

ND-SP Ultrasonic Spray Coaters

ND-SP 11/3

The Nadetech Ultrasonic Spray Coater ND-SP is a system developed for the fabrication and deposition of thin films via spray



ND-SP Ultrasonic Spray Coater system

ND-SP has been designed with the objective to perform Spray Coating techniques, such as Sol-Gel, which require uniform and very small drop sizes. Thanks to its ultrasonic spray nozzles, the system is capable to produce drops with an average diameter of 20 micrometers and a very uniform tight drop distribution. Ultrasonic nozzle allows superior sprays and coating results as well as a reduction of the coating material, up to 80%.

The dissolution is supplied through a syringe pump which offers high precision, versatility, inter-change and an easily to use system. In this sense, it is possible to carry out depositions with a wide range of flows and without volume limitation.

For optimum atomization, the viscosity of the atomized material should be under 50 cps and the solid concentration below 30%.

The ND-SP equipment could be configured for both vertical and horizontal depositions. The software, which is based on Windows®, is of easy management and allows programming any type of spray sequence depending on the size of the samples as well as the number of deposition samples.

Nadetech Innovations offers the possibility to its clients to modify the dimensions and characteristics of the ND-SP Spray Coater in order to have equipment which satisfies their necessities.

Three axes movement

Reduction in coating material

Configurable sequences

Very low flow rate capabilities

Drop size distribution very uniform



Technical specifications

ND-SP 11/3 Vertical



ND-SP 11/3 Horizontal



	Low flow rate	High flow rate	Low flow rate	High flow rate
Maximum Sample Size	350 x 250 mm		350x250 mm	
Nozzle displacement	55 mm		55 mm	
Minimum Speed	20 mm/min		20 mm/min	
Maximum Speed	1500 mm/min		1500 mm/min	
Minimum Flow Rate	1 ml/h	200 ml/h	1 ml/h	200 ml/h
Maximum Flow Rate	200 ml/h	1500 ml/h	200 ml/h	1500 ml/h

System requirements

Operative system

Windows Server 2003; Windows Server 2008; Windows XP; Windows Vista; Windows 7

Processor

Pentium 400 MHz or equivalent (Minimum) | Processor Pentium 1 GHz or equivalent

RAM

96 MB (Minimum) | 256 MB (Recommended)

Hard Disk

The Installation requires 500 MB of free disk space

Monitor

800x600, 256 colors (Minimum) | 1024x768 high color, 32-bit (Recommended)

ND-SP Spray Coater Accessories

The ND-SP Spray Coater are complemented by a comprehensive range of accessories, all of which are designed to help you get the most from your spray coater. This data sheet explains in more detail the makeup of key accessories and offers technical specifications where required.

- **ND-SP Sample Dryer: blowing hot air**
- **ND-SP Multisample Holder**
- **ND Disposals: Tubing, Syringes...**
- **ND Air Compressor**
- **ND Control PC**

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