

## Balloon Mounted Catheter Ultrasonic Coating System

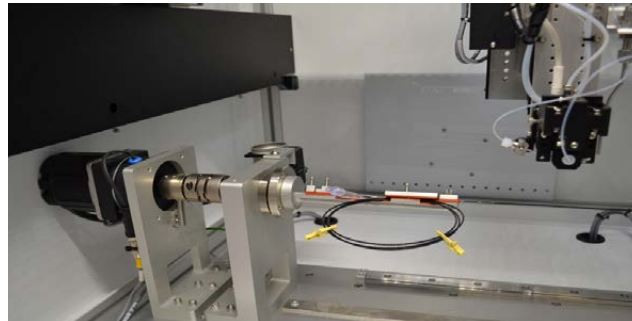


For spraying anti-restenosis solutions containing Paclitaxel, Rapamycin, Zotarolimus or other anti-proliferative solutions with plasticizers onto catheters mounted with cardiac or peripheral balloons.

- Highly uniform thin film coatings using ultrasonic nozzle technology
- Dramatic material savings compared to dip coating
- Reliable, repeatable, controllable coatings
- Durable coatings with no cracking or peeling
- Windows-based software control and programming
- Automated drying sequence following coating using precision gas hypotube
- Optional dual nozzle configuration for layering of different chemistries and ease of setup for multiple spray applications

- Two system configurations are available. The MediCoat BCC185 is designed to coat balloons up to 185 mm in length and the MediCoat BCC300 coats balloons up to 300 mm in length. For both models, the cassette fixture holds one catheter up to 2 meters in length (MediCoat BCC300 shown).
- The balloon catheter cassette assembly can be removed for coating other medical devices, making the MediCoat BCC a flexible R&D development system for medical device coatings.

Sono-Tek's patented ultrasonic atomizing nozzles produce a fine mist of uniform droplets with almost no overspray, making them ideal for precision medical device coating applications.



Rotational motor rotates catheter and balloon 360°

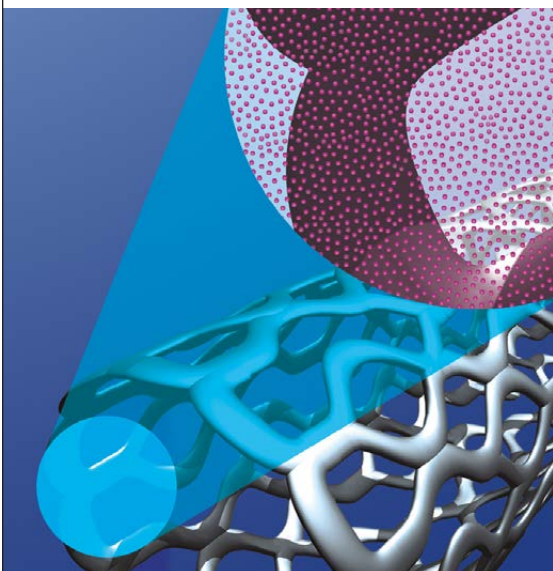


Ultrasonic spray adheres readily to balloon surfaces

PRECISION MEDICAL ULTRASONIC COATING TECHNOLOGY

**The industry's leader in ultrasonic stent coating is expanding with their new breakthrough technology for drug coated balloons.**

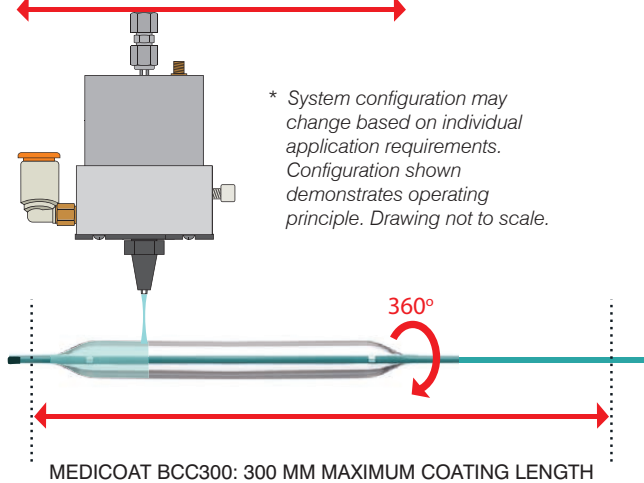
**Sono-Tek ultrasonic coating systems are a proven successful technology with anti-restenosis drug solutions used in stent and balloon coating processes, with decades of expertise spraying dozens of stent/drug solution combinations.**



