

# AGFA LABOMATOR 45

The New-Generation Roll Paper Processor

Advanced in engineeringunsurpassed in reliability.



# The new Agfa Labomator 45 ...meeting your needs

The Agfa Labomator 45 is unparalled in:

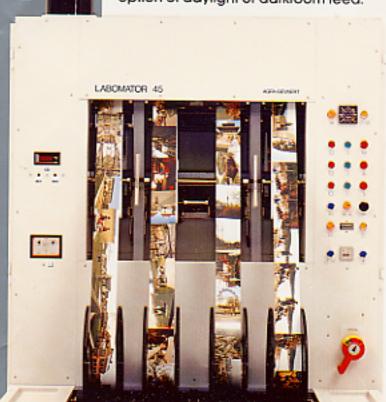
- innovation
- speed
- ease-of-operation and maintenance
   Outstanding features include:
- versatile modular design
- unique paper transport system
- systematic replenishment circuit
- energy-saving dryers
- innovative take-up design

### Modular Design For Unlimited Flexibility

The Agfa Labomator 45 is comprised of four basic modules: paper transport drive, leader belt storage, control cabinet, and take-up. Designed for maximum performance and economy, the Labomator 45 can easily adapt to handling large volumes by increasing processing speeds from 16.5 ft. to 57.75 ft./min. per lane... allow addition of wet and dry sections as needed...and enable a variety of processes, including AP92/EP2, HC101, color reversal, and black and white.

### Innovative Engineering

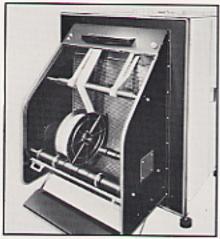
We're an innovator in daylight processing and the Labornator 45 is the product of our continuing efforts toward a more efficient system. The result: a system that enables daylight processing and the option of daylight or darkroom feed.



### Daylight Operation

Now you can take exposed paper cassettes directly from printer to the paper processor. Our universal daylight feed section is engineered with cassette adapters for most major types of printer cassettes—enabling an "interface" system between the daylight feed section and different types of printer cassettes.

The cassette adapters can be easily changed without tools—allowing efficiency without restrictions!



Darkroom Feed

### Daylight/Darkroom Feed Option

The Labornator 45 is versatile enough to operate with either daylight or darkroom feed—the option is yours.

The darkroom feed section features a roller shutter that eliminates the need for a conventional double darkroom door. Additional features include: acceptance of emulsion wound inside or out; clip tray; ON/OFF switches for transport; and dryers on the feed section; and easy reach of the safety OFF button for emergencies.

### Optional Accessories

A central paper supply system is available for any Agfa Labomator model. Spool plates attached to the winding cores can unwind directly from the corean alternative to the standard paper supply system that makes handling safe and easy.



### Smooth Acceleration In Seconds

The Labornator 45 has an electronically controlled DC drive that can be varied continuously from 13 ft./min. to 59 ft./min. for paper transport. The drive accelerates from zero to the desired speed within two to three seconds (with a maximum output of 57.4 ft./min.)

An automatic cooling system using vane switches guards against drive motor overheating and helps load control to prevent wear on commutator brushes. Warning is audible and visual LEDs indicate trouble area (LEDs remain lit even after transport system shut-off).

### Unique Leader Belt Elevator

An integral part of the Agfa Labomator 45 is the leader belt elevator which allows the leader belt to be stopped without interrupting operating speed so that the paper clips can be easily attached by the operator.

# Automated Paper Tracking System

The paper drive system will track long rolls of paper in straight line precision. You needn't worry about the paper being too slack or pulled too tight because the Labomator 45 will automatically adjust to paper stretching and the tolerances of various drive rollers.

The upper guide rollers are driven only as long as the paper is under full tension. The drive gears engage the rollers in response to tension and disengage as soon as tension is released. This ensures even turning of the guide rollers with the paper (see illustration).

Paper Transport System Top shafts running on stainless steel ball bearings provide smooth motion and minimal wear. Additionally, thick rollertumbled 316 steel is used for the upper shafts.

### Paper End Tracking

The problems normally encountered by loose paper ends drifting through tanks and dryers are alleviated by employing roller brakes for exact paper tracking. This system combined with new leader belt materials, guarantees smooth and precise paper transport from beginning to end.

### Increased Silver Recovery

New squeegees have four wiping edges, and need replacing only when the fourth edge is worn out. The extended life of the squeegees, therefore, reduces chemical carry-over and substantially improves silver recovery.

