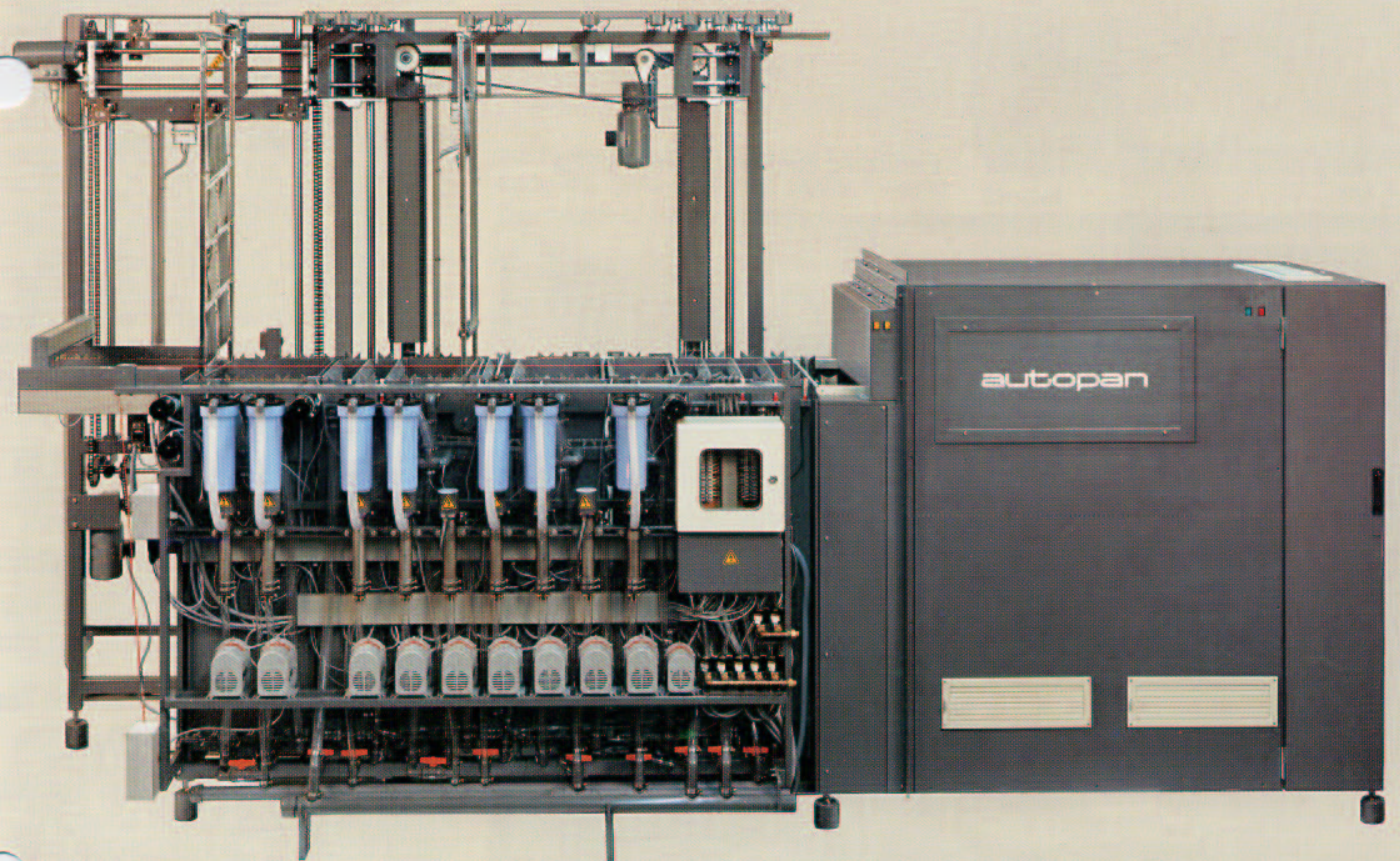


FILM-PROCESSOR

autopan

FP 2000

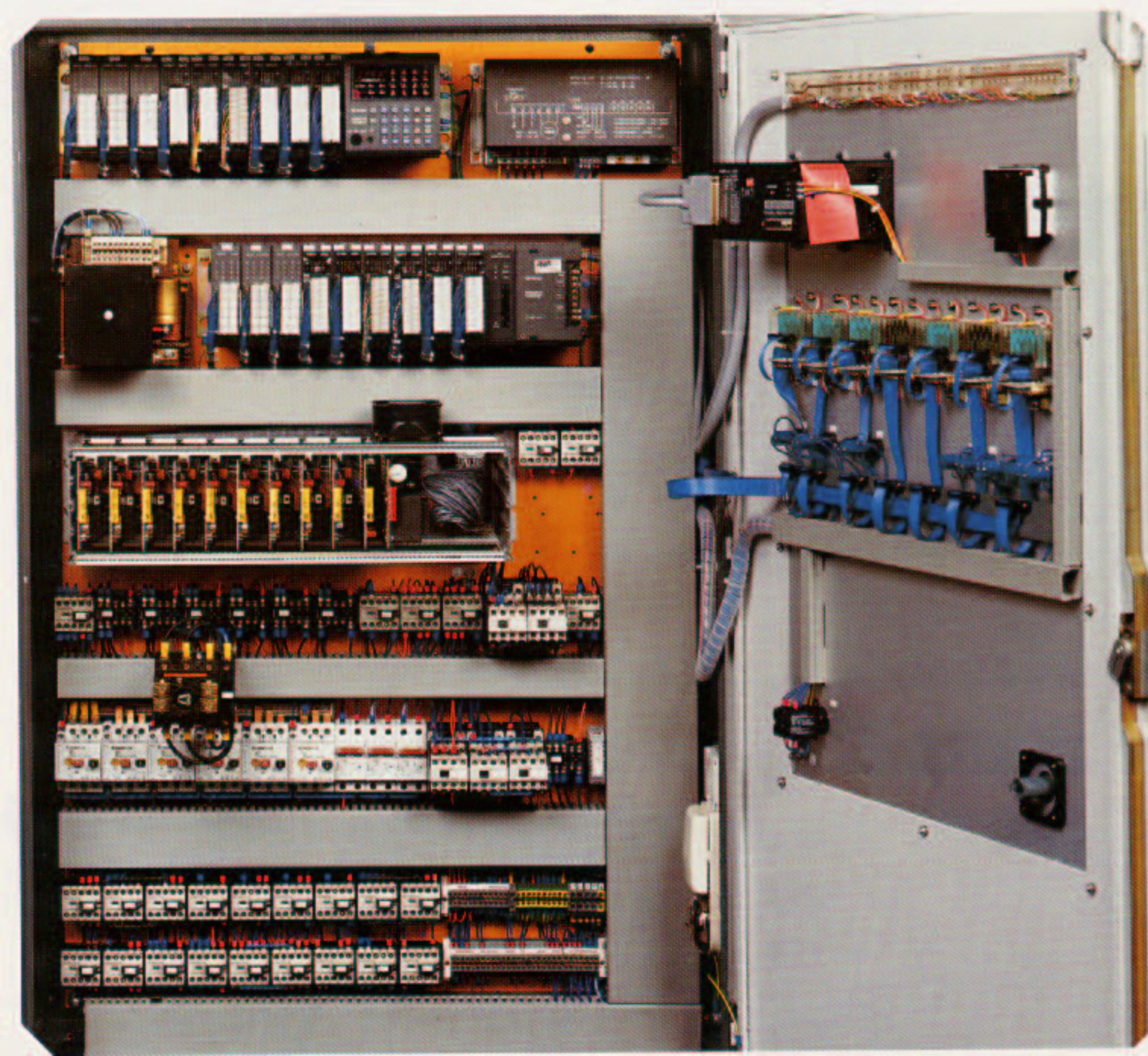


The autopan Film Processor 2000— the completely automatic hanger-type processor with a new-type timing system and big production for color reversal film— in rolls and sheets



Display
Control unit

Electronic control system (PMSC)



Advantages:

- The modern programmable memory supported control system permits time variations for the first developer between 3½ and 15 minutes—adjustable according to demand in steps of 15 seconds. Each hanger is timed as required—individually and independently of one another.
- The microprocessor of the above control (PMSC) calls off the single hangers in the most suitable sequence, thus also permitting “overtake” cases of the hangers to happen. The call-off sequence is determined by the different lengths of time that have been coded for the different film hangers and by the very best use of the capacity of the developer solution tank.
- As a result, the previous loss of time in case of special developing requirements belongs to the past. The intelligent PMSC control with its selective call-off system assures the best possible use of the machine’s processing capacity.
- Incorporated in the control unit is a readable text display that continuously indicates the state of the machine’s performance. In addition, all coded developing times of the single hangers travelling across the machine, are shown on the display. If desired, a printer can be connected to the text display for continuous print-out of the pertinent data shown on the display.

Hanger Loading Magazine:

The machines are equipped with an inlet loading magazine that holds a maximum of 7 film transport hangers. Before inserted in the storage magazine, each film hanger is coded for its particular first developer time according to demand and then placed in the inlet magazine in whatever sequence.

Film Transport:

The film transport has been based on the patented magnetic clamp system of the other autopan Film Processors. Thus proven for many years to guarantee an absolutely reliable and safe film transport, this system transfers the film hangers from tank to tank and into the dryer.

The modern design of the machine has enabled our staff to renounce on the traditional light trap that used to be installed in the dark room wall. Instead, the light tight dryer is itself equipped with a horizontal opening on top fitted with a sliding “door” (cover) that only opens when a film hanger arrives from the last tank of the machine and that is automatically reclosed once the hanger has been inserted in the dryer.

In order to keep the processing part in complete darkness, the outlet door of

the dryer cannot be opened until the inlet opening has been reclosed. The dryer as such has been equipped with hot air blowers that assure a short drying time of the films.

Temperature Control and Pump Circulation:

Electronic temperature controls ensure bath temperatures of highest precision (tol. ± 0.2 °F or 0.1 °C). All solutions are individually temperature controlled and constantly recirculated by strong pumps and filtered by easily accessible filters.

Economy Control:

The special electronic control assures a minimum consumption of water as well as of nitrogen gas and compressed air. For the inflow into the wash tanks of water is not released until a film hanger enters the particular wash tank. The same applies to the gas and air bursts in the solution tanks each of which is only actuated in any tank whenever this tank holds a film hanger.

Solution Replenishment:

The Inline Replenishment System—in connection with a Personal Computer—provides for a perfectly precise replenishment of the solutions.

Water Consumption:

Approx. 4 US-gals. (15 Liters) per minute.

Processing Quality:

As a result of a precise temperature and replenishment control as well as of a special system of gas and air bursts within the solution tanks, a perfect processing quality and consistency are achieved that conform to the highest standards of professional film processing.

Operation and Maintenance:

The operation of the machine is very easy. The same applies to its maintenance as all parts of the machine are most accessible.

