

COMPONENT PARTS

SDX Recommended Cleaning procedure

Depending upon your specific application, SDX component parts (orifice, swirl chamber/end plate) and the body, will require cleaning to remove product build up.

The frequency of cleaning will depend upon individual applications.

In order to maximize the life of the component parts, the following cleaning procedure is recommended:

Soak the components in a commercially available cleaning solution, using the manufacturer's recommendation on time and concentrate.

If making your own, a caustic solution of 20% concentrate or less may be used – but caution should be used, as caustic will eventually affect the component parts.

Parts should not be soaked in caustic solutions overnight, as this may deteriorate the binder used in the tungsten carbide material. Soak no longer than 30 minutes, then rinse thoroughly with water.

Another option is to place the components in an ultrasonic cleaner with water or mild soap for approximately 10-15 minutes, depending upon the cleaning requirements.

This cleaning procedure is appropriate for HSS, tungsten carbide and ceramic materials.

COMPONENT PARTS - MINI SDX

MATERIALS

DESCRIPTION	PART NO.	MATERIAL
Orifice Disc	902-XX*	Tungsten Carbide
Nozzle Body	32932	303 SS
Swirl Chamber	32933-X*	Ceramic
Swirl Chamber	50791-X*	Tungsten Carbide
O-Ring Seal	31352-013	Viton
1/4" NPTF Adaptor	32931-1	303 SS
3/8" NPTF Adaptor	32931-2	303 SS

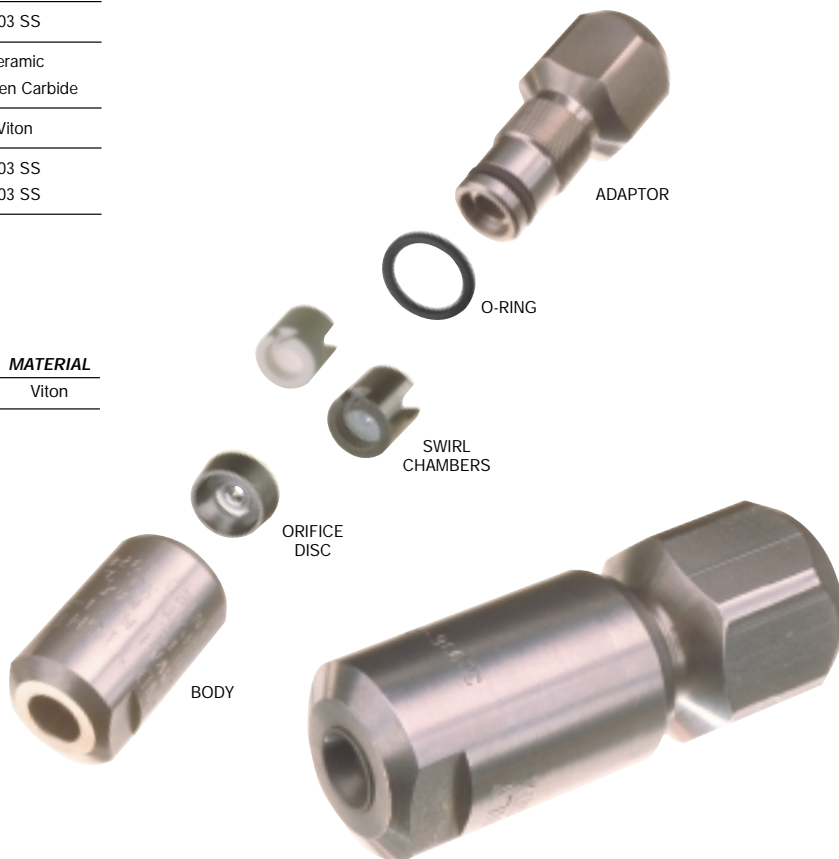
* Refer to capacity chart for dash number.
NOTE: - 50791-1 is equivalent to 32933-1.

SEAL KIT (24 SEALS)

PART NO.	DESCRIPTION	MATERIAL
49109	Seal Kit	Viton

MINI SDX ASSEMBLY PROCEDURE

- Place the nozzle body thread side up on a flat surface.
- Insert the orifice disc - cone face down.
- Insert the swirl chamber on top of the orifice disc. The slot at the back of the swirl chamber must be facing upwards.
- Slot the 'O' ring onto the adaptor.
- Screw the adaptor into the back of the body.



