



durst

Printo

Printo is a unique paper processing system, adaptable to your own specific needs and requirements. Whether you select the three module basic outfit, the professional standard dry to dry set up, or anything between the two, with Printo you build your own customised mini laboratory.



The system

Printo is a modular system adaptable to precise needs

With a total of seven modules at your disposal, you can build your individual mini lab, exactly according to your individual requirements. While just three complete modules make up the basic version, the most extensive system is an automatically replenishing dry to dry machine which performs to the highest professional standards.

The modular system has many advantages. Because the modular system meets your specific requirements, it saves you paying for unnecessary capabilities or in advance for future needs. The more you add to your system, the more creative possibilities you will enjoy. As your requirements change or become more sophisticated, you can add units without making your existing modules superfluous. With the Printo you build up your system rather than restructuring it.

Printo is thus the most flexible mechanical paper processing system on the market. You can use most photographic processes with optimum results, black and white, traditional and high

speed colour negative processes as well as making colour prints from transparencies. The speed of operation, and thus the time which your prints stay in the various chemicals, is simply regulated by a system of plug-in drive cogs.

Printo - the indispensable assistant

The Printo effectively reduces the print process to a single step. All you do is feed the paper into the first module, the Intro, and the finished print emerges in just a few minutes.

The Printo makes traditional tank processing seem positively outdated. Individual timing of the various processes, intermediate rinsing and changes of chemical baths are a thing of the past - and your hands are no longer subjected to chemical soiling! Printo is virtually a lab assistant, easy to clean and helping you to work tidily. Rely on the Printo so that you can pay full attention to the creative part of the printing process.

The modular system grows without taking up excessive space

These days, space is at a premium. The pre-fabricated modules of the Printo are of a similar size and allow for stacked storage. If you lack space for a permanent darkroom, the Printo will not encroach on your living space. To set up and take apart the Printo outfit takes minimal time and the modules can soon be stored away, out of sight.

But the Printo is always ready to take on a heavy workload. Whether you are producing a display for the camera club competition or party pictures for your friends, it will easily cope, using a minimum of energy and chemicals. With a single tank filling of 2.5 litres, 20 prints 30 x 40 cm or 100 prints 13 x 18 cm can be processed.

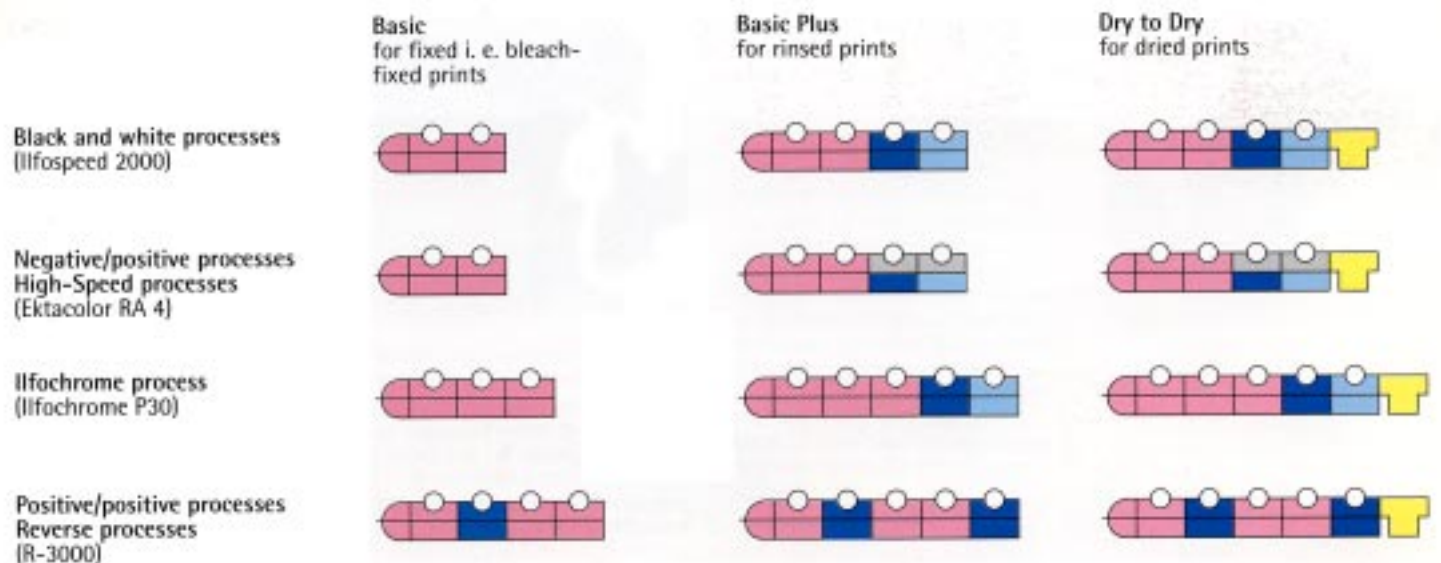


The units of the Printo modular system can be combined according to individual requirements.



Combinations

The more combinations, the more applications. Every element of the Printo Modular System adds its individual functions to the possible applications of your processor. Starting with a single configuration you can build further, adding functions as necessary to complete your own personal mini lab.



The modules



Printo Energy

The drive modules are fitted laterally onto the tank body, providing electrical connection and transmission of the mechanical drive from the motor. Depending on the usage of the Printo tank, two versions are used.

The Energy Mot drives the transport and the Archimedean screw mechanism of tanks that require no heat.

When heat is required, the Energy Therm, with its heating element, is used to provide precise thermostatically controlled temperatures. As in the Energy Mot, a synchronous motor eliminates the effect of power fluctuations and ensures smooth transport.



