

## HydroWhirl® S slotted rotating spray nozzle for quick, efficient tank cleaning

The HydroWhirl® S nozzle directs the cleaning water through a rotating head at the tip of the spray assembly. This produces a vigorous moving spray action against all areas of the walls of a tank. The spray pattern from the HydroWhirl S head uses impact and repetition to quickly wash the tank. This spray pattern is especially effective at breaking up and removing contaminants.

### Advantages of the HydroWhirl S rotary spray nozzle.

- Cleans more quickly, and uses less water and lower pressure than static tank washers
- Complete 360° coverage
- Lower flow and pressure mean smaller pump size resulting in lower operating costs

### The HydroWhirl S nozzle has been carefully designed for long service life.

#### Low-maintenance bearing design

- Self-cleaning bearings are lubricated by water flow to clear away particles

#### High-precision machining and finish

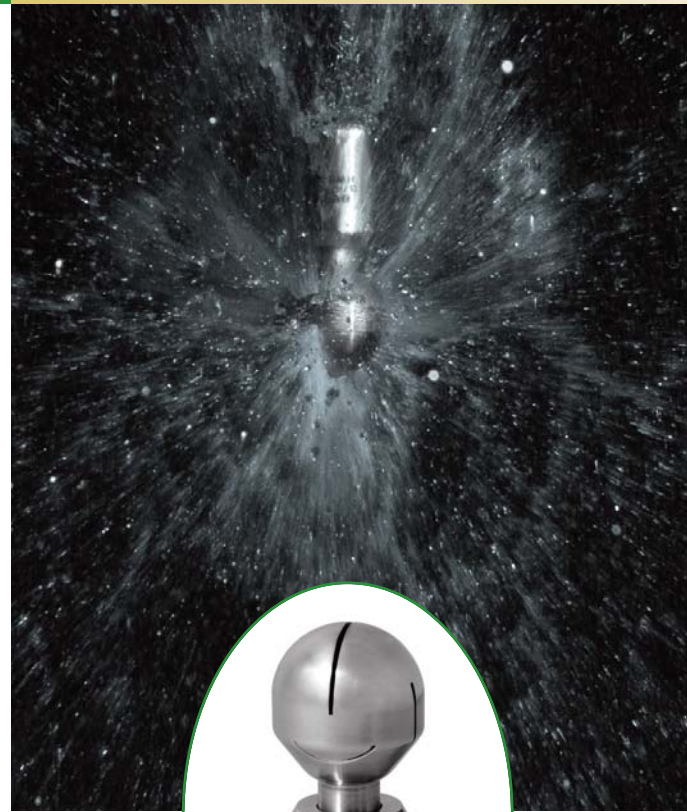
- Stainless steel construction – corrosion resistant
- Laser-welded design for durable assembly
- Surface finish of 0.8 microns R<sub>a</sub> or better
- Made from FDA-approved materials for use in Clean-in-Place (CIP) applications

#### Comprehensive quality control

- Material traceability controlled throughout production
- Lifecycle lab testing validates minimum service life of 300 hours
- All HydroWhirl S nozzle are available with ATEX approval for Zone 0.

#### Design flexibility

- Available in many different sizes and connections: threaded, clip-on, or welded
- 360° omni-directional spray pattern standard; other spray angles available upon request
- Flow range: 1.26 – 90.9 gpm (14.2 – 334 L/min)
- Dual bearing design – nozzle operates effectively in any orientation



*Surface finish ideal for sanitary applications*

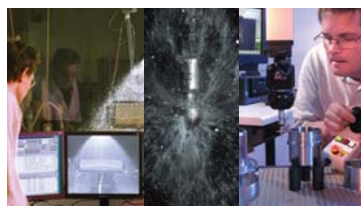
**The HydroWhirl S nozzle is an outstanding combination of design, quality, and engineering. The HydroWhirl S nozzle is ideal for anyone who needs reliable, efficient cleaning of tanks and other interior spaces.**

BETE Fog Nozzle, Inc. has been a nozzle pioneer for over 60 years. BETE Applications Engineers will work with you to ensure you choose the right BETE nozzle for your application.