COMPONENT PARTS - SDX

MATERIALS AND WEIGHTS

Description	Part No.	Material	Weight (oz)
Body	29776	303 Stainless Steel	5.4
Orifice Seal	29772-1	Nylon	-
	29772-3	Aluminium	-
	29772-4	PTFE	-
	29772-6	Hard Fibre	-
	29772-7	Copper	-
Orifice Disc	703-XXX*	Tungsten Carbide	0.4
	704-XXX	Chrome Carbide	0.4
	608-XXX	Ceramic	-
Swirl Chamber	29794-XX*	Hardened SS	0.3
	31212-XX	Tungsten Carbide	0.6
	30655-XX	Ceramic	-
End Plate	29953	Tungsten Carbide	0.4
	29954	Chrome Carbide	0.4
	34430	Ceramic	-
Screw Pin	29777	303 Stainless Steel	3.2
Body Seal	29773-1	Nylon	-
	29773-3	Aluminium	-
	29773-4	PTFE	-
	29773-6	Hard Fibre	-
	29773-7	Copper	-
1/4" NPTFT Female Adaptor 3/8" NPTF Female Adaptor 1/2" NPTF Female Adaptor 3/4" NPTF Female Adaptor	29775-1 29775-3 29775-5 29775-7	303 Stainless Steel	13.0

* Specify orifice size and swirl chamber suffix from capacity chart.



SDX ASSEMBLY PROCEDURE

- Place the nozzle body thread side up on a flat surface.
- Insert the orifice seal.
- Place the orifice inside the nozzle body numbers side down (sharp edge orifice).
- Place the swirl chamber on top of the orifice. It does not matter which side goes down with regards to the swirl chamber (13800-X will only go one way).
- Place the end plate, chamber side up, on top of the swirl chamber.
- Align the threaded side of the screw pin over the endplate and screw onto the nozzle body.
- Torque screw pin into body with 35 lbs/ft.
- Place body seal into female adaptor.
- Pick up the assembled unit and screw into the female adaptor.
- Torque body onto adaptor with 35lbs ft torque.

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e-mail: sales@delavan.com Web: www.delavan.com

