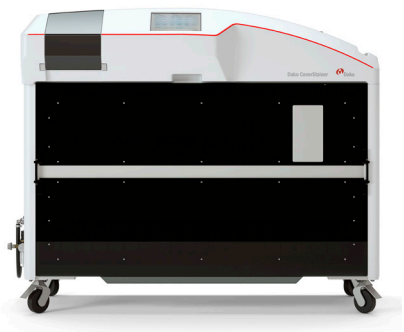
Data Sheet

Agilent Dako

Agilent Dako CoverStainer—the Efficient, Safety-Focused, and Accurate Choice for H&E



Continuous delivery of stained slides in a lean workflow

Agilent Dako CoverStainer fully automates every step of the H&E process, from baking to drying, reducing manual processes and streamlining the workflow.

The instrument—combined with Dako Ready-to-Use (RTU) reagents, Dako validated, preoptimized protocols, and the Dako Reagent Management System (DakoRMS)—provides you with a solution that is efficient, safety-focused, and provides accurate staining results.

Dako CoverStainer enables you to achieve 240 stained slides per hour, with only 46 minutes until your first coverslipped slides are ready.

The Dako H&E Solution includes:

Validated Dako Ready-to-Use H&E reagents

- Three staining intensities
- Consistent for 3,000 slides or up to five days use (whichever comes first)

Validated Dako H&E protocols

- Capacity for 19 customized protocols

Dako Reagent Management System

- Constantly circulating reagents
- Optimizes consumption and prevents precipitation

Unique rack design

- Ensures only slides are lowered into the reagent to minimize carryover
- Eliminates risk of cross contamination with slides side-by-side[1]

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Dako CoverStainer Specifications

Table 1. Instrument specifications.

Specification	Description
Instrument	The Dako CoverStainer is a fully automatic working station that covers: – Baking – Dewaxing – Staining – Coverslipping – Drying
Labeling	In Vitro Diagnostic Regulation (IVDR) (EU) 2017/746
Quality system	ISO13485
Instrument dimensions	150 cm W x 67.2 cm D x 128.0 cm H 105 kg (231.5 lbs)
Electrical requirements/power	100-120V~ 6A 50/60Hz Fuses: 2 x T6.3AL 250V Inlet voltage setting: 115V 210-240V~ 3A 50/60Hz Fuses: 2 x T3.15AL 250V Inlet voltage setting: 230V
Networking/LIS connection	LAN: preferably with DHCP server Cable: minimum CAT-5 patch cable, maximum length: 3 m (10 ft)
External ventilation	110 mm (4") duct Airflow range: 80–140 m^3/h required (47–82 ft^3/min)
Waste/drain	Sink or drain required within 2 m (6.6 ft) Individual reagent waste drains back to original bottle One bulk water waste bottle which empties automatically (10 L) One backup bulk hazardous waste bottle, manually emptied, if required (10 L)
Environmental conditions	The work area for the Dako CoverStainer must be an environment with an ambient temperature between 18°C-26°C (64°F-79°F) and 25-60% relative humidity (RH). The instrument must not be exposed to direct sunlight. – Noise level < 50 dB – Heat emission < 220 W
Water supply	¾" threat tap Pressure range: 2-4 Bar Connection to tap water. Not all sources of water may be of sufficient quality for H&E staining. It is recommended to use reagent-grade water corresponding to Clinical Laboratory Reagent Water (CLRW) standard as specified by CLSI, or water of similar quality.

Table 2. Staining Module.

Specification	Description
Heating chamber capacity	12 racks at a time, maximum 120 slides
Heating chamber temperature	Minimum 60 °C and maximum 70 °C (140–158 °F)
Slide rack capacity	1 to 10 glass slides per slide rack
Loading of slide racks	Slide racks can be loaded and unloaded continuously
Capacity	Up to 240 slides per hour
Overnight run	Maximum 240 slides 120 slides coverslipped and dried 120 slides waiting in exit bath before coverslipping
Reagent stations/reagent bottles	18 dip tanks divided into two compartments which give 36 reagent stations Dip tanks 1-2 and 14-16 (i.e. reagent stations 1-4 and 27–32) are reserved for xylene or xylene substitute due to special requirements to the solvent pumps Dip tanks 17-18 (i.e. reagent stations 33–36) are reserved for running tap water One reagent station contains approx. 300 mL 20 reagent bottle positions (1,000 mL) All reagents circulate constantly during processing (DakoRMS) 20 membrane pumps (five pumps for xylene or xylene substitute, 15 pumps for other reagents) Each pump uses one reagent bottle and can go to one reagent station or two dip tank compartments
Reagent capacity	Dako CoverStainer reagents (Dako Hematoxylins, Dako Eosins, Dako Differentiation Solution and Dako Bluing Buffer) or user-defined reagents. Please note: We recommend reagents to be changed every five days or for every 3,000 slides (whichever comes first).
Protocols	20 protocols, of which 19 can be programmed by the user It is possible to change number of steps, reagents, and time in the protocols Each rack can be loaded with any of the 20 protocols as needed Three validated, preoptimized protocols for both progressive and regressive staining
Alarms	Alarm notification when protocol is completed Alarm notification, if error occurs (screen error message pops up)

Table 3. Coverslipping.

Specification	Description
Cover glass size	24 x 50 mm
Mounting medium	Validated and recommended by Agilent Technologies: – CS703 Mounting Medium – CS705 Mounting Medium, Toluene-Free
Programming of mounting parameters	Placement of both cover glass and amount of mounting medium applied to each slide can be programmed

Dako CoverStainer

The efficent, safety-focused, and accurate choice for H&E

- Walkaway solution designed for LEAN processes
- Processes up to 240 H&E slides per hour
- First batch of coverslipped slides in as little as 46 minutes
- Proven consistent staining quality–3,000 slides or five days' usage (whichever comes first)
- Three sets of validated Dako CoverStainer reagents
- Prefilled RTU reagent bottles minimize spills and reduce handling
- Cost efficient waste management

Reference

1. Case Study on Dako CoverStainer for H&E - No Risk of Cross Contamination, **2019**, 38686)

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