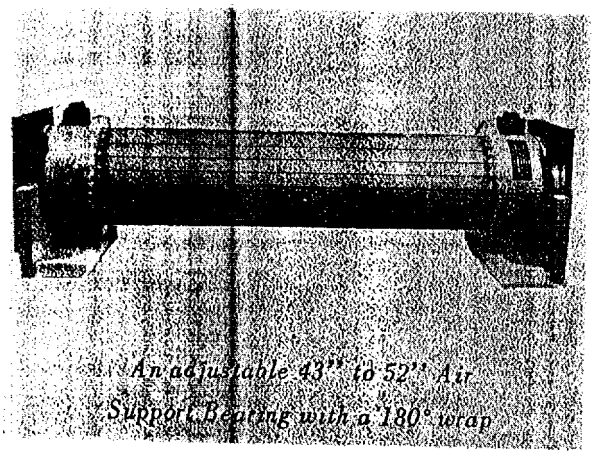


Sepatron 35mm prototype designed for research and development of the straight line film processing system.



An adjustable 43" to 52" Air Support Bearing with a 180° wrap

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MANUFACTURERS OF

FILM PROCESSING EQUIPMENT

FILM AND PAPER HANDLING SYSTEMS

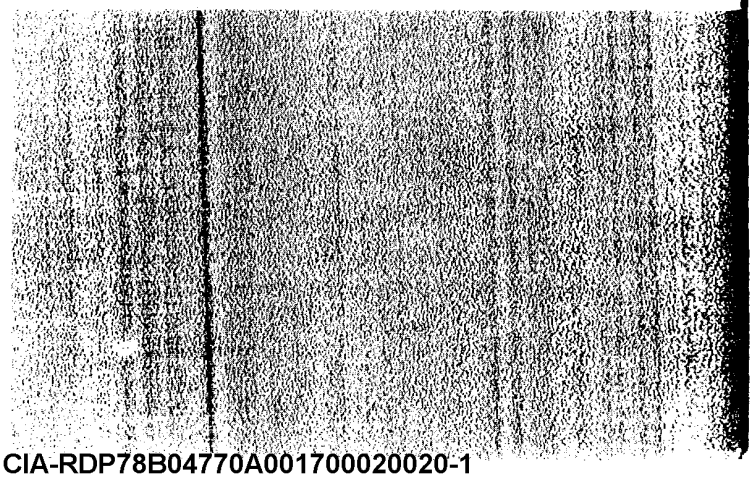
ELECTRONIC DRYERS

ELECTROMECHANICAL DEVICES

RESEARCH AND DEVELOPMENT
SERVICES FOR INDUSTRY

STAT

[redacted]



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