Roll Film Hangers 120

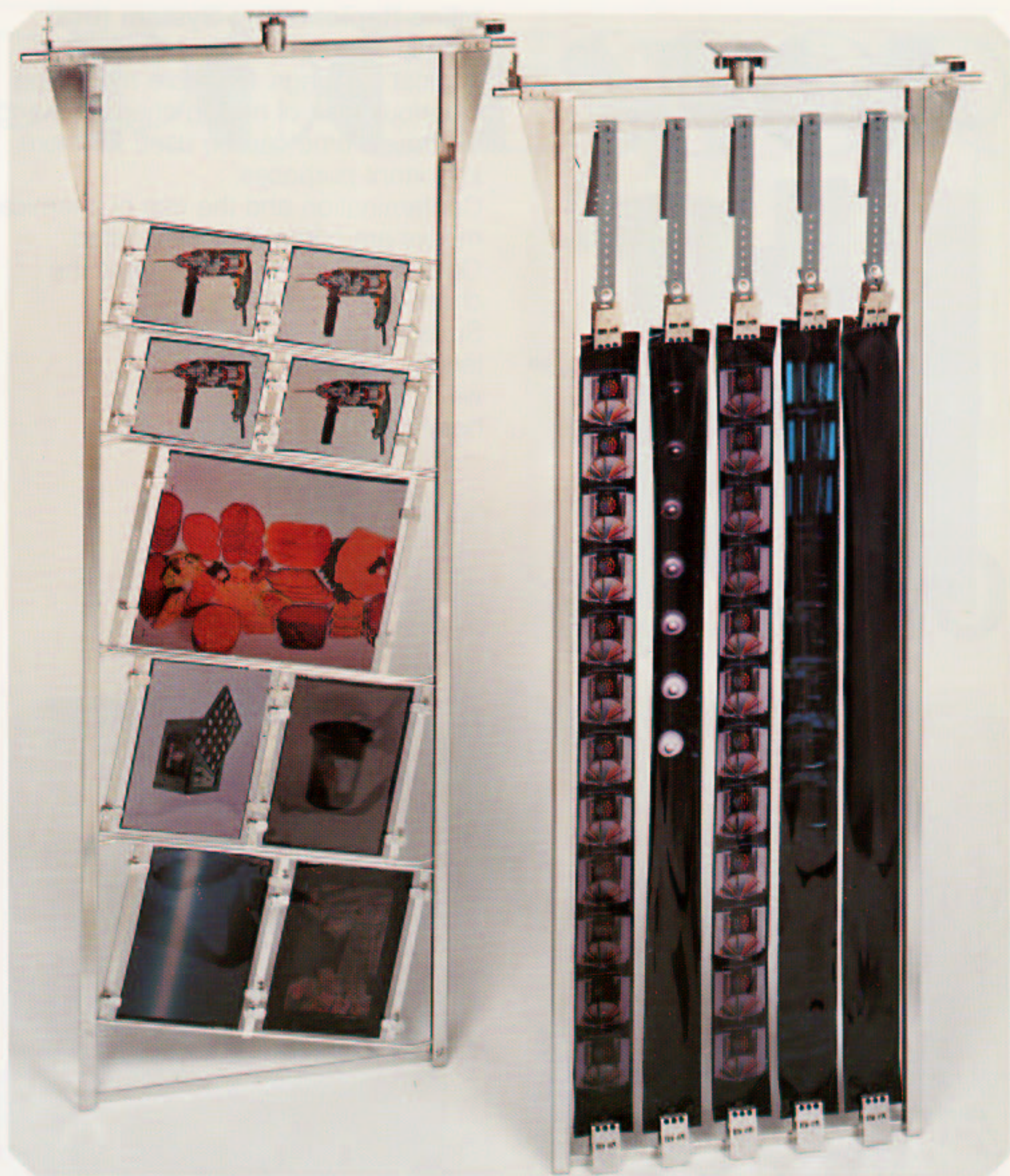
These hangers are fitted with 5 clips each at the bottom and the top that keep the films stretched under tension by means of rubber bands.

Roll Film Hangers 220

This hanger allows for 5 films to be loaded by means of 5 double-clips at the bottom and 5 reversing rollers on top of the hanger—all stretched under tension of the roller-holding rubber bands.

35 mm-Film Hangers for 20 expos. films

These hangers are fitted with 7 clips



each at the bottom and the top that keep the films stretched under tension by means of rubber bands.

35 mm-Film Hangers for 36 expos. films

This hanger allows for 7 films 135/36 to be loaded by means of 7 double-clips at the bottom and 7 reversing rollers on top of the hanger—all stretched under tension of the roller-holding rubber bands.

Transport Hangers and Single Film Carriers for sheet film

The loading of sheet film requires two different types of carrier, viz.:

- a) *Transport Hangers*—and
- b) *Single Film Carriers* to be inserted in said *Transport Hangers*.

This combined system allows for different sheet film formats to be intermixed in one *Transport Hanger*.

In order to assure the stain-free drying of the film—with no marks of liquid drops left on the film, the *Single Film Carriers* are fixed in the *Transport Hangers* at an angle to ease the complete run-off of the last liquid.