COMPONENT PARTS - SDX III

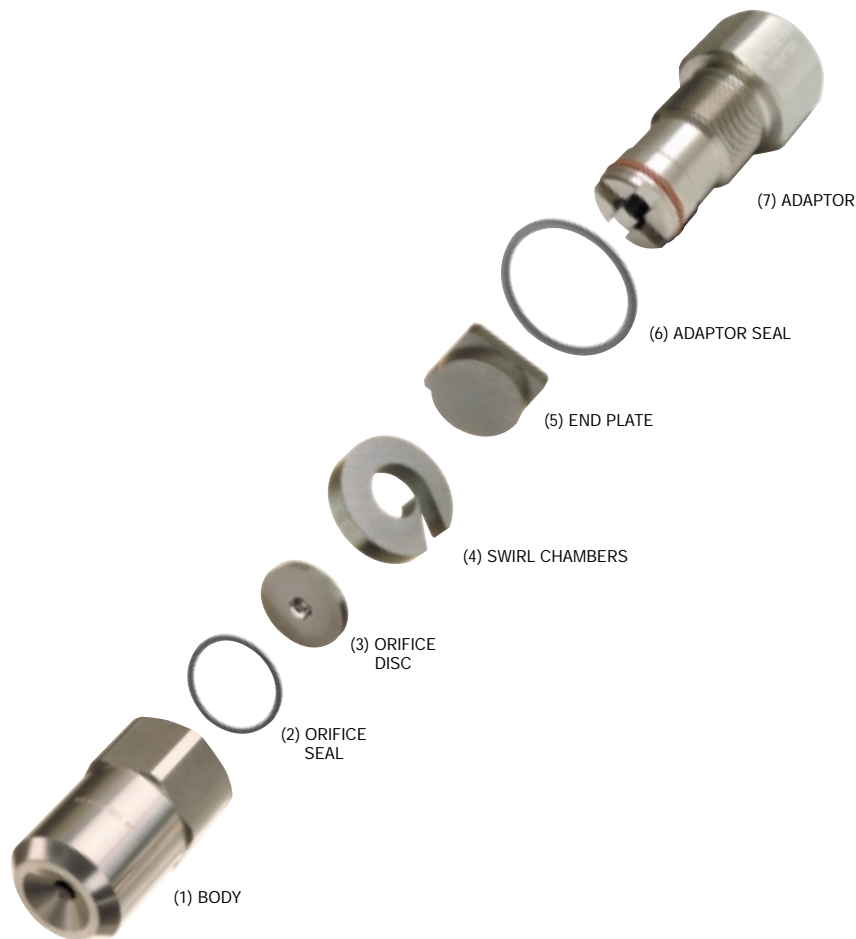
MATERIALS AND WEIGHTS

Description	Part No.	Material	Weight (oz)
Body	48440	17-4 PH Stainless Steel	9.7
Orifice O-Ring	31351-66 31352-016	Silicone Viton	- -
Orifice Disc	703-XXX* 704-XXX 608-XXX	Tungsten Carbide Chrome Carbide Ceramic	0.4 0.4 -
Swirl Chamber	29794-XX*	Hardened Stainless Steel	0.3
Swirl Chamber	31212-XX	Tungsten Carbide	0.6
Swirl Chamber	30655-XX	Ceramic	-
End Plate	38331 W11430	Tungsten Carbide Ceramic	1.5 -
Adaptor O-Ring	31351-65 31351-32	Silicone Viton	- -
1/4" NPT Female Adaptor	38329-1	17-4 PH Stainless Steel	13.0
3/8" NPT Female Adaptor	38329-2		12.5
1/2" NPT Female Adaptor	38329-3		12.0
3/4" NPT Female Adaptor	38329-4		11.0
	48725 Seal Kit		

* Specify orifice size and swirl chamber suffix from capacity chart.

SDX III ASSEMBLY PROCEDURE

- Place the nozzle body thread side up on a flat surface.
- Make sure the o-ring seal is pressed in snugly to the nozzle body.
- Place the orifice numbers side down into the body (sharp edge orifice).
- Use your finger to align the orifice into the recessed area in the body.
- Place the swirl chamber on top of the orifice. It does not matter which side of the swirl chamber faces the orifice (13800-X will only go in one way).
- The direction of the swirl chamber does not affect the functionality of the nozzle.
- Place the endplate, circular side down, on top of the swirl chamber with the square side of the endplate should be on top (if required).
- Make sure the o-ring is on the adaptor.
- Screw the adaptor onto the nozzle body. Hand tighten only.



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CAPACITY CHART - MINI SDX

MINI SDX SWIRL CHAMBER 32933-2 OR 50791-2 (WATER CAPACITY GPH @ PSI)

ORIFICE NO.	200	500	1,000	2,000	3,000	4,000	5,000
902-20	5.6	8.8	12.5	17.7	21.7	25.0	28.0
902-22	6.3	9.9	14.0	19.8	24.2	28.0	31.3
902-24	6.9	11.0	15.5	21.9	26.8	31.0	34.7
902-27	7.8	12.4	17.5	24.7	30.3	35.0	39.1
902-30	8.9	14.1	20.0	28.3	34.6	40.0	44.7
902-33	9.9	15.7	22.2	31.4	38.5	44.4	49.6
902-36	11.2	17.7	25.0	35.4	43.3	50.0	55.9
902-38	11.9	18.7	26.5	37.5	46.9	53.0	59.3
902-40	13.0	20.5	29.0	41.0	50.2	58.0	67.1
902-42	13.4	21.2	30.0	42.4	52.0	30.0	67.1
902-44	14.1	22.3	31.5	44.5	54.6	63.0	70.4
902-46	14.8	23.3	33.0	46.7	57.2	66.0	73.8
902-48	15.7	24.7	35.0	49.5	60.2	70.0	78.3
902-50	16.5	26.2	37.0	52.3	64.1	74.0	82.7
902-52	17.9	28.3	40.0	46.6	69.3	80.0	89.4
902-54	18.6	29.3	41.5	58.7	71.9	83.0	92.8
902-56	19.2	30.4	43.0	60.8	74.5	86.0	96.1
902-58	20.6	32.5	46.0	65.1	79.7	92.0	103.0
902-60	21.5	33.9	48.0	67.9	83.1	96.0	107.3

MINI SDX SWIRL CHAMBER 32933-3 OR 50791-3 (WATER CAPACITY GPH @ PSI)

ORIFICE NO.	200	500	1,000	2,000	3,000	4,000	5,000
902-24	8.2	12.9	18.2	25.7	31.5	36.4	40.7
902-27	8.9	14.1	20.0	28.3	34.6	40.0	44.7
902-30	10.3	16.3	23.0	32.5	39.8	46.0	51.4
902-33	11.6	18.4	26.0	38.8	45.0	52.0	58.2
902-36	12.9	20.5	29.0	41.0	50.2	58.0	64.8
902-38	14.3	22.6	32.0	45.3	55.4	64.0	71.6
902-40	15.2	24.0	34.0	48.1	58.9	68.0	76.0
902-42	16.3	25.8	36.5	51.6	63.2	81.8	81.6
902-44	17.4	27.6	39.0	55.1	67.5	78.0	87.2
902-46	18.6	29.3	41.5	58.7	71.9	92.8	92.8
902-48	19.2	30.4	43.0	60.8	74.5	86.0	96.2
902-50	20.1	31.8	45.0	63.6	77.9	90.0	100.6
902-52	21.5	33.9	48.0	67.9	83.1	96.0	107.3
902-54	22.6	35.7	50.5	71.4	87.5	101.0	102.9
902-56	23.9	37.8	53.5	75.7	92.7	107.0	119.6
902-58	24.6	38.9	55.0	77.8	95.2	110.0	123.0
902-60	25.5	41.0	58.0	82.0	100.4	116.0	129.7
902-62	27.3	43.1	61.0	86.3	105.7	122.0	136.4