Printo Intro

The Intro module feeds the paper into the first bath, through a pair of rollers. Once the paper has been inserted, the light proof cover can be closed and room lights switched on. The Intro also carries the mains input and on/off switch. The other modules take their power from the Intro via plugs and sockets built into the housings to ensure user safety.



Printo Tank

The major module of the system consists of a tank with draining hoses, an immersed rack which carries the transport mechanism plus a light proof cover through which the thermometer, the Printo Thermo, can be inserted. Five pairs of rollers transport the paper while an Archimedean screw provides consistent chemical agitation. A system of plug in cogs provide the connection to the motor in the Energy unit. Squeegee rollers prevent chemicals from being carried over to the next tank, assuring consistent process quality and extended operating life for the solutions.





Printo Aquamot
This unit regulates the supply of water into the rinse tank.

Printo technology

Precision and easy handling combined

Although designed for user friendly operation, the Printo works to the highest professional standards. The immersion heaters keep bath temperature constant to within +/- 0.3 degrees Celsius, while the synchronised motors ensure a regular paper flow, regardless of voltage fluctuations. The quality of this ingenious technology becomes apparent when used with the latest critical developing processes requiring short process times and high bath temperatures as well as with mono-concentrate processes at room temperatures.

The reliability of Printo technology is reflected in each of its components

The choice of construction materials is determined by parameters affecting quality and durability. Every Printo module coming into contact with chemicals is either made of stainless steel or of the quality synthetic material, Norye, the latter being resistant to all known photo chemicals.



Printo Dry
This module, also powered from the integral electrical distribution system, incorporates smooth transport of the paper through heated air from cross flow fans and guarantees perfect production line drying of all types of black and white or colour papers.



The synchronised motors are connected to the transport rollers via a simple gear mechanism. You can easily set the cogs to four alternative positions to match the four different running speeds.



Each tank module can be drained from both sides, by a hose which is easily fitted into the openings provided on the side-walls. Curved hose parts ensure the optimum hose position when the replenishment unit is used, so that the hose does not bend and cause chemical overflow.

In place of chemical circulation pumps, a continuously rotating endless screw, modelled on the Archimedeian screw principle, is fitted. This mixes the solutions without creating turbulence, excessive air contact or uneven heat distribution.



Technical data

Power supply:	115 V AC/60 Hz UL 230 V AC/50 Hz EU
Drive motor power consumption:	3.6 W
Average heater module power:	approx. 50 W
Dryer power:	approx. 750 W
Dimensions (l x w x h):	
Printo Intro	17 x 50 x 20 cm (7 x 20 x 8 in.)
Printo Tank	21 x 50 x 20 cm (8.25 x 20 x 8 in.)
Printo Energy Mot	13 x 24 x 20 cm (5 x 9.5 x 8 in.)
Printo Energy Therm	13 x 24 x 20 cm (5 x 9.5 x 8 in.)
Printo Dry	25 x 50 x 20 cm (10 x 20 x 8 in.)
Printo Water Economizer	20 x 21.5 x 9.5 cm (8 x 8.5 x 3.75 in.)
Weight:	
Printo Intro	approx. 2.3 kg (5 lbs)
Printo Tank	approx. 5 kg (11 lbs)
Printo Energy Mot	approx. 1 kg (2.2 lbs)
Printo Energy Therm	approx. 1.1 kg (2.3 lbs)
Printo Dry	approx. 8 kg (17.6 lbs)

The latest technical developments are constantly being incorporated into Durst products. Illustrations and descriptions are therefore subject to modification.

Processable sheets:	min. 7 x 10 cm (3 x 4 in.) max. 30.5 x 40.6 cm (12 x 16 in.)
Paper transport:	by 5 roller pairs per solution
Developing or throughput speed (variable in 4 steps):	Step 1 = 2 min./solution Step 2 = 45 sec./solution Step 3 = 1 min./solution Step 4 = 3 1/2 min./solution
Tank volume:	2.5 l
Solution temperature:	from 19 °C (66.2 °F) to 45 °C (113 °F) individually variable per solution
Temperature stability:	+/- 0.3 °C
Warm-up time:	approx. 30 min. (from 20 °C/68 °F to 33 °C/91.4 °F)
Agitation:	by endless archimedean screw individually variable per solution: step 1 = 30 rpm step 2 = 60 rpm
Transport speed:	variable in steps from 48 cm/min. to 10.5 cm/min (17 in./min. to 4 in./min.)
Dry temperature:	variable from 20 °C (68 °F) to approx. 85 °C (185 °F)

Capacity with different processes (including compatibles)

Prints/hour	B/W	RA4	Ilfochrome	Kodak R 3000
30 x 40 cm (12 x 16 in.)	13	23	45	63
20 x 30 cm (8 x 12 in.)	25	43	30	117
18 x 24 cm (7 x 9.5 in.)	27	47	100	130
13 x 18 cm (5 x 7 in.)	54	94	200	260
9 x 13 cm (3.5 x 5 in.)	108	187	415	509
7 x 10 cm (3 x 4 in.)	176	308	722	835
	B/W	RA4	Ilfochrome	Kodak R 3000
Input speed	10.5 cm/min. (4 in./min.)	18 cm/min. (7 in./min.)	36 cm/min. (14 in./min.)	48 cm/min. (19 in./min.)
Throughput time per solut.	3 1/2 min.	2 min.	1 min.	45 sec.

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Durst Phototechnik
AG
Division Phototechnik
Postfach 223
Vittorio-Veneto-Straße 59
I-39042 Brixen, Italy
Telefon 0472/830620
Telefax 0472/830980



World Images, Inc.
1600 NE 25th Avenue
Hillsboro, OR 97124
Tel: 503 846 1492 Fax: 503 640 1878
E-mail: sales@world-images-inc.com
www.durst-pro-usa.com