

# 3 Application Guide

SPECIFIERS GUIDE

WELCOME TO DELAVAN

Meeting the **challenges**  
of new  
**industries** and *NEW markets*

**DELAVAN**<sup>®</sup>  
Spray Technologies

# SECTION INDEX

Section	Page No.
<i>Introduction</i> .....	3.1
<i>Industry Applications</i> .....	3.1
<i>Nozzle Guide</i> .....	3.6
<i>Notes</i> .....	3.14

Contact our Helpline for  
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**SPRAYING APPLICATIONS**

With more than 60 years of nozzle application experience Delavan has listed some of the more common spray nozzle applications in the table below. Please use the Nozzle Technology section to calculate the desired flow rate, spray angle, operating pressure and material and then use the tables in this section to find the nozzle you need.

The first table groups applications by industry and the second lists the nozzle types suggested for each application. Certain installation sites will often present unique design constraints but the most common nozzles for particular applications are presented in the next table on page 3.6.

**WE ARE HERE TO HELP**

If you need more detailed information or advice then Delavan sales engineers and technical staff are always available to answer your questions.

**INDUSTRY APPLICATIONS**

INDUSTRY	APPLICATION	SEE APPLICATION TYPES
<b>Agriculture/Horticulture/Livestock</b>	Plant Protection / Watering / Irrigation	Application 3 – Dust Suppression – Roads
	Stubble Burning	Application 26 – Oil Burning
	Aerial Spraying	Application 25 – Oil Pollution Control
	Livestock Showering / Cooling	Application 37 – Livestock Cooling
<b>Automotive Industry</b>	Component or Body Washing Machines	Application 15 – Component Washing
	De-burring	Application 16 – De-burring
	Dip Tank Agitation	Application 17 – Liquid Agitation
	Leak Test	Application 20 – Leak Testing
	Foam Breaking	Application 6 – Foam Breaking
<b>Bottling and Canning Industries</b>	Conveyor Lubrication	Application 7 – Roll Lubrication
	Bottle & Can Cooling	Application 15 – Component Washing
	Washing – Trays etc.	Application 10 – Phosphate Spraying
	Drying	Application 13 – Air Drying
	Foam Breaking	Application 6 – Foam Breaking
<b>Brewing Industry</b>	Vessel Clean In Place Systems	Application 30 – Cleaning In Place
	Mash Tun Cleaning	Application 30 – Cleaning In Place
	Foam Breaking	Application 6 – Foam Breaking
	Bottle Washing	Application 15 – Component Washing
	Keg Washing	Application 30 – Cleaning In Place
	Conveyor Lubrication	Application 7 – Roll Lubrication
	Drying	Application 13 – Air Drying
	Trub Dispersal	Application 14 – Coke / Slag Quenching
<b>Carpet Industry</b>	Application of Stain Repellent Chemicals	Application 7 – Roll Lubrication