MINI SDX SWIRL CHAMBER 32933-4 OR 50791-4 (WATER CAPACITY GPH @ PSI)

ORIFICE NO.	200	500	1,000	2,000	3,000	4,000	5,000
902-16	2.5	4.0	5.6	7.9	9.7	11.2	12.5
902-18	2.9	4.5	6.4	9.1	11.1	12.8	14.3
902-20	3.0	4.8	6.8	9.6	11.8	13.6	15.2
902-22	3.4	5.3	7.5	10.6	13.0	15.0	16.8
902-24	3.8	6.1	8.6	12.2	14.9	17.2	19.2
902-27	4.5	7.1	10.0	14.1	17.3	20.0	22.4
902-30	4.9	7.8	11.0	15.6	19.0	22.0	24.6
902-33	5.4	8.5	12.0	17.0	20.8	24.0	26.8
902-36	5.8	9.2	13.0	18.4	22.5	26.0	29.1
902-38	6.2	9.8	13.8	19.5	23.9	27.6	30.9
902-40	6.5	10.3	14.5	20.5	25.1	29.0	32.4

MINI SDX SWIRL CHAMBER 32933-1 OR 50791-1 (WATER CAPACITY GPH @ PSI)

ORIFICE NO.	200	500	1,000	2,000	3,000	4,000	5,000
902-16	3.7	5.9	8.3	11.7	14.4	16.6	18.6
902-18	4.2	6.7	9.5	13.4	16.5	19.0	21.2
902-20	4.7	7.4	10.5	14.8	18.2	21.0	23.5
902-22	5.1	8.0	11.3	16.0	19.6	22.6	25.3
902-24	5.6	8.8	12.5	17.7	21.7	25.0	27.9
902-27	6.5	10.3	14.5	20.5	25.1	29.0	32.4
902-30	7.4	11.7	16.5	23.3	28.6	33.0	36.9
902-33	7.8	12.3	17.4	24.6	30.1	34.8	38.9
902-36	8.4	13.3	18.8	26.6	32.6	37.6	42.0
902-38	8.9	14.1	20.0	28.3	34.6	40.0	44.7
902-40	9.4	14.9	21.1	29.8	36.5	42.2	47.2
902-42	10.0	15.8	22.4	31.7	38.8	44.8	50.1
902-44	10.5	16.6	23.5	33.2	40.7	47.0	52.5
902-46	11.0	17.5	24.7	34.9	42.8	49.4	55.2
902-48	11.6	18.4	26.0	36.8	45.0	52.0	58.1
902-50	12.1	19.1	27.0	38.2	46.8	54.0	60.4

All Spray Angles 70°-75°. The following charts are only a selection of swirl chamber and orifice conversions. If you require further information and combinations please contact us.

*If complete assemblies are required, order all 5 parts required to make up that assembly from component parts list. **NOTE: Rating pressure (pressure tested at) is 1000 PSIG.

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e-mail:sales@delavan.com Web:www.delavan.com

