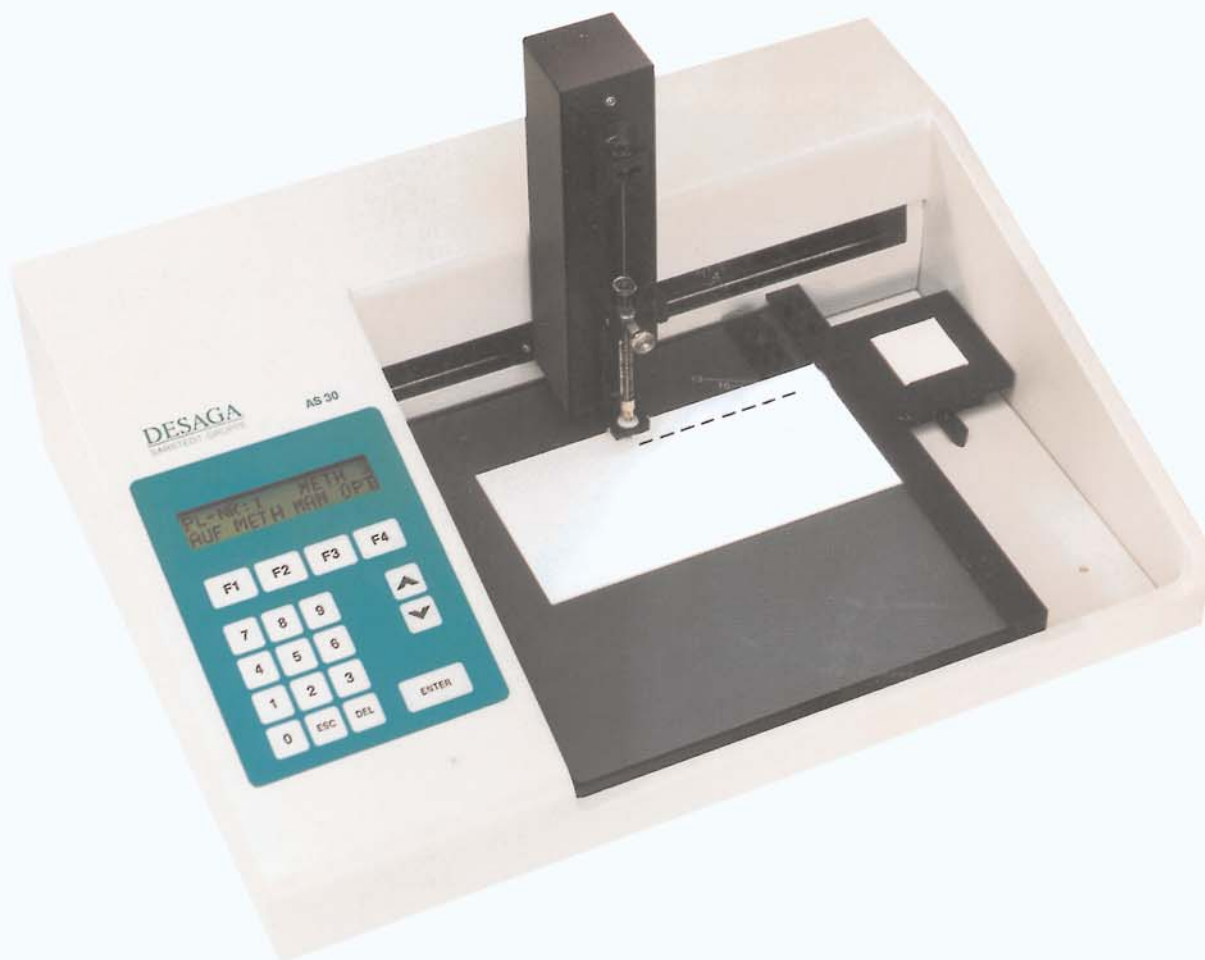


DESAGA HPTLC-Applicator AS 30

For controlled and precise Thin-layer Chromatography.
Tomorrow's technology – in action today





Our standard:

- Dot- or line application
- Programmable via keyboard or PC
- Integrated software for Autosampler and Densitometer CD 60

DESAGA HPTLC-Applicator AS 30

The HPTLC-Applicator AS 30 is a decisive contribution towards modern GxP-conform Thin-layer Chromatography and works according to the spray-on technique. A stream of gas carries the sample from the cannula tip onto the HPTLC plate. This proven principle prevents damage to the layer and allows the application tower to be moved during sample ejection. The samples can be applied up to the size of 20 x 20 cm on HPTLC-plates, TLC-plates or foils as dot or line.

During the filling process the dosing syringe is positioned over the tray which collects rinsing and flushing solvent and excess sample. The sample is injected into the body of the syringe through a lateral opening. After the syringe has been filled, a stepping motor moves the piston downwards to close the fill port.