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INDUSTRY APPLICATIONS

INDUSTRY	APPLICATION	SEE APPLICATION TYPES
<b>CHEMICAL &amp; PETROCHEMICAL Manufacturing</b>	Dust Suppression	Application 2 – Dust Suppression – Transfer Points
	Storage Tank Cooling	Application 23 – Fire Protection
	Leaching	Application 15 – Component Washing
	Odour Control	Application 22 – Odour Control
	Vessel Clean In Place Systems	Application 30 – Cleaning In Place
	Container Washing – Internal	Application 30 – Cleaning In Place
	Container Washing – External	Application 15 – Component Washing
	Keg Washing	Application 30 – Cleaning In Place
	IBC Washing – Internal	Application 30 – Cleaning In Place
	IBC Washing – External	Application 15 – Component Washing
	Conveyor Washing	Application 21 – Vehicle Washing
	Conveyor Lubrication	Application 7 – Roll Lubrication
	Foam Breaking	Application 6 – Foam Breaking
	Oil Slick – Detergent Spraying	Application 25 – Oil Pollution Control
	Gas Scrubbing	Application 35 – Gas Scrubbing
	Steam Conditioning	Application 36 – Steam Conditioning
	Liquid Waste Incineration	Application 26 – Oil Burning
	Fire Protection	Application 23 – Fire Protection
Safety Showers & Eye Baths	Application 44 – Safety Showers	
Coke or Slag Quenching	Application 14 – Coke / Slag Quenching	
<b>Civil Engineering</b>	Dust Suppression	Application 3 – Dust Suppression – Roads
	Building Cleaning	Application 9 – Descaling
	Decorative Water Features	Application 45 – Decorative Water Features
	Wood Preservation	Application 18 – Paint Spraying
	Roof Cooling	Application 23 – Fire Protection
<b>Electronics Industry</b>	Etch and Wash Chemical Spraying	Application 40 – Etch And Wash Chemical Spraying – Electronics
	Dip Tank Agitation	Application 17 – Liquid Agitation
	Drying	Application 13 – Air Drying
	Foam Breaking	Application 6 – Foam Breaking
<b>Environmental</b>	Dust Control – Roads	Application 3 – Dust Suppression – Roads
	Pollution Control – Oil Slick Spraying	Application 25 – Oil Pollution Control
	Effluent Treatment	Application 28 – Effluent Treatment
	Spray Ponds	Application 29 – Spray Ponds
	Odour Control	Application 22 – Odour Control
	Dust Suppression	Application 2 – Dust Suppression – Transfer Points Application 3 – Dust Suppression – Roads
	Wheel Wash	Application 5 – Wheel Wash
	Road Sweeping	Application 24 – Weed Control

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INDUSTRY	APPLICATION	SEE APPLICATION TYPES
<b>Environmental (continued)</b>	Weed Control	Application 24 – Weed Control
	Liquid Waste Incineration	Application 26 – Oil Burning
	Weir Wall Washing	Application 16 – Oil De-burring
<b>Food Processing Industry</b>	Container Washing - External	Application 15 – Component Washing
	Container Washing – Internal	Application 30 – Cleaning In Place
	Conveyor Washing	Application 21 – Vehicle Washing
	Drying	Application 13 – Air Drying
	Leaching	Application 15 – Component Washing
	Foam Breaking	Application 6 – Foam Breaking
	Fruit/Vegetable Washing	Application 15 – Component Washing
	Fruit/Vegetable Coating	Application 7 – Roll Lubrication
	Mould Cooling	Application 31 – Mould Cooling
	Release Agent Spraying	Application 7 – Roll Lubrication
	Disinfection – Spraying or Fogging	Application 27 – Humidification
	Spray Drying	Application 32 – Spray Drying
	Oven Humidity Control	Application 27 – Humidification
<b>HVAC</b>	Heating – Oil Burning	Application 26 – Oil Burning
	Humidification	Application 27 – Humidification
	Fogging	Application 27 – Humidification
	Fume Scrubbing	Application 19 – Fume Scrubbing
<b>Meat Processing</b>	Abattoir Cleaning	Application 15 – Component Washing
	Disinfection – Spraying or Fogging	Application 27 – Humidification
	Conveyor Washing	Application 21 – Vehicle Washing
	Foam Breaking	Application 6 – Foam Breaking
<b>Mechanical Engineering</b>	Tool Cooling	Application 4 – Cutter Cooling
	Mould Release Spraying	Application 7 – Roll Lubrication
	Lubricant & Grease Spraying	Application 7 – Roll Lubrication
<b>Metal Finishing</b>	Static, Rotary or Conveyor Component Washing Machines	Application 15 – Component Washing
	De-burring	Application 16 – De-burring
	Grinding Dust Removal	Application 5 – Wheel Wash
	Electroplating – Tank Agitation	Application 17 – Liquid Agitation
	Electroplating – Product Washing	Application 10 – Phosphate Spraying
	Pre-treatment Wash	Application 15 – Component Washing
	Pre-treatment Plating Iron or Zinc Phosphate	Application 10 – Phosphate Spraying
	Protective Coating Spraying	Application 7 – Roll Lubrication
	Paint Spraying	Application 18 – Paint Spraying
	Drying	Application 13 – Air Drying
	Dip Tank Agitation	Application 17 – Liquid Agitation