# BETE®

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# HydroWhirl® S

## Tank Washing - Slotted Spray Nozzle

### DESIGN FEATURES

- Cleans more quickly, and uses less water and lower pressure than static tank washers
- Surface finish ideal for sanitary applications
- Laser-welded design for durable assembly
- Stainless steel construction - corrosion-resistant material
- Three connections: threaded, clip-on, and welded
- Made from FDA approved materials for use in Clean-In-Place (CIP) applications.

### SPRAY CHARACTERISTICS

- Self-cleaning bearings
- Vigorous moving spray action
- Complete 360° omnidirectional coverage

**Flow rates:** 1.26 to 90.9 gpm

All HydroWhirl S nozzle are available with ATEX approval for Zone 0.



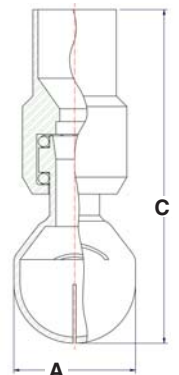
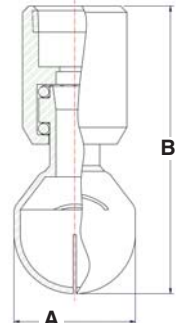
### STANDARD CONNECTION SIZES

Additional connection sizes available on request

Connection Type	Nozzle Number													
	HWS 20-3	HWS 20-4	HWS 20	HWS 30-5	HWS 30-6	HWS 30	HWS 40-7.5	HWS 40-8	HWS 40-9	HWS 40	HWS 40HF-11	HWS 40HF	HWS 50-16	HWS 50
Pipe Clip On	--	--	--	--	--	3/8"	--	--	--	3/4"	--	3/4"	--	1-1/2"
Tube Clip On	--	--	--	--	--	3/4"	--	--	--	1"	--	1"	--	2"
Pipe Weld On	--	--	1/4"	--	--	3/8", 1/2"	--	--	--	3/4", 1	--	3/4", 1	--	1-1/2", 2"
Tube Weld On	--	--	1/2"	--	--	3/4"	--	--	--	1"	--	1"	--	2"
FNPT/FBSP	1/8"	1/8"	1/8"	3/8"	3/8"	1/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1-1/2"	1-1/2"
DIN Clip On (mm)	--	--	8	--	--	15	--	--	--	20, 25	--	20, 25	--	40, 50
DIN Weld On (mm)	--	--	8, 10	--	--	15	--	--	--	15, 20, 25	--	15, 20, 25	--	40, 50

### HydroWhirl® S Flow Rates and Dimensions

Female Pipe Size	Nozzle Number	GALLONS PER MINUTE @PSI						Dimensions (in)			Wt (oz)	Coverage Diameter (ft) @40PSI
		10 psi	20 psi	30 psi	40 psi	50 psi	60 psi	A	B	C		
1/8"	HWS-20-3	1.26	1.63	1.89	2.10	2.28	2.44	0.66	1.68	2.72	0.88	4.9
	HWS-20-4	2.14	2.79	3.26	3.64	3.97	4.26					6
	HWS-20	3.16	4.31	5.45	6.41	7.16	7.83					8
3/8"	HWS-30-5	2.31	3.29	4.12	4.80	5.37	5.88	1.1	2.34	3.28	3.28	8
	HWS-30-6	5.54	6.97	7.98	8.78	9.46	10.1					
1/4"	HWS-30	5.70	8.10	9.96	11.5	12.9	14.3	1.53	3.65	4.25	10.8	11
3/4"	HWS-40-7.5	5.60	7.87	9.60	11.1	12.4	13.6					
	HWS-40-8	6.39	8.96	10.9	12.6	14.1	15.4					
	HWS-40-9	7.94	11.3	13.9	16.0	17.8	19.6					
	HWS-40	9.08	13.1	16.1	18.3	20.3	22.2					
1 1/2"	HWS-40HF-11	12.2	17.1	20.8	24.1	26.9	29.4	1.53	3.65	4.25	10.6	13
	HWS-40HF	15.0	21.3	26.0	29.7	32.6	35.4					
1 1/2"	HWS-50-16	24.2	33.8	41.4	47.8	53.4	58.5	2.72	6.21	7.09	53.8	18
	HWS-50	37.2	52