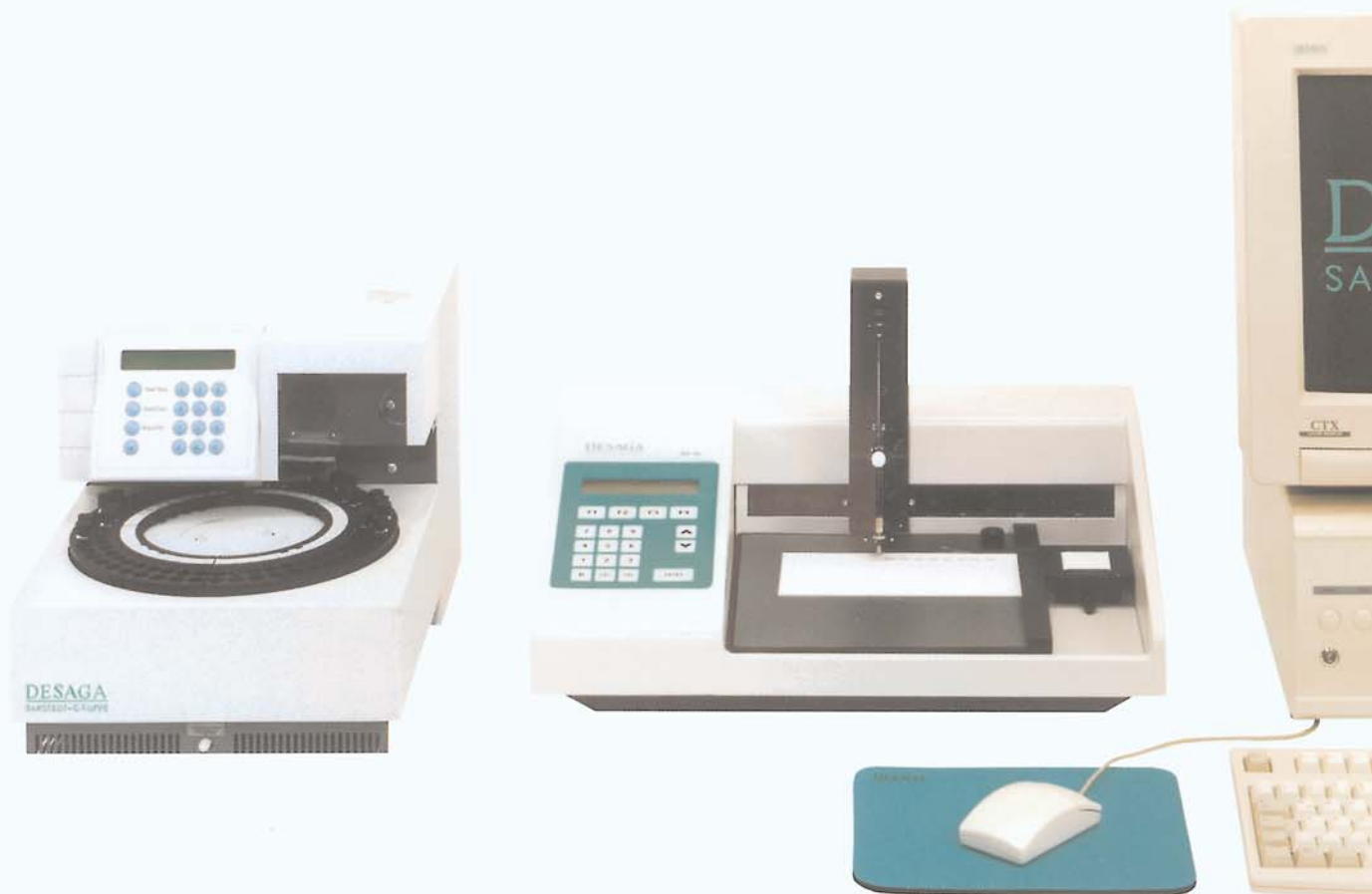
A second stepping motor moves the tower sideways across

the TLC-plate. The microprocessor controls the two stepping motors and the gas valve for accurate application, as a dot or as a line.

All parameters for the application of up to 30 samples are entered via the keyboard. The user is guided through the clearly structured menu by the 2-line LCD display.

After entering all parameters the data will be checked for plausibility, such as compliance of limit, clear assignment of lane or clear assignment of name.

One method contains the plate size, number, length and distance of the path, the volume applied, as well as the rate of application. The sample number and volume factor can be indicated for each path. The battery-buffered memory holds ten different methods.