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<b><i>Metal Finishing (continued)</i></b>	Foam Breaking	Application 6 – Foam Breaking
	Safety Showers & Eyebaths	Application 44 – Safety Showers
	Fume Scrubbing	Application 19 – Fume Scrubbing
<b><i>Metal Heat Treatment</i></b>	Billet Quenching	Application 11 – Continuous Casting Cooling
	Strip Cooling	Application 8 – Cooling Mill Rolls
<b><i>Metal Production Industry</i></b>	Roll Lubrication	Application 7 – Roll Lubrication
	Roll Cooling	Application 8 – Cooling Mill Rolls
	Descaling	Application 9 – Descaling
	Dust Control – at Descaling Points	Application 2 – Dust Suppression – Transfer Points
	Pickling	Application 10 – Phosphate Spraying
	Continuous Casting – Cooling	Application 11 – Continuous Casting
	Wire Die Lubrication / Cooling	Application 12 – Wire Die Lubrication
	Sheet Washing	Application 10 – Phosphate Spraying
	Drying	Application 13 – Air Drying
	Sheet Oiling	Application 7 – Roll Lubrication
	Coke or Slag Quenching	Application 14 – Coke Quenching
<b><i>Mineral Extraction &amp; Processing</i></b>	Gravel or Coal Washing	Application 1 – Gravel / Coal Washing
	Dust Control – Transfer Points	Application 2 – Dust Suppression – Transfer Points
	Dust Control – Roads	Application 3 – Dust Suppression – Roads
	Cutter Cooling	Application 4 – Cutter Cooling
	Wheel Wash	Application 5 – Wheel Wash
	Foam Breaking	Application 6 – Foam Breaking
<b><i>Paper Making Industry</i></b>	Bark Removal	Application 16 – De-burring
	Edge Trimming	Application 42 – Edge Trimming
	Pulp – Water Addition	Application 43 – Pulp – Water Addition
	Foam Breaking	Application 6 – Foam Breaking
	Filter / Screen Washing	Application 11 – Continuous Casting Cooling
<b><i>Pharmaceutical Industry</i></b>	Vessel Clean In Place Systems	Application 30 – Cleaning In Place
	Tablet Coating	Application 33 – Tablet Coating
	Bottle Washing	Application 15 – Component Washing
	Drying	Application 13 – Air Drying
	Conveyor Lubrication	Application 7 – Roll Lubrication
	Dust Suppression	Application 2 – Dust Suppression – Transfer Points
	Fume Scrubbing	Application 19 – Fume Scrubbing
	Centrifuge Cake Washing	Application 34 – Centrifuge Cake Washing
<b><i>Photographic Industry</i></b>	Film Processing	Application 40 – Etch And Wash Chemical Spraying – Electronics
	Dip Tank Agitation	Application 17 – Agitation
	Drying	Application 13 – Air Drying

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<b>Power Industry</b>	Flue Gas De-Sulphurisation	Application 35 – Gas Scrubbing
	Steam Conditioning	Application 36 – Steam Conditioning
	De-Superheating	Application 36 – Steam Conditioning
	Spray Ponds	Application 29 – Spray Ponds
	Cooling Towers	Application 29 – Spray Ponds
	Gravel / Coal Washing	Application 1 – Gravel / Coal Washing
	Dust Control – Transfer Points	Application 2 – Dust Suppression – Transfer Points
	Dust Control – Roads	Application 3 – Dust Suppression – Roads
	Flask Decontamination – Nuclear	Application 38 – Flask Decontamination – Nuclear
	Magnox Extinguishing	Application 39 – Magnox Extinguishing – Nuclear
	Safety Showers & Eyebaths	Application 44 – Safety Showers
	Pollution Control – Oil Slick Spraying	Application 25 – Oil Pollution Control
	Wheel Wash	Application 5 – Wheel Wash
	Insulator Washing	Application 5 – Wheel Wash
	Transformer Fire Protection	Application 23 – Fire Protection
Coke or Slag Quenching	Application 14 – Coke / Slag Quenching	
<b>Rubber Processing Industry</b>	Conveyor Lubrication	Application 7 – Roll Lubrication
	Belt Cooling	Application 41 – Belt Cooling
	Mould Release Agent Spraying	Application 7 – Roll Lubrication
	Foam Breaking	Application 6 – Foam Breaking
<b>Textile Industry</b>	Moistening of cloth or yarn	Application 27 – Humidification
	Spraying of Stain Repellent Chemicals	Application 7 – Roll Lubrication
<b>Transport Industry</b>	Vehicle Washing	Application 21 – Vehicle Wash
	Wheel Wash	Application 5 – Wheel Wash
	Odour Control – Ships	Application 22 – Odour Control
	Fire Protection – Ships	Application 23 – Fire Protection
	Weed Control – Railway Lines, Runways & Pavements	Application 24 – Weed Control
	Oil Slick Detergent Spraying	Application 25 – Oil Pollution Control

