DC200

The DC200 dip coaters automatically and precisely apply UV-curable, hydrophilic coatings for a variety of life science devices, with performance, features and size unmatched in the industry.
The systems were designed for the latest low particulate, low-friction lubricious coatings, with multi-coat and multi-solution capabilities for catheters, guidewires, and other surgical intravenous, urological, and endoscopic devices.

WHAT IS THE DC200?

These dip coaters offer a dual-batch platform with a load/dip/dry station in parallel with a dry/cure station to maximize manufacturing productivity of the hydrophilic coating.

BENEFITS OF THE DC200

- Automated handling and processing improves quality and consistency
- Space-saving design to optimize production area
- Increased throughput with dual batch platform
- Process flexibility via solution containment of multiple different coating solutions
- Safe and efficient use

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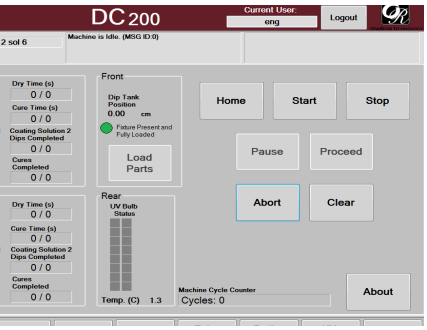

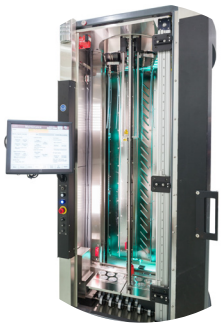

MARKET SEGMENTS

- Neurovascular
- Coronary
- Structural Heart
- Peripheral
- Endoscopy
- Urological

TECHNICAL INFORMATION

Safety Features

- UV Filtered and tinted glass
- Front-mounted E-stop and rear door E-stop
- Interlocked and keyed curing chamber
- Keyed access to main electrical enclosure and system rear door
- Software automatic and maintenance modes
- Safety interlock sensors on front and rear doors and partition door

Physical Features

- Removable cassettes
- Up to 4 precision extract zones via servo driven motion
- Individual part rotation
- 17" Touchscreen monitor
- Lifetime monitoring of UV bulbs and C-tubes through limit approaching warnings and limit-reached alarms
  - Temperature sensing via Omega Type K Thermocouple
  - UV Intensity monitoring (optional) via Radiometer and UVA probes
- 1 front panel ethernet port and 2 front panel USB ports

Software Features

- Intuitive controls with visual cues for all key machine states
- Recipe-driven for customizable process control parameters
- Access to historical data, with the ability to create, view, print and save logs
- Teach function for simple recipe creation
- Maintenance modes for control of individual components
- Modular design for easy configuration to specific needs
- Touch-screen, menu-driven PC interface
- Explicit error messages and prompts
- Sensing of all actuation positions
- Intended for production and R&D environments with 4 access levels
- Industrial PC-based controls and components

For recommendations on hydrophilic coating chemistries, reach out to Surmodics.

SURMODICS

PROCESS CAPABILITIES

• Max. part length	Fixed: 120cm C-Tube: 180cm
• Max. coat length	Fixed: 60cm C-Tube: 175cm
• Max. part diameter	3/8in (standard); alternatives optional
• Max. batch size	1-solution config: 11 (22 max parts) 2-solution config: 6 (12 max parts)

Maximum product weight (including part holders): 13 lbs (@90 psi)
Customizations available to the standard DC200 to accommodate longer part lengths or coat lengths, larger part diameters or increased batch sizes.

MOTION CONTROL

• Insertion/Extract Rate	0.5-10cm/s
• Controllable Extraction Zones	Up to 4 separate extraction speeds
• Dip tank speed repeatability	± 0.005cm/s
• Position Repeatability	± 0.001cm
• Rotation Speeds	1 – 60rpm
• Spacing between parts	3 in

DIP TANK

• Coating solution reservoir	~1.5L each reservoir (max volume)
• Funnel dimensions	0.4 – 2.75”
• Tube change-out time	0.5 – 1hr (estimated)
• C-Tube pressure rating	6psi

FLOW

• Max. exhaust flow rate	1650cfm (3) 550cfm fans (2) adjustable fans
• Max. input flow rate	910cfm 1 adjustable 30cfm fan 3 110cfm fans 2 adjustable fans 1 550cfm fan
• Air filters	Polyester (disposable) Expanded Aluminum (cleanable)
• Fan speed adjustability	0%, 40-100% of max. cfm

CURING

• Part curing distance	Less than 12” (to UV lamps)
• UV lamp warm-up time	5 - 20 minutes (configurable)
• UV lamp controllability	Lamp standby and on/off Individual power & fault detection 50%/100% power option
• UV bulb life	~500hrs before drop to 75%

OPERATION

• Load Height	Adjustable down to 5ft
• Loading Ergonomics	Press&hold button lowering Single press button lifting
• HMI ± 0.005cm/s	17” VGA Touchscreen
• Monitor Height range	43-56” (Ergotron arm)
• Front window height	27-81” height range
• Cure chamber window	17-71” height range

ELECTRICAL/PNEUMATICS

• Voltage	208VAC
• Frequency	60Hz
• Phases	3
• Wires	5
• Full-load current	60A
• Largest load	10A
• SCCR	5kA
• Air pressure	95psi

DIMENSIONS

• Height, Width, Depth	94”x 34” x 50”
• Weight	2200 lbs

MATERIALS

• Processed materials	Stainless steel, Anodized aluminum
• UV resistance	Polane-painted frame, Aluminized conduit, Kevlar sleeving
• Debris generation resistance	Sealed stage/bearings, PTFE wear plates, Contained gears/pulleys

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