Subject to modification of design

Process Model	E-6 FP 2000
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Production per hour:		
Sheet films	4 X 5"	420
	5 X 7"	240
	8 X 10"	90
	11 X 14"	60
	16 X 20"	30
	9 X 12 cms	420
	13 X 18 cms	240
	18 X 24 cms	120
	24 X 30 cms	60
	30 X 40 cms	60
	40 X 50 cms	30
Roll films	120 (full length)	150
	220 (folded once)	150
35 mms films	135-20 (full length)	210
	135-36 (folded once)	210

Technical details:		
Sizes	length	460 cms
	width	118 cms
	height	250 cms
Tank volume	165/115/80/30 litres	
Water connection	1/2"	
Waste	40/50 mms	
Nitrogen and compressed air	12 mm	
Voltage	380 Volts*	
Electrical power	12 kW	
Weight	2100 kgs	

*)other voltages on request



Inline-Replenishing-System (IRS)

Simply insert the chemicals in their original packings. No more mess and laborious task of mixing chemicals and the saved time can be used for more important purposes.

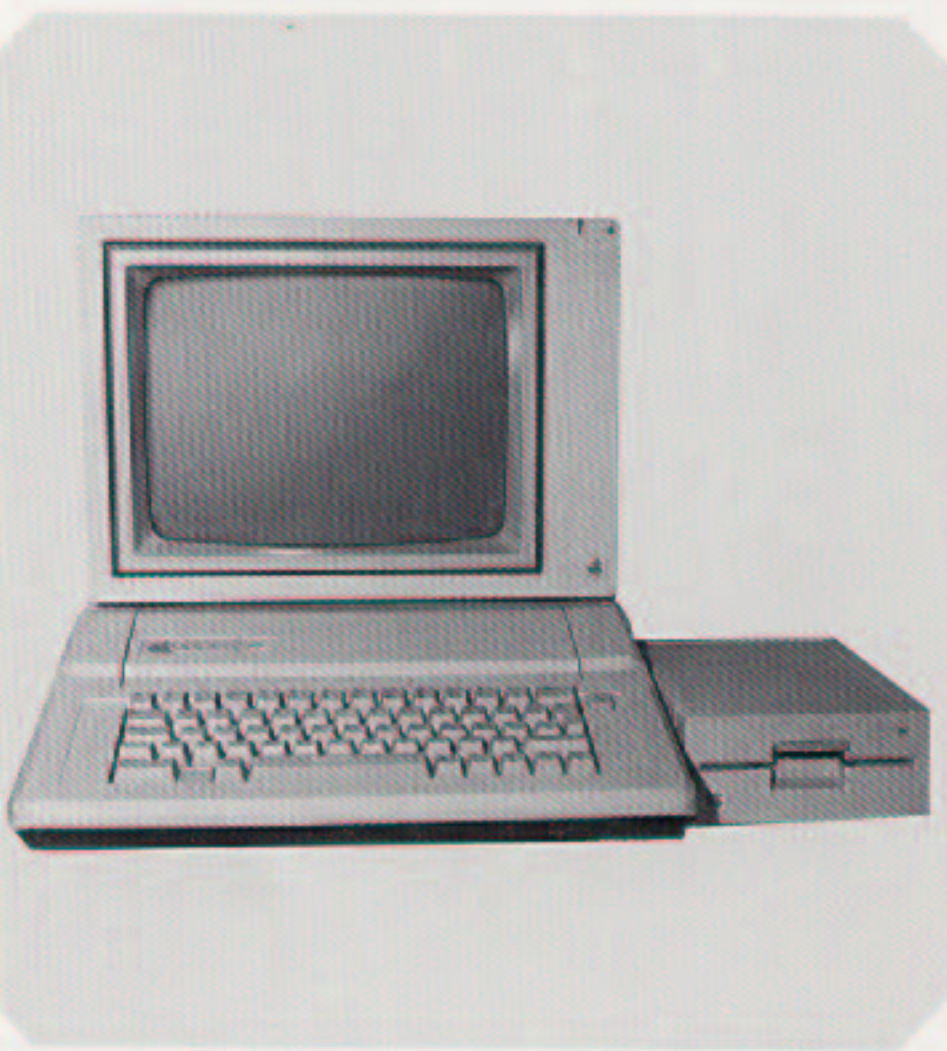
Contamination and the use of chemical mixers are completely eliminated. Once adjusted, it administrates the chemicals accordingly.