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## NOZZLE GUIDE

Having found the application number from the previous table, use this table to determine the nozzle you require.

The various fitting options are:

- One piece threaded – This type of nozzle screws onto or into a mating part.
- Tip Type – A flanged nozzle which requires a body and cap assembly.
- Delafit – A quick release system which allows tool free replacement.

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If you need more detailed information or advice then Delavan sales engineers and technical staff are always available to answer your questions.

### APPLICATION 1 – GRAVEL/COAL WASHING

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, TJ, AN		DFAC, DFTJ, DFAN		Eyelets, HNS
Hollow Cone Spray	AE, AF, AH, AG		DFAE, DFAF		
Solid Cone Spray	BI, BN		DFBI, DFBN		
Other Nozzles					

Use Hollow Cone sprays when the wash water is re-circulated and is likely to contain debris.

### APPLICATION 2 – DUST SUPPRESSION – TRANSFER POINTS

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					Eyelets, HNS, Swivels
Hollow Cone Spray	AE, AF, WR, WRW	DC	DFAE, DFAF		
Solid Cone Spray	BI, BN, BK, BL	WL	DFBI, DFBN		
Other Nozzles					

### APPLICATION 3 – DUST SUPPRESSION – ROADS

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, AN				Eyelets, HNS
Hollow Cone Spray					
Solid Cone Spray	BI, CJ				
Other Nozzles				Sector Sprays	

### APPLICATION 4 – CUTTER COOLING

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC(0°)				HNS
Hollow Cone Spray	WM				
Solid Cone Spray	BL				
Other Nozzles					

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**APPLICATION 5 – WHEEL WASH**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, TJ	AD			HNS
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 6 – FOAM BREAKING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AN	D Tip			Eyelets, HNS
Hollow Cone Spray	RA				
Solid Cone Spray	BN, BY				
Other Nozzles					

Due to the complex nature and variation of different chemical foams please contact Delavan's Customer Service Team for advice on this application.

**APPLICATION 7 – ROLL LUBRICATION**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray		LF, LK, D Tip		AL15, AL60, Lo-Air	HNS, Swivels
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 8 – COOLING MILL ROLLS**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, CAC	LF	DFAC	LD, AD	HNS
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 9 – DESCALING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AZ, BZ, 343, 344	DE, DO, DD, LO			HNS
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 10 – PHOSPHATE SPRAYING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, TJ, AN		DFAC, DFTJ, DFAN	LD, AD	Eyelets, Ball Swivel Eyelets, HNS, Adjustable Joints
Hollow Cone Spray	AE, AF		DFAE, DFAF		
Solid Cone Spray	BI, BN		DFBI, DFBN		
Other Nozzles					

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**APPLICATION 11 – CONTINUOUS CASTING COOLING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC	LF	DFAC, FB Cap & Body	LD, AD	HNS
Hollow Cone Spray					
Solid Cone Spray	BI, BN, BQ, BT		DFBI, DFBN, DFBO, DFBT		
Other Nozzles					

**APPLICATION 12 – WIRE DIE LUBRICATION (AND COOLING)**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS
Hollow Cone Spray	WM				
Solid Cone Spray				AL, AL45	
Other Nozzles					