Automation

A sampler specially modified for DESAGA expands the HPTLC-Applicator AS 30 into a fully automatic application system. The applicator controls the autosampler via a serial interface and monitors the selection of the sample containers, the delivery of the necessary amount of sample and the rinsing processes. The second serial interface allows the application parameters to be documented using a printer or laboratory computer system.

A complete workstation for quantitative HPTLC is obtained by combining the HPTLC-Applicator AS 30 with the Densitometer CD 60. A PC monitors the operation of both instruments. The integrated software allows all the parameters necessary for application and subsequent quantitative evaluation to be entered in one operation.



The saved data records can also be read from the control and evaluation program of the Densitometer CD 60, so that it is not necessary to enter the positions, allocations of the standards and samples and their names twice. This makes routine operation simpler and considerably increases the data integrity.

All information relating to a AS 30 method is stored in a data file; including plate size, number, length and spacing of the lanes, application volume and application time. Sample identity and sample container numbers are displayed during application and printed with the results.

Method data entry

Application scheme

Define parameters

Name: Synthetic dyes in red wine
 User: DESAGA Application lab
 Date: 1998-04-09

Geometric settings		Other settings	
Lanes:	[1 ... 30] [10] ✓	Plate width (mm):	100
Standards:	[1 ... 8] [3] ✓	COM Port:	COM2 (free)
Samples:	[0 ... 7] [2] ✓	Dosing syringe:	10 µl
Start position (mm):	[7 ... 121] [14] ✓	Volume (µl):	[0.4 ... 10] [1.0] ✓
Distance (mm):	[0 ... 19] [8] ✓	Cycles:	[1 ... 2] [2] ✓
Line length (mm):	[0 ... 5] [4] ✓	Time (s/µl):	[3 ... 120] [3] ✓
		Break (s):	[0 ... 15] [6] ✓

Width of application (mm): 93
 Minimum plate width (mm): 100

Cancel OK

The integrated software for the HPTLC-Applier AS 30 was especially developed for Windows 98/2000/XP. Assignment of application parameters is carried out in clear dialogue windows. The data will be checked for plausibility.

Lane assignment

Name: Synthetic dyes in red wine
 User: DESAGA Application lab
 Date: 1998-04-09

Selected sample or Standard

Samples: [1] [2]

Standards: [1] [2] [3]

Lane assignments

Lane: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Sample/Standard: [1] [2] [1] [2] [3] [1] [2] [1] [2] [3]

Cancel OK

The lane assignment is performed by mouse click. Coloured codes for samples and standards allow fast entering without mix-up. The number of applications is directly taken over from the window „method parameter“.

Graphic of TLC-Plate

Plate width: 100 mm

Lane	Liquid	Name of lane	Factor	Vial
1	Sample 1	Trollinger	1	4
2	Sample 2	Côtes du Rhone	1	5
3	Standard 1	E 124, St. 1	1	1
4	Standard 2	E 124, St. 2	1	2
5	Standard 3	E 124, St. 3	1	3
6	Sample 1	Trollinger	1	4
7	Sample 2	Côtes du Rhone	1	5
8	Standard 1	E 124, St. 1	1	1
9	Standard 2	E 124, St. 2	1	2
10	Standard 3	E 124, St. 3	1	3

Show same samples or Standards blinking.

Close window

For final control F4 calls up the graphic mode. A true picture of the plate is displayed, on which all parameters are entered. Various samples are marked by different colours.

Technical Data

Plate size	HPTLC-plates, TLC-plates and foils up to 200 x 200 mm
Path length	0–100 mm
Movement of tower	40 mm/s, 13 steps/mm
Application rate	3–120 s/μl
Resolution	2000 steps/μl
Time requirements	35 s for 30 x 300 nl in one filling
Interface	2 x RS 232
Gas supply	2.5–10 bar, 5 l/min
Mains supply	230 V, 50–60 Hz, 50 VA
Dimensions (L x W x H)	500 x 380 x 280 mm
Weight	12 kg

Ordering information

HPTLC-Applicator AS 30, 230 V

incl. 10 μl Dosing syringe, 25 μl Filling syringe, fillport, 2.5 m pressure tubing iø 4 mm, filter cardboard 40 x 40, 25 pieces

Dosing syringe 10 μl for AS 30

Filling syringe 25 μl for AS 30

Dosing syringe 100 μl for AS 30

Filling syringe 250 μl for AS 30

Filter cardboard 40 x 40, 25 pieces

Autosampler for AS 30, 230 V

incl. Teflon hose connection, connecting cable to HPTLC-Applicator AS 30 and 144 sample containers 1.5 ml

PC-Software for HPTLC-Applicator AS 30 incl. connecting cable

Compressor, 230 V

max. 8 bar, 17 l/min

HPTLC Densitometer CD 60, 230 V

with Windows Software ProQuant®

Please ask for our detailed brochure

Order no.

90.130.500

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