CAPACITY CHART - SDX & SDX III

SWIRL CHAMBER LETTER	ORIFICE NUMBER*	SPRAY ANGLE	FLOW RATE IN (GALLONS PER HOUR) AT PSIG.							SDX ONLY 70000 PSIG
			200 PSIG	500 PSIG	1000 PSIG	2000 PSIG	3000 PSIG	4000 PSIG	5000 PSIG	
SB	703-34	70°	9.5	14.5	20.0	27.5	33.2	37.8	41.9	49.0
SA	703-37	80°								
SB	703-40	75°	11.7	18.1	25.0	34.6	41.9	48.0	53.3	62.4°
SA	703-49	85°								
SD	703-34	60°	13.9	21.5	30.0	41.8	50.8	58.4	65.0	76.3
SC	703-40	70°								
SE	703-34	50°	16.0	25.0	35.0	49.0	59.6	68.6	76.4	89.9
SD	703-40	65°								
SD	703-43	65°	18.3	28.6	40.0	56.0	68.2	78.4	87.3	102.8
SC	703-49	75°								
SF	703-37	50°								
SE	703-40	60°	20.5	32.0	45.0	63.2	77.1	88.8	99.0	116.8
SC	703-55	75°								
SF	703-40	50°								
SE	703-43	60°	22.5	35.5	50.0	70.5	86.1	99.3	110.9	131.0
SD	703-52	70°								
SE	703-49	60°								
SD	703-58	70°	24.8	39.0	55.0	77.5	94.7	109.2	122.0	144.1
SC	703-67	80°								
SF	703-46	55°								
SE	703-52	65°	26.8	42.4	60.0	84.9	104.0	120.0	134.2	158.8
SC	703-70	80°								
SF	703-52	55°								
SE	703-58	65°	31.3	49.5	70.0	99.0	121.2	140.0	156.5	185.2
SD	703-70	75°								
SG	703-49	50°								
SF	703-55	60°	35.8	56.6	80.0	113.1	138.6	160.0	178.9	211.7
SF	703-64	70°								
SD	703-76	80°								
SG	703-52	50°								
SF	703-61	60°	39.9	63.4	90.0	127.7	156.7	181.3	202.9	240.4
SE	703-70	70°								
SG	703-58	55°								
SF	703-64	65°	44.4	70.5	100.0	141.9	174.2	201.4	225.4	267.2
SD	703-91	80°								
SG	703-61	55°								
SF	703-70	65°	48.8	77.5	110.0	156.1	191.6	221.5	248.0	293.9
SE	703-82	75°								
SG	703-64	55°								
SF	703-76	65°	53.2	84.6	120.0	170.3	209.0	241.7	270.5	320.6
SE	703-88	75°								

The following charts are only a selection of swirl chamber and orifice conversions. If you require further information and combinations please contact us.

*The number following the dash refers to orifice diameter. For instance, an orifice number 703-33, the orifice diameter is .033.

Additional orifice discs ranging from .016 to .230 diameters are also available for special flow rates or spray angles.

CAPACITY CHART - SDX & SDX III

SWIRL CHAMBER LETTER	ORIFICE NUMBER*	SPRAY ANGLE	FLOW RATE IN (GALLONS PER HOUR) AT PSIG.							SDX ONLY 70000 PSIG
			200 PSIG	500 PSIG	1000 PSIG	2000 PSIG	3000 PSIG	4000 PSIG	5000 PSIG	
SH	703-67	50°								
SG	703-76	60°	66.5	105.7	150.0	212.9	261.2	302.1	338.1	400.7
SF	703-88	70°								
SE	703-109	80°								
SH	703-76	50°								
SG	703-85	65°	79.2	126.4	180.0	256.3	315.2	365.0	409.0	485.6
SF	705-103	75°								
SH	703-82	55°								
SG	703-97	65°	92.4	147.5	210.0	299.0	367.8	425.9	477.2	566.5
SF	703-115	75°								
SI	703-82	50°								
SH	703-91	60°	105.6	168.5	240.0	341.8	420.3	486.7	545.4	647.5
SG	703-106	70°								
SF	703-127	80°								
SI	703-88	50°								
SH	703-100	60°	118.8	189.6	270.0	384.5	472.8	547.5	613.5	728.4
SG	703-118	70°								
SF	703-142	80°								
SI	703-94	55°								
SH	703-106	65°	132.0	210.7	300.0	427.2	525.4	608.4	681.7	809.3
SG	703-127	75°								
SI	703-106	55°								
SH	703-121	65°	154.0	245.8	350.0	498.4	612.9	709.8	795.3	944.5
SG	703-145	75°								
SJ	703-103	50°								
SJ	703-115	60°	176.0	280.9	400.0	569.5	700.5	811.2	908.9	1079.1
SH	703-133	70°								
SI	703-127	60°								
SH	703-145	70°	198.0	316.0	450.0	640.8	788.0	912.6	1022.5	1214.0
SJ	703-118	55°								
SI	703-136	65°	221.8	352.3	500.0	709.6	870.8	1007.0	1127.1	1335.8
SH	703-157	75°								
SI	703-148	65°	244.0	387.6	550.0	780.5	957.9	1107.1	1239.8	1469.4
SJ	703-136	60°	268.3	424.3	600.0	848.5	1039.2	1200.0	1341.6	15873.5
SI	703-154	70°								
SJ	703-151	60°	290.7	459.6	650.0	919.2	1125.8	1300.0	1453.4	1719.8
SJ	703-157	65°	313.1	495.0	700.0	989.9	1212.4	1400.0	1565.2	1852.1

The following charts are only a selection of swirl chamber and orifice conversions. If you require further information and combinations please contact us.

*The number following the dash refers to orifice diameter. For instance, on orifice number 703-33, the orifice diameter is .033.

Additional orifice discs ranging from .016 to .230 diameters are also available for special flow rates or spray angles.

