

Autodrop Professional Positioning System MD-P-802



ADVANTAGES

- versatile platform for R&D or production
- high axis accuracy:
repetition +/- 1 μ m
absolut +/- 5 μ m
- optional upgrade for 8 dispenser heads
- flowbox optional

The System

The Professional Positioning System MD-P-802 is designed for high accuracy in the μ m-range.

Vibration damping is achieved by using granite components for the base plate as well as for the bridge carrying the z-axis.

The substrate is placed on the x-y-table and is moved relative to the dispenser heads, while the z-axis which moves the dispenser heads up and down is stable.

This design minimizes the moved masses and improves positioning accuracy considerably. It is possible to move and control up to 8 dispenser heads or pipettes in parallel. Dispensing can be done in "start-stop"-mode or in-flight, i.e. while the head is moving. Aiming accuracy then differs ± 5 respective $\pm 10\mu$ m each single axis.

The Autodrop Professional Positioning System contains all of the electronic control elements for the positioning unit and the dispensers.

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TECHNICAL DATA

Computer controlled positioning system MD-P-802	
Drive	DC-Servomotors, x- and y-axis 150 W, z-axis 30 W
Travel range	x-axis 200 mm, y-axis 200 mm, z-axis 80 mm
Positioning accuracy	$\pm 5 \mu\text{m}$ (x- and y-axis alone), z-axis $\pm 10 \mu\text{m}$
Repetition accuracy	$\pm 1 \mu\text{m}$ (x- and y-axis alone), z-axis $\pm 5 \mu\text{m}$
Acceleration	max. 1000 mm/s ²
Load	max. 10 kg for x-y-table, z-axis 1.5 kg
Speed	max. 125 mm/s (x- and y-axis), max. 75 mm/s (z-axis)
Servo control	3-axis servo control, RS 232, freely programmable
Dimensions	w: 800 mm (without monitor tablet) / h: 1900 mm / d: 750 mm
Weight	approx. 380 kg



Sample production with the MD-P-802 Positioning System

AD_PROFESSIONAL_EN_0714 subject to change without prior notice