## Operating Principle

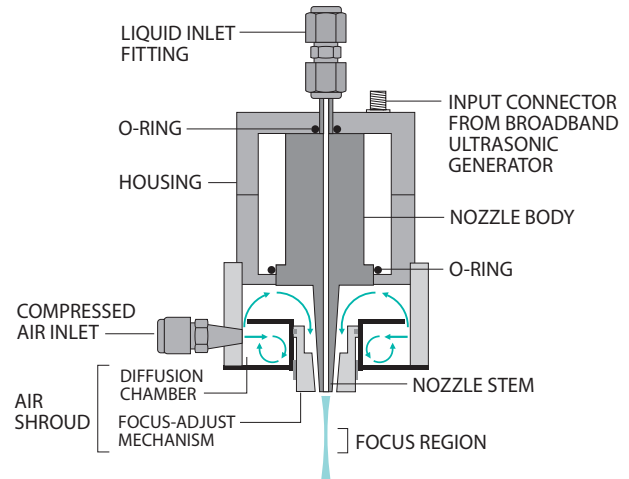
Balloons are inflated prior to coating. The catheter is laid into Sono-Tek's user friendly holding cassette and clamped in place. The cassette is then inserted into the system. Programmable rotation and lateral nozzle motion can apply uniform, controllable thin film coatings or striped coatings.

ULTRASONIC NOZZLE TRAVERSES ACROSS CATHETER DURING COATING SEQUENCE



The MediCoat BCC is configured with Sono-Tek's AccuMist precision ultrasonic atomizing nozzle:

The AccuMist™ nozzle creates a narrow, slightly bow-shaped spray pattern, adjustable from 0.070 - 0.250" (1.778 - 6.35 mm).



## MEDICOAT BCC PROGRAMMABLE COATING SYSTEM SPECIFICATIONS

### Enclosure Specifications

Work Area	500 x 500 x 100 mm (19.7 x 19.7 x 3.9 in)
<i>*NOTE: Coating area may be reduced depending on nozzle configuration, options and accessories</i>	
Repeatability	0.025 mm (0.001 in)
Resolution	0.015 mm (0.0006 in)
Max Translation Speed	200 mm/sec
Motor	Brushless DC servo
Drive Mechanism	Ball screw drive
Work Payload	11.4 kg (25 lbs.)
Inputs/Output	52
Software Control	Windows®-based (PC included)
Power	120V, 220V, +/- 10%, 50-60Hz
Air	80 PSI dry, unlubricated air
Certification	CE certified
Floor Space Required	1448 mm x 1550 mm (57 in x 61 in)
Dimensions	1240 mm W x 1818 mm H x 1328 mm D (48.8 in W x 71.6 in H x 52.3 in D)

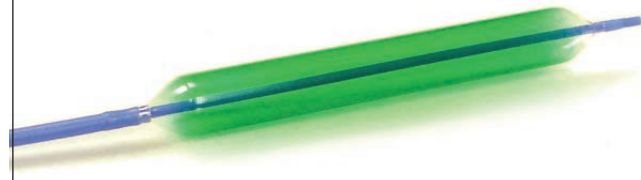
### Balloon Catheter Cassette Specifications

Catheter Length	850 mm - 2000 mm
Balloon Max Coating Length	1 to 300 mm
Balloon Max Diameter	20 mm (larger diameter capabilities available upon request)
Max Rotation Speed	900 rpm
Dimensions	1072 mm W x 223 mm H x 254 mm D (42.4 in W x 8.8 in H x 10 in D)

### Liquid Delivery Specifications

MediCoat BCC is fully integrated with Sono-Tek's Syringe PumpTI precision touch interface syringe pump.

Controls	Trigger interface, PC connect, touch screen function
Input/Output Interfaces	USB, RS 485, DB9 Serial
Capacity	One syringe per pump: up to 25ml ea.
Flow Rate Range	1 µl/min to 50 ml/min
Flow Rate Repeatability	± 0.05%
Drive Motor	1.8° Stepper Motor
Non-Volatile Memory	Stores all settings
Accuracy	±0.35%



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