SWIRL-AIR

In addition to the **SDX™** range of products, **Delavan** offers further experience through the use of two fluid, or air atomizing nozzles.

In two fluid nozzles, air, steam or gas supplies most of the energy to atomize the liquid. This can be mixed either internally or externally and in **Delavan's Swirl Air Spray Drying Nozzle**, this is mixed internally, offering a range of flow rates and spray angles.

- Two Swirl-Air nozzle versions are available: the right angle nozzle (atomizing air enters the side, the liquid enters axially in back): and the in-line nozzle (concentric piping is used with the liquid in the center and atomizing air around the outside). Concentric pipe adaptors are optional and not included with the nozzle assembly.

FEATURES

- Large internal passages with no vanes or cores assure unrestricted flow with little chance for clogging.
- No external struts or supports to interfere with spray pattern.
- Nozzle design provides for vortex mixing, primary impingement, fluid distortion and external impact for fine atomization and relatively high nozzle efficiency.
- Spray angle can be adjusted through interchangeable nozzle cap assemblies. This feature permits much wider spray patterns than are possible with most types of two fluid atomizers.
- Air flow (M^3/min) and power requirements are relatively low, permitting specification of smaller air compressors.
- Good atomization over wide turn-down ratios.
- Droplet size is controlled by minor changes in air pressure.

SPRAY CHARACTERISTICS

- Air is introduced tangentially into the nozzle chamber in low pressure region of the swirling liquid, creating extreme turbulence and primary atomisation. As liquid leaves the orifice, it impinges against the deflector ring which serves a dual purpose: close control of spray angle and breakup of the spray into even finer droplets (secondary atomization).
- Nominal spray angles of 50°, 75°, 100° can be attained by specification of interchangeable nozzle caps. Contact Delavan's Customer Service Team for special spray angles up to 180°.
- Mean droplet diameters in the 50 to 100 micrometres range at modest air pressures and flow rates.
- Degree of atomization is also variable by controlling the ratio of air to liquid.
- If air pressure is set initially, and it is necessary to modulate the liquid flow, the air pressure and flow rates will automatically respond in such a way that the quality of atomization remains nearly constant. In some applications, this can result in savings through the elimination of air valving and controls.

CONSTRUCTION AND MATERIALS

- Two piece construction, the nozzle body plus integral deflector ring and cap, easily removable without disturbing pipe connection.
- For in-line nozzles the user can alter "C" dimension to any extended length by providing two concentric pipes with a coupling on one end of each. Both made up pipe/coupling lengths should be equal. The length is then the desired addition to "C" dimension.
- No external struts or supports to interfere with spray pattern.
- Both in-line and right angle versions are available in 316 Stainless Steel and 440 Stainless Steel. Other materials such as Hastelloy C276, Inconel 600, Carpenter 20, Titanium and Carbide lined are available by special order. For other materials, contact Delavan's Customer Service Team.
- Large internal passages with no vanes or cores assure unrestricted flow with little chance for clogging.

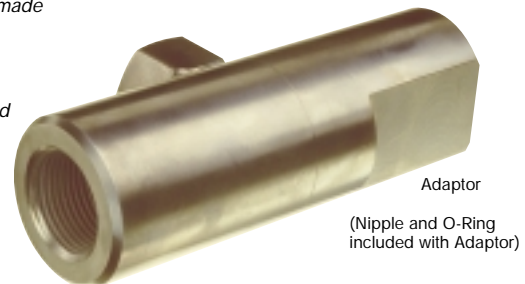
Right Angle
Nozzle Assembly

Nozzle -
Max. Design Pressure: 200 PSIG.
Max. Design Temperature: 1,000°F.

Adaptor -
Max. Design Pressure: 200 PSIG.
Max. Design Temperature: 300°F.



In-Line
Nozzle



Adaptor

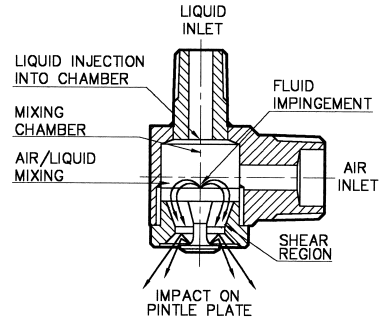
(Nipple and O-Ring
included with Adaptor)