**APPLICATION 13 – AIR DRYING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, DJ	LF, SL, Blow Off	DFAC, FB Cap & Body		HNS, Swivels, Adjustable Joints
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 14 – COKE QUENCHING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS
Hollow Cone Spray	AE, AF, BE		DFAE, DFAF		
Solid Cone Spray	BI, BN, CM, BY		DFBI, DFBN		
Other Nozzles					

**APPLICATION 15 – COMPONENT WASHING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, CAC, TJ		DFAC, DFTJ		HNS, Ball Swivel Eyelets
Hollow Cone Spray	AE		DFAE		
Solid Cone Spray	BI		BFBI		
Other Nozzles					

**APPLICATION 16 – DE-BURRING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AQ, AZ	LQ			HNS
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

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**APPLICATION 17 – LIQUID AGITATION**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC				HNS, Ball Swivel Eyelets, Adjustable Joints
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles				BB Eductor	

**APPLICATION 18 – PAINT SPRAYING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray		LK, LQ		Airless Tips	Turnaflo
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 19 – FUME SCRUBBING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS, Ball Swivel Eyelets
Hollow Cone Spray	AE, AF, PJ		DFAE, DFAF		
Solid Cone Spray	BN		DFBN	AL30	
Other Nozzles					

**APPLICATION 20 – LEAK TESTING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS, Ball Swivel Eyelets
Hollow Cone Spray					
Solid Cone Spray	BN, BI, CJ		DFBN, DFBI		
Other Nozzles					

**APPLICATION 21 – VEHICLE WASHING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, CAC, AN, TJ, AZ	LF	DFAC, DFTJ, DFAN, FB Cap & Body		HNS, Ball Swivel Eyelets, Swivels
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 22 – ODOUR CONTROL**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray				AL60	HNS
Hollow Cone Spray	WM	WG	FB Cap & Body		
Solid Cone Spray				GA, GC, AL, AL45	
Other Nozzles					

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**APPLICATION 23 – FIRE PROTECTION**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AN				HNS
Hollow Cone Spray					
Solid Cone Spray	BI, BN, CM, BY			CL7	
Other Nozzles					

**APPLICATION 24 – WEED CONTROL**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AN	LF	FB Cap & Body		HNS, Swivels
Hollow Cone Spray	RA				
Solid Cone Spray	BL	WL	FB Cap & Body		
Other Nozzles					

**APPLICATION 25 – OIL POLLUTION CONTROL**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC			QLD, FLD	HNS, Swivels, Quick Couplers
Hollow Cone Spray	RA				
Solid Cone Spray					
Other Nozzles					

Note:- QLD and FLD are not featured in this catalogue. Please contact Delavan's Customer Service Team for further details.

**APPLICATION 26 – OIL BURNING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC	LF			Protek
Hollow Cone Spray		WDA		Swirl-Air	
Solid Cone Spray		WDB		SNA, AIRO.	
Other Nozzles					

Please contact Delavan's Customer Service Team for further details of oil burning nozzles and our Oil Burner leaflet.

**APPLICATION 27 – HUMIDIFICATION**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray				AL60	
Hollow Cone Spray	WM	WG	FB Cap & Body	Swirl-Air	
Solid Cone Spray				AL, AL30, AL45, SNA	
Other Nozzles					

**APPLICATION 28 – EFFLUENT TREATMENT**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AN				HNS, Quick Couplers
Hollow Cone Spray	BE, WRA, WRA-RD				
Solid Cone Spray	CM				
Other Nozzles					

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**APPLICATION 29 – SPRAY PONDS**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS, Quick Couplers
Hollow Cone Spray	BE, RA, WRA				
Solid Cone Spray					
Other Nozzles					

**APPLICATION 30 – CLEAN IN PLACE**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS
Hollow Cone Spray	PU, PJ				
Solid Cone Spray	BI, BN, CLFD 13			CIP21, DWN19, KN9	
Other Nozzles					

Note:- As vessels vary widely in shape and size, please contact Delavan's Customer Service Team for advice on Clean In Place Systems.