Sizes:

length 160 cm

width 40 cm

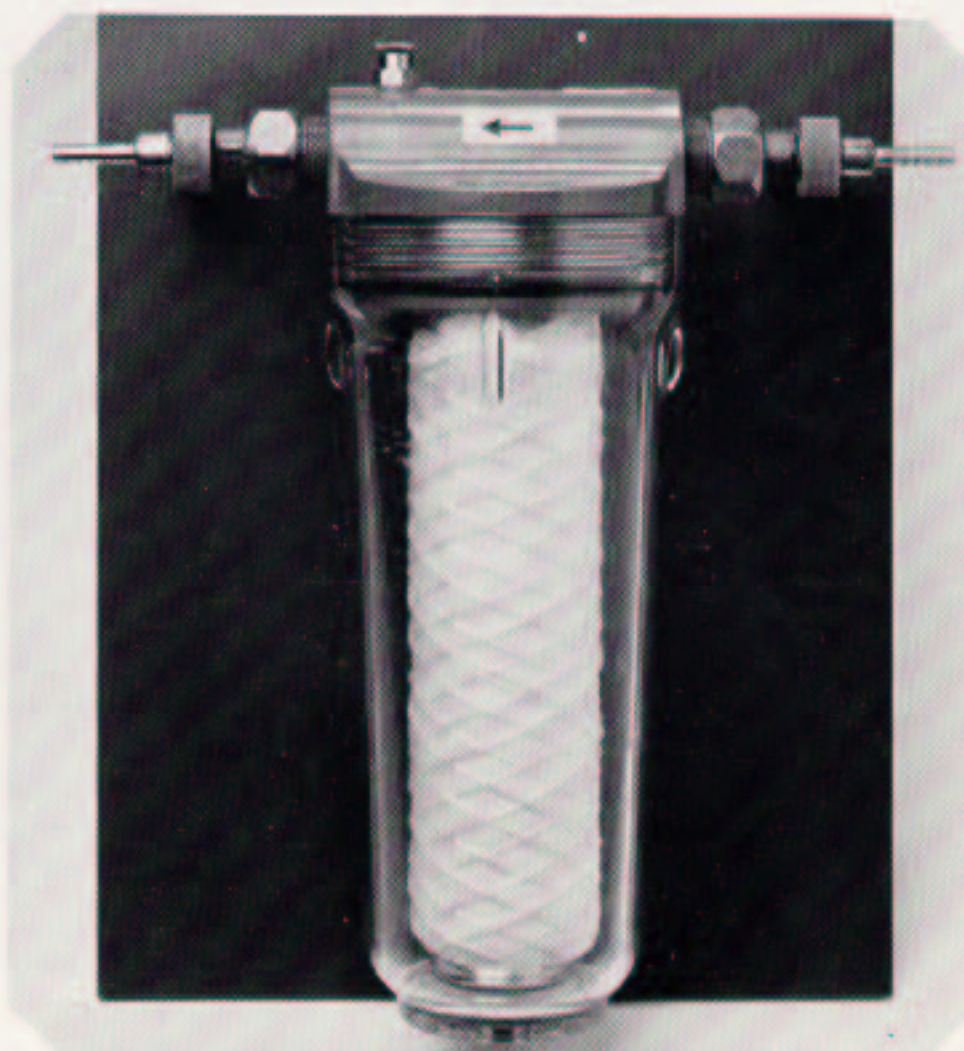
height 220 cm



Computer for Replenishment:

This computer enables you to replenish all bathes absolutely exactly according to developed film size. So, you will have an optimum of chemistry constancy.

You just have to input the film sizes and the amount of films which you want to develop to the computer. These input dates will then be stored and the required replenishing rates will be fetched from memory automatically at the necessary point of time.



Nitrogen Humidifier

This anchors free-passage of nitrogen through fine perforations of gas distributor and also maintenance liquid volumes at a higher level due to moisture content.

Consistent contrast is obtained due to the regular agitation by not having blocked or cristallized perforations in the distributor.



Silent air-compressor

Completely free of oil and other particals in the air, this "Jun-Air" compressor supplies pressurized air for processing-machines and other purposes. This compressor can be installed at any part of your color-lab with the minimum amount of maintenance.

autopan 

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