### Easy Rack Removal

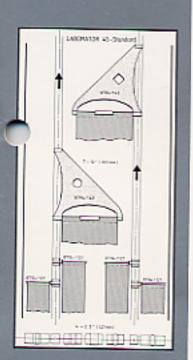
The two racks in each tank are conveniently designed as separate pieces. They are lightweight and it only takes one person to lift them up and out.

# Paper Width Capacity

The Agfa Labornator 45 has four lanes to accommodate different paper widths. You can have four lanes of 5" each or two lanes up to 5" plus one lane up to 12" in paper width. Mechanical adjustments are unnecessary when changing paper widths.

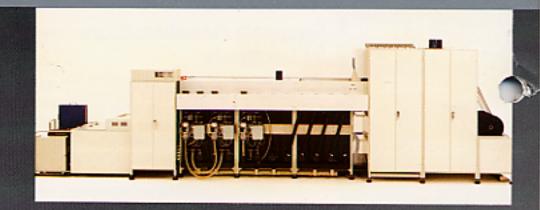
### Wet Section Advantages

- Sectional design offers maximum flexibility. Racks are subdivided into tank sets of four, (three and one).
- Tanks for solutions and water are identical for added flexibility and reduced production costs.
- Steel supports between tanks eliminate tank bowing, increasing safety.
- Level compensation is provided when several tanks are coupled together.
- Compact circulation systems are positioned in the direction of transport.
- Optimized covering to reduce escaping fumes.
- Condensation outlet.
- Long squeegee life.



# Agfa Labomator 45

Ease of handling –simple to use.



#### Leader belt elevator

Standard on all models. Separate drive with acceleration and braking for maximum paper care. Leader belt stops for controlled fastening of paper clips.

### Drive

Electronically controlled DC drive with smooth acceleration. Monitoring of load, temperature and brush wear.

#### Chemical filters

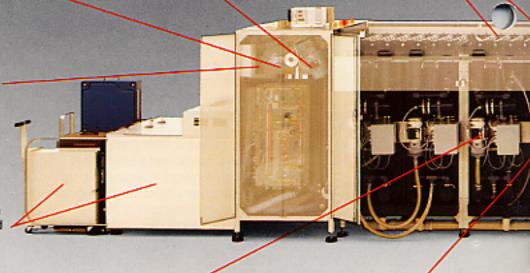
All chemical filters monitored for clogging.

#### Replenishment scanning

Paper width and length scanning by infrared system for exact replenishment of chemicals and wash water. Replenisher and wash water added through precision flowmeter.

#### Feed section

Optional universal daylight feed section for all the major printer cassettes. Cassette adapters interchange within seconds, without tools. Darkroom feed section is standard with monitored roller shutter.

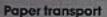


#### Pumping system

Powerful magnetically driven pumps for excellent chemical mixing action and temperature distribution in the tank. Pump action monitored electronically.

#### **Heating system**

Fast heating of chemical baths, with automatically controlled heating for precise temperature tolerances. Electronic temperature regulators. Overheating circuit breaker.



Regulated paper tracking system for safe and easy paper transport. Excellent directional stability. Paper end guides, in wet section and dryer, control paper ends.

#### Squeegees

Easy to change. Longevity achieved by utilizing all four wiping edges. Reduced chemical carryover. Improved silver recovery rate.

#### Control panel

Well designed layout, with alarm indicators. Digital temperature display of all chemicals.

#### Control cabinet

Concise arrangement. Totally compatible to the modularity of all Labornators.

#### Patented take-up.

Separate drive with electronic control for each of the four take-up spools. Spool drive active only when tracks are occupied. Constant paper tension, regardless of the winding diameter. Spools remain stationary in order to attach the leading end of the paper to ensure proper wind-up. Wide strips of paper wind-up without damage by loop-controlled, intermittent take-up.

#### Cascade washing

End to end washing cascade to save water. Preliminary washing action, fed from main cascade, for efficient silver recovery from wash water. Monitoring of cascade function.

#### Dryers

Dryer modules with doors at both sides for easy access. Drive via main motor, no synchronization difficulties. Extremely quiet operation. Climate control for energy economy. Good insulation. Even paper drying, regardless of the ambient conditions.