NOZZLE SIZING CHARTS

NOMINAL FLOW (GPM)*	RIGHT ANGLE NOZZLE ASSEMBLY NUMBER	RIGHT ANGLE NOZZLES				CAP ASSEMBLY	
		DASH NUMBERS FOR MATERIAL AND NOMINAL SPRAY ANGLE				316 SS	440 HSS
		316 SS	440 HSS	ANGLE (°)	MIN. PASSAGE		
25	45506	-2	-	50 (40-60)	.240	707-97	-
		-1	-	75 (65-85)	.190	707-96	-
		-3	-	100 (90-110)	.150	707-98	-
15	31618	-2	-5	50 (40-60)	.170	707-11	707-26
		-1	-4	75 (65-85)	.140	707-10	707-25
		-3	-6	100 (90-110)	.110	707-12	707-27
10	31325	-2	-5	50 (40-60)	.100	707-8	707-23
		-1	-4	75 (65-85)	.082	707-7	707-22
		-3	-6	100 (90-110)	.062	707-9	707-24
4	31693	-2	-5	50 (40-60)	.065	707-5	707-20
		-1	-4	75 (65-85)	.065	707-4	707-19
		-3	-6	100 (90-110)	.065	707-6	707-21
2.5	31694	-2	-5	50 (40-60)	.050	707-2	707-17
		-1	-4	75 (65-85)	.050	707-1	707-16
		-3	-6	100 (90-110)	.050	707-3	707-18
1.0	32163	-11	-	50 (40-60)	.025	707-93	-
		-2	-	75 (65-85)	.025	707-13	-
		-7	-	100 (90-110)	.025	707-29	-
0.2	32163	-10	-	50 (40-60)	.025	707-93	-
		-1	-	75 (65-85)	.025	707-13	-
		-8	-	100 (90-110)	.025	707-29	-

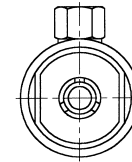
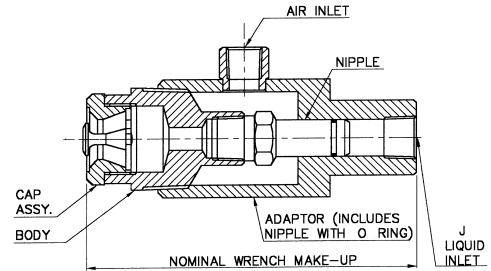
* Higher flow rates can be achieved by increasing pressure.

Maximum Recommended Pressure: 1,500 PSIG.



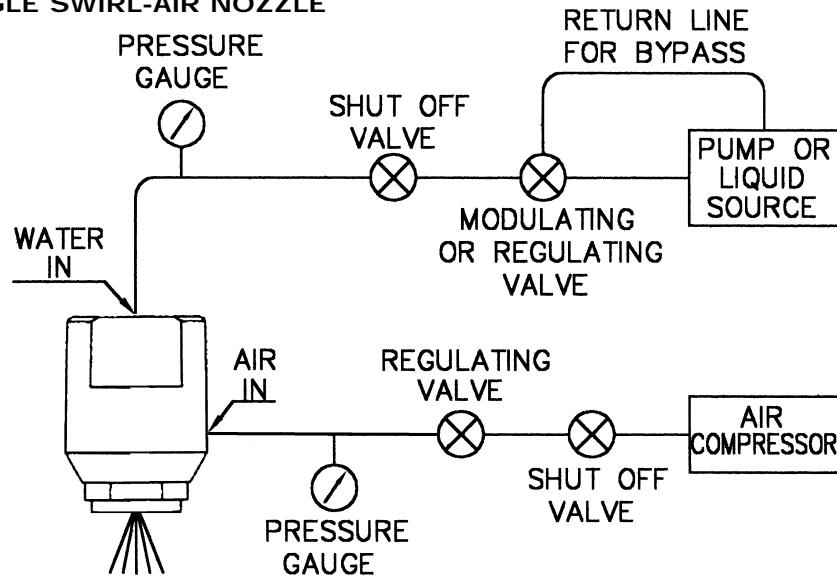
NOMINAL FLOW (GPM)*	NOZZLE ASSEM. NUMBER	DASH NUMBERS FOR MATERIAL AND NOMINAL SPRAY ANGLE			CAP ASSEMBLY		OPTIONAL ADAPTOR
		316 SS	ANGLE (°)	MIN. PASSAGE	316 SS	440 HSS	
		15	32555	-2	50 (40-60)	.170	
-1	75 (65-85)			.140	707-10	707-25	
-3	100 (90-110)			.110	707-12	707-27	
10	32554	-2	50 (40-60)	.100	707-8	707-23	32618
		-1	75 (65-85)	.082	707-7	707-22	
		-3	100 (90-110)	.062	707-9	707-24	
4	32668	-2	50 (40-60)	.065	707-5	707-20	32695
		-1	75 (65-85)	.065	707-4	707-19	
		-3	100 (90-110)	.065	707-6	707-21	
2.5	32740	-2	50 (40-60)	.050	707-2	707-17	32742
		-1	75 (65-85)	.050	707-1	707-16	
		-3	100 (90-110)	.050	707-3	707-18	
1.0	32740	-13	50 (40-60)	.025	707-93	-	32742
		-4	75 (65-85)	.025	707-13	-	
		-5	100 (90-110)	.025	707-29	-	

* Higher flow rates can be achieved by increasing pressure.