**APPLICATION 31 – MOULD COOLING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS, Swivels, Adjustable Joints
Hollow Cone Spray					
Solid Cone Spray	BI, BN, BL	WL	DFBI, DFBN, FB Cap & Body		
Other Nozzles					

**APPLICATION 32 – SPRAY DRYING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					Assembly Tools, Kwik-Chek Orifice Gauge
Hollow Cone Spray				Mini SDX, SDX, SDX III, Swirl-Air	
Solid Cone Spray					
Other Nozzles					

Delavan produce a complete range of Spray Drying nozzles and accessories. Please contact Delavan's Customer Service Team for full details and a copy of our Spray Drying literature.

**APPLICATION 33 – TABLET COATING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray				AL15, AL60, AFAL, Airless Tip	
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

Note:- AFAL is a variable fan width, air atomising nozzle specifically designed for batch tablet coating and is not featured in this catalogue. Please contact Delavan's Customer Service Team for further details.

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**APPLICATION 34 – CENTRIFUGE CAKE WASHING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, TJ	LF	DFAC, DFTJ, FB Cap & Body		HNS
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 35 – GAS SCRUBBING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS
Hollow Cone Spray	AF, BE, AE, UC				
Solid Cone Spray	BI, BN, CM, BY, CJ				
Other Nozzles					

*Due to the complex nature and variation of the different chemicals and gas scrubber designs please contact Delavan's Customer Service Team for advice on this application.*

**APPLICATION 36 – STEAM CONDITIONING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS
Hollow Cone Spray	AE				
Solid Cone Spray	BI, CJ				
Other Nozzles					

**APPLICATION 37 – LIVESTOCK COOLING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS, Swivels
Hollow Cone Spray	WA, WR, WRW	WG			
Solid Cone Spray	BL, BI, BN	WL			
Other Nozzles					

**APPLICATION 38 – FLASK DE-CONTAMINATION – NUCLEAR**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AZ, AQ	LQ			HNS
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

**APPLICATION 39 – MAGNOX EXTINGUISHING – NUCLEAR**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS
Hollow Cone Spray					
Solid Cone Spray	CJ				
Other Nozzles					

Contact our Helpline for any special requirements:  
Tel: +44 (0) 151 424 6821  
Fax: +44 (0) 151 495 1043  
e-mail: sales@delavan.co.uk  
Web: www.delavan.co.uk

NOZZLE GUIDE

**APPLICATION 40 – ETCH AND WASH CHEMICAL SPRAYING – ELECTRONICS**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	CAC	LF, LD, LE			HNS, Swivels, Adjustable Joints
Hollow Cone Spray	WM	WG			
Solid Cone Spray	BL	WL			
Other Nozzles					

**APPLICATION 41 – BELT COOLING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC				HNS
Hollow Cone Spray					
Solid Cone Spray	BT, BQ				
Other Nozzles					

**APPLICATION 42 – EDGE TRIMMING**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC(0°), AQ(0°)				HNS
Hollow Cone Spray					
Solid Cone Spray					
Other Nozzles					

*Note:- Delavan have manufactured many types of edge trimming nozzles for a wide range of industries. Please call Delavan's Customer Service Team for further details.*

**APPLICATION 43 – WATER ADDITION**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray					HNS
Hollow Cone Spray	AE, WR, RA				
Solid Cone Spray					
Other Nozzles					

**APPLICATION 44 – SAFETY SHOWERS AND EYEBATHS**

Delavan produce a wide range of safety showers, Eyebaths and custom designed units for all applications. Please contact Delavan's Customer Service Team for further advice and a copy of the Safety Showers literature.

**APPLICATION 45 – DECORATIVE WATER FEATURES**

SPRAY TYPE	ONE PIECE THREADED	TIP TYPE	DELA-FIT	OTHER	ACCESSORIES
Flat Spray	AC, AN, TJ				
Hollow Cone Spray	BE, WRA, WRS				
Solid Cone Spray	CM, BY				
Other Nozzles					

HNS = Header Nozzle Socket

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**WE ARE HERE TO HELP**

If you need more detailed information or advice then Delavan sales engineers and technical staff are always available to answer your questions.