# Pumping and Heating System

Replenishment System Elements with powerful 3.5 kW basic heaters heat up the baths at a fast rate, while highly sensitive temperature regulators monitor the solutions for strict adherence to working temperature, within fine tolerances. Temperature accuracy can be checked instantly on digital indicators located on the front panel.

Powerful magnetically driven pumps ensure even temperature distribution and careful chemical blending in tanks. Effective pressure filters keep the solutions clean.

# System Double Check

The pumping system has multiple monitoring. A pressure monitor verifies the pumping action and simultaneously provides protection against dry running. A second pressure monitor alerts you of clogged filters.

The system determines the amount of replenisher via a moving infrared scanner that detects the paper width and length being fed.

Built-in pressure regulators ensure constant chemical flow, regardless of the location of the supply tank, pump pressure, and tank levels. The replenisher is added through a flow meter so that consumption can be monitored exactly.

The Labomator also retains heat generated by the outflowing replenisher. This is then used to preheat the incoming supply, saving energy and providing temperature control within fine tolerances.

### **Scanner Option**

An optional electronic scanner for short paper strips is available, designed to alleviate any replenishment inaccuracies.

### Reduced Water Consumption

An electronic monitor measures the paper width, rather than the paper strip, for wash water control proportional to the area. Thus, water consumption is drastically reduced. Further water reduction is achieved by a cascade which passes up through nine tanks.

### Effective Silver Recovery

A preliminary wash system in the Labomator feeds water from the main water cascade to the first tank (after BX bleaching bath). As a result the remaining concentration of silver in the wash remains suitable for recovery.

### Dryer System

The dryer system is also modular so that the drying capacity can be matched to volume of processing. The dryer's unique design tracks the paper tails straight, ellminating damage to paper ends.

The hot-air blower, temperature and climate control are coordinated electronically in each module for high efficiency and fast drying.

#### Climate Control

Another energy saving device is the Labomator's maximized use of heated air. The Labomator monitors the internal air humidity levels. Once the humidity saturation level is reached, fresh air is pulled-in and the dryer switches over to a system of return air combined with frest air which provides additional cost savings.

### Patented Take-up System

The Agfa Labornator 45 has four take-up spools with a separate motor drive and electronic tracking. This feature is unique to the Labornator 45 and keeps the winding tension constant regardless of the roll diameter. Paper widths and lengths up to 1,150 ft. are wound up evenly and firmly to provide trouble-free handling. A paper loop elevator operates as an intermittent control for paper wider than 5."

The take-up spool can also be halted so that the leading edge of the paper can be attached to the spool. A clip tray and spool compartment are integrated in this section as well

### Master Control Cabinet

The control cabinet is compact and totally compatible with all Laborator 45 models, from the smallest to the largest versions, without modifications. Additionally, the cabinet houses the entire system's ON/OFF switch and protects the circuits via circuit breakers.



The Agfa Labomator 45 P Professional is a special version of the Agfa Labomator 45, made to handle wide roll processing. The "P" version was developed specially for labs processing large orders of paper widths up to 24" which makes it ideal for labs specializing in school and wedding photography.

Most features in the "P" version are the same as the Agfa Labomator 45. Since broad strips of paper have a more critical tracking requirement, the maximum processing rate in the "P" version has been limited to 32.81 ft./min, without sacrificing high processing quality.

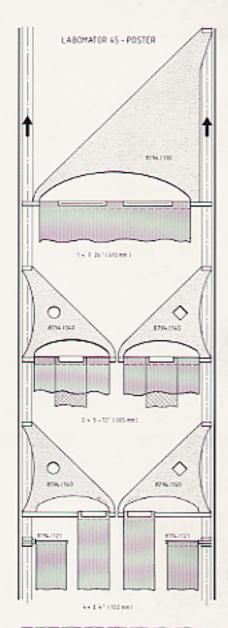




To accommodate the wide paper widths, the leader belts have been positioned to the ends of the tanks, enabling the following processing widths: one lane up to 24"; two lanes up to 4"; two lanes up to 4"; two lanes up to 4" plus one lane up to 12."

Other modifications include the development of special paper clips for processing different paper widths (see illustration). This guarantees safe handling without paper loss.

AGFA LABOMATOR PROCESSORS								
Features	45	45P						
Maximum Processing Speed (ft/min.) Maximum Width Capacity (inches) Light Trap Partition Leader Belt Storage Automated Paper Tracking Paper End Tracking Lightweight Racks Automated Replenishment Dryer Climate Control IR Replacement Scanner Patented Take-Up Wide Roll Take-Up AWAILABLE OPTIONS	57.75 12.10	32.81 24.00						
Bar Feed Assembly Short Paper Scanner Universal Daylight Feed								





# In Summary:

We've succeeded in designing a Labomator 45 Processor that meets your processing volume with quality and reliability. Compare each of our Labomator 45's and determine which one fits your needs.