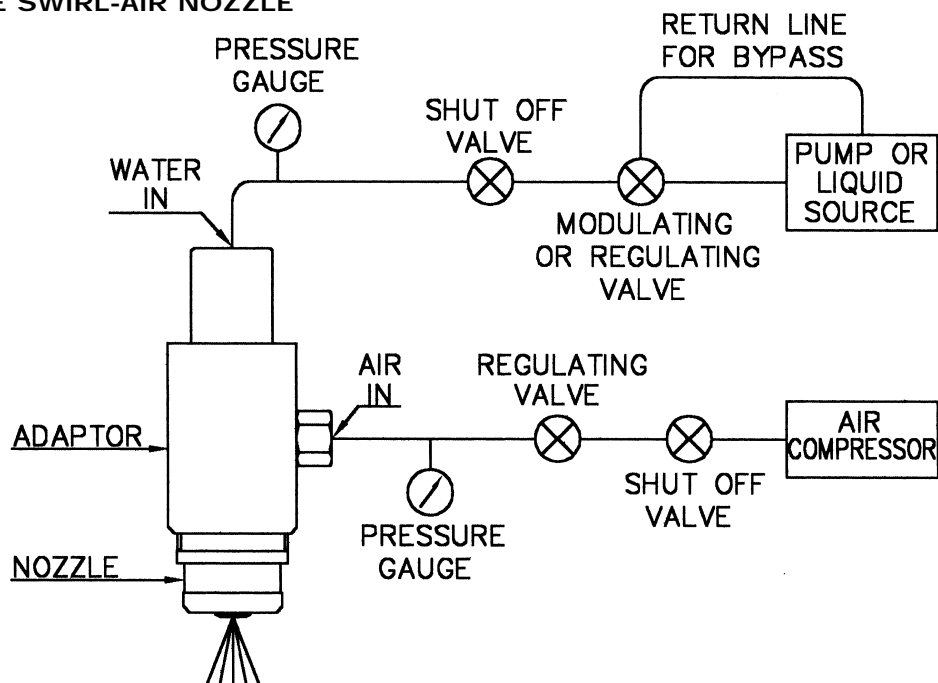


TYPICAL NOZZLE INSTALLATIONS

RIGHT ANGLE SWIRL-AIR NOZZLE



IN-LINE SWIRL-AIR NOZZLE



1. Install nozzle as shown in schematic drawing above. Make certain both pressure gauges are located as close to the nozzle as practical. Allow for pressure losses between gauges and nozzle when establishing settings. Shut-off valves are included for convenience, allowing nozzle removal without shutting down system.
2. Always start air flow first, then liquid flow. On shut-down, stop liquid flow first, then air flow. Adjust air and liquid pressures simultaneously; each affects the other. Check liquid flow rate after system reaches equilibrium.

3. In-Line Version: The adaptor shown may be purchased from Delavan. It is not part of the nozzle.
4. In-Line Version: Concentric piping can be used between adaptor and nozzle, making it possible to position the adaptor in an ambient temperature area and the nozzle within the walls of a high temperature chamber. Contact Delavan for installation drawing SK6072.

NOTE: For gas cooling applications, it is recommended that the air flow continues through nozzles after liquid flow is stopped.

Spray Drying Fax Back Form

This enquiry sheet serves as a guide so that we may better assist you in proper nozzle selection. Many times the optimum nozzle combination cannot be found on the first attempt but the more completely this form is filled out, the better our chance of success

Name: _____ Date: _____

Company: _____

Address: _____

Tel No: _____ Fax No: _____

The Feed Material

Substance being sprayed: _____ % Solids: _____

Specific gravity (or Density): _____ Viscosity: _____

Acidic or alkaline (pH): _____

The Nozzle

Nozzle type presently being used: _____

Manufacturer: _____ Number of nozzles: _____

Rated flow and spray angle: _____ Average wear life: _____

Material: _____ Thread type: _____

The Dryer

Dryer manufacturer: _____ Inlet air temp: _____

Cocurrent or countercurrent air: _____ Outlet air temp: _____

Dryer diameter at nozzle position: _____ Maximum pump pressure: _____

Pump manufacturer: _____ Operating pressure: _____

The Dry Product

% Moisture: _____ Density: _____

Pounds per hour: _____ Solubility: _____

Comments: _____

Please fax back to:

803-245-4146
or your local distributor