DC10/20

DC10 and DC20 dip coaters apply hydrophilic coatings onto catheters, guide-wires and other medical devices, with semi-automated functionality. It offers a coating chamber with easy operator access along with an in-parallel dry/cure chamber. The DC10 accommodates single solution coating applications, while the DC20 provides automatic handling of two coating solutions.

WHAT ARE THE DC10 AND DC20?

These dip coaters have been engineered specifically for low-volume applications, utilizing reliable commercial components and proven electro-mechanical techniques for robustness, resulting in a cost-effective system.

BENEFITS OF THE DC10 AND DC20

- Safe, efficient access
- Dual batch platform for maximum productivity
- Optics can be fixed or galvo scanhead mounted
- Solution containment for up to 2 different coating solutions
- Precision dip/extract via servo driven motion
- Interlocked and keyed curing chamber
- Individual part rotation

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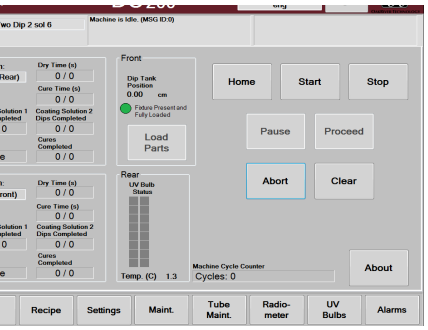

INDUSTRIES SERVED

Research, prototyping & development

Medical Device

TECHNICAL INFORMATION

Safety Features

- UV Filtered and tinted glass
- Light curtains
- Front-mounted E-stop
- Keyed access to main electrical enclosure and maintenance door
- Software automatic and maintenance modes
- Safety interlock sensors on cure chamber door and maintenance door

Physical Features

- 17" Touchscreen monitor
- Temperature sensing via Omega Type K Thermocouple
- 1 front panel ethernet port and 1 front panel USB port

Software Features

- Touch-screen, menu-driven PC interface
- Intuitive controls with visual cues for all key machine states
- Recipe-driven for customizable process control parameters
- Teach function for simple recipe creation
- Multiple zone control with independent speed control
- Maintenance modes for control of individual components
- Lifetime monitoring of UV bulbs, limit-approaching warning, and limit-reached alarms
- Modular design for easy configuration to specific needs
- Explicit error messages and prompts
- Sensing of all actuation positions
- Access to historical data, with the ability to create, view, print and save logs
- CFR 21 Part 11 Data Logging Compliance
- Intended for production and R&D environments with 4 access levels
- Industrial PC-based controls and components

PROCESS CAPABILITIES

• Part length	135-180cm
• Coat length	135-175cm
• Max. part diameter	3/8in (standard); alternatives optional
• Max. Batch size	6 (12 max parts)

CURING

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

MOTION CONTROL

• Insertion/Extract Rate	0.5-10cm/s
• Controllable Extraction Zones	Up to 3 separate extraction speeds
• Dip tank speed repeatability	± 0.005cm/s
• Position Repeatability	± 0.001cm
• Rotation Speeds	5 – 60rpm
• Spacing between parts	3 in

OPERATION

• Load Height	Adjustable down to 5ft
• HMI	17” VGA Touchscreen

FUNNELS

• Max. funnels	6 per coating solution
• Number of coating solutions	Up to 3
• Funnel dimensions	0.4” ID (standard); alternatives optional

ELECTRICAL/PNEUMATICS

• Voltage	208VAC
• Frequency	50Hz
• Phases	3
• Wires	5
• Full-load current	30A
• Largest load	10A
• SCCR	5kA

AIR FLOW

• Max. exhaust flow rate	1100cfm (2) 550cfm fans
• Air filters	Polyester (disposable) Expanded Aluminum (cleanable)

DIMENSIONS

• Height, Width, Depth	80”x 62” x 30”
• Weight	750 lbs

MATERIALS

• Processed materials	Stainless steel anodized aluminum Funnel material customizable
• UV resistance	Aluminized conduit Kevlar sleeving
• Debris generation resistance	Sealed stage/bearings Contained gears/pulleys

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