### **Technical Data**

#### Agfa Labomator 45

machine types			dimensions in ft.			electrical data			weight in lbs.		
type no.		process	speed per track in ft./min.	length	width	height	max. load in kW	max. voltage 380/220V	mean consumption kWh/h	empty	tull
8791/102 8791/112 8791/122 8791/132 8791/142 8791/152	Labornator 45/500 C (BX) Labornator 45/750 C (BX) Labornator 45/1000 C (BX) Labornator 45/1250 C (BX) Labornator 45/1500 C (BX) Labornator 45/1750 C (BX)	AP 92 (BX) Ekto- print 2*	16.4 24.6 32.8 41.0 49.2 57.4	18.1 23.4 28.4 33.0 37.1 41.7	4.6 4.6 4.6 4.6 4.6 4.6	6.9 6.9 6.9 6.9 6.9	29 36 45 56 62 73	65/100 74/120 85/135 95/160 105/175 125/220	11 15 18 23 25 30	4481 5815 7118 8269 9378 10513	8450 11768 15056 17773 20484 23214
8793/102 8793/112 8793/122 8793/132 8793/142	Labomator 45/500 C (BL/FX) Labomator 45/750 C (BL/FX) Labomator 45/1000 C (BL/FX) Labomator 45/1250 C (BL/FX) Labomator 45/1500 C (BL/FX)	AP 92 (BL/FX) HCC 101	16.4 24.6 32.8 41.0 49.2	20.3 25.7 30.6 35.2 40.2	4.6 4.6 4.6 4.6 4.6	6.9 6.9 6.9 6.9	29 36 45 60 66	65/100 74/120 85/135 100/165 110/180	11 15 23 24 27	5034 6368 7671 8813 10117	10194 13512 16800 19530 22817
8792/103 8792/113	Labornator 45/460-R3 Labornator 45/610-R3	AP 63 R3	15.0 20.0	20.3 21.8	4.6 4.6	6.9 6.9	35 35	65/105 65/105	15 15	5034 5418	10194
8792/302	Labornator 45/690-BW	BW	22.6	15.0	4.6	6.9	25	65/90	12	3735	6117

\*Lengths and weights are for machines without feed section. The dimensions are increased by:

type 8794/100

darkroom feed section

length plus 1.7 ft.

weight plus 94.8 lbs.

00

type 8780/100

daylight universal feed section length plus 3.3 ft.,

weight plus 701.2 lbs.

plus 2.1 ft. cossette length.

### Agfa Labomator 45P Professional Series

mochine types			dimensions in ft.			electrical data			weight in lbs.		
type no.		process	speed per track in ft./min.	length	width	height	max. load in kW	max. voltage 380/220V	mean consumption kWh/h	empty	full
8747/100	Laborator 45 P/500 C (BX)	AP 92	16.4	19.8	4.6	6.9	29	65/100	11	4575	8544
8747/110	Laborator 45 P/750 C (BX)	(BX)	24.6	25.1	4.6	6.9	36	74/120	15	5909	11863
8747/120	Laborator 45 P/1000 C (BX)	Extoprint*	32.8	30.1	4.6	6.9	45	85/135	18	7213	15151
8747/200	Laborator 45 P/500 C (BL/FX)	AP 92	16.4	22.0	4.6	6.9	29	65/100	11	5129	10289
8747/210	Laborator 45 P/750 C (BL/FX)	(BL/FX)	24.6	27.4	4.6	6.9	36	74/120	15	6423	13607
8747/220	Laborator 45 P/1000 C (BL/FX)	HCC 101	32.8	32.4	4.6	6.9	45	85/135	23	7766	16895
8747/300	Laborator 45 P/460-R3	AP 63	15.0	22.0	4.6	6.9	35	65/105	15	5129	10289
8747/310	Laborator 45 P/610-R3	R3	20.0	23.6	4.6	6.9	35	65/105	15	5513	
8747/400	Laborator 45 P/690-BW	BW	22.6	16.8	4.6	6.9	25	65/90	12	3610	6211

The darkroom section (type 8794/100) is standard equipment on the machines.

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