

VCN

INDUSTRIAL SPRAY NOZZLES - AIR ATOMISING

VCN

A new product with a LONG HISTORY of Total Control

Delavan's new Variable Coating Nozzle offers total control for demanding applications including those in the pharmaceutical, food and engineering industries. The VCN's design allows the width of the spray, the atomizing air and the flow of the liquid all to be controlled independently and remotely.

Delavan has been making precision nozzles for more than 65 years and we have designed and manufactured high technology, variable width, tablet coating nozzles for a major pharmaceutical equipment manufacturer for the last 15 years.

Our latest Variable Coating Nozzle takes our technical leadership one step further by offering class leading atomization, superior droplet control and a host of advanced user-focused innovation

Variable Spray Width

- Variable spray width
- Optimizes the wetted area
- Minimizes the risk of localized over wetting
- Maintains the optimum inter-nozzle distance for all common coating media
- Spray width is remotely controllable and is easy to adjust either manually, via a pressure regulator or automatically from a control panel
- Setting is uniform between nozzles and consistent each time the nozzle is operated - ideal for repeatable, automatic control in a multi nozzle configuration
- Low air consumption minimizes running costs

Liquid Shut Off

- The flow of the liquid can be shut off automatically to avoid dripping
- A special shut off sealing kit is available for use with low viscosity liquids.

Total Droplet Control

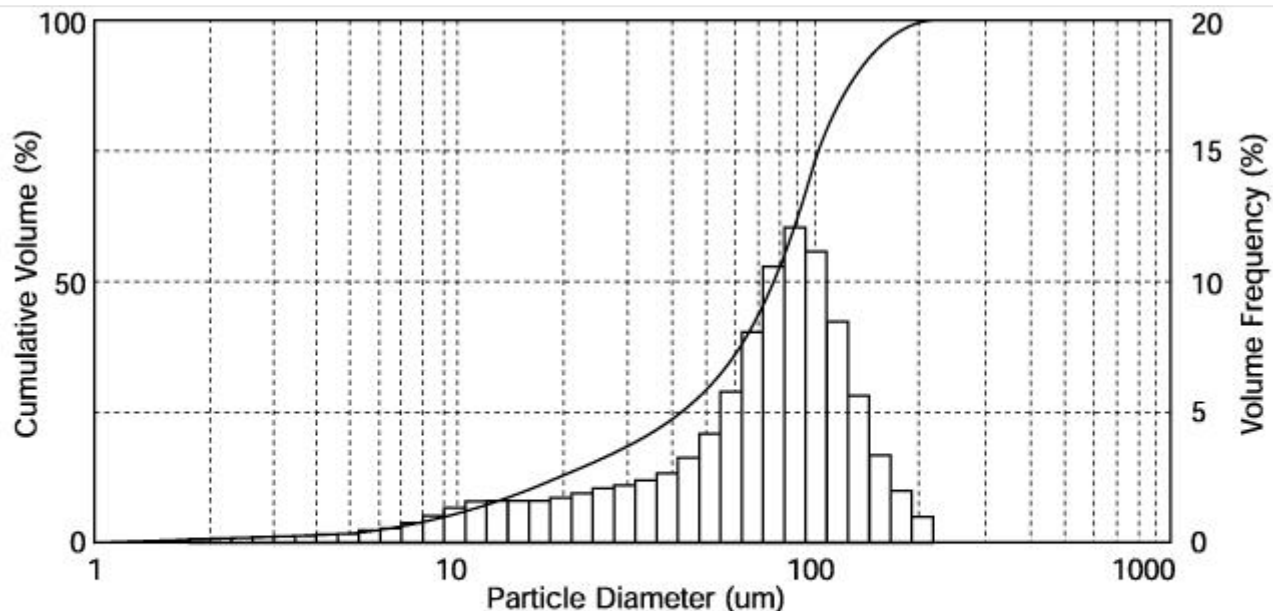
- Consistency - Each VCN produces the same droplet spectrum throughout the run, every run.
- Accuracy - Our technical expertise guarantees a closely controlled droplet spectrum
- Adaptability - The VCN Unit is available in sizes ranging from 0.8 to 2.5mm and will cope with a wide variety of coating media. If you need help to specify a nozzle for your application please contact us.

Quality Assurance and Certification

Inspection

- All parts are manufactured on our world class CNC machinery and inspected at every stage of manufacture in our ISO9001 manufacturing facility.
- Every complete unit is tested and individually serial numbered prior to dispatch

CAPACITY CHARTS



This graph shows the control and accuracy of the VCN's droplet spectrum. This graph was generated on a Malvern Instruments, Insitex laser diffraction droplet analyser. The Delavan VCN was spraying a typical tablet coating medium with a viscosity of approximately 200 cP. Delavan would like to thank Malvern Instruments for their continued assistance.

Nozzle Number	Orifice diameter (mm)	Liquid capacity (lh) on water at 0.7 bar atomising air	
		0.35 bar	1.0 bar
VCN 0.8	0.8	9	15
VCN 1.0	1.0	14	26
VCN 1.2	1.2	21	40
VCN 1.4	1.4	29	54
VCN 1.6	1.6	37	72
VCN 1.8	1.8	46	91
VCN 2.0	2.0	57	112
VCN 2.3	2.3	76	148
VCN 2.5	2.5	89	175

ORDERING INFORMATION

Complete Kits



Complete Kit with Push Fit Connections

Contains: 1 Body with 1/4" BSPP atomising air inlet and 3 push fit connections, 5-Small Seals (PTFE), 5-Large Seals (EPDM), 1 Spare Air Cap, 1 Spare Needle, 1 Needle Extraction Tool, 1 Liquid Tip Spanner.
Part Number: W18820-xx
 Please specify Liquid Tip Size required 0.8 - 2.5mm



Complete Kit with Threaded Connections

Contains: 1 Body with threaded connections, 5-Small Seals (PTFE), 5-Large Seals (EPDM), 1 Spare Air Cap, 1 Spare Needle, 1 Needle Extraction Tool, 1 Liquid Tip Spanner.
Part Number: W18800-xx
 Please specify Liquid Tip Size required 0.8 - 2.5mm

Spare Parts



Standard Seal & Spring Kit

Contains: 5-Small Seals (PTFE), 5-Large Seals (EPDM), 1 Spring.
Part Number: W18813



Needle Kit

Contains: 1 Needle Kit.
Part Number: W18804



Air Cap

Contains: 1 Air Cap.
Part Number: W18801
 Please specify Liquid Tip Size of the Nozzle



Knurled Ring

Contains: 1 Knurled Ring.
Part Number: W09406



End Cap

Contains: 1 End Cap.
Part Number: W18807



Spring

Contains: 1 Spring.
Part Number: W08435-5



Needle Head

Contains: 1 Needle Head.
Part Number: W18806



Low Viscosity Shut Off Kit

Contains: 1 Liquid tip fitted with seal (PVDF), 1 Needle.
Part Number: W18816-xx
 Please specify Liquid Tip Size required 0.8 - 2.5mm

Tools

Needle Extraction Tool

Contains: 1 Needle Extraction Tool.
Part Number: W18815

Liquid Tip Spanner

Contains: 1 Liquid Spanner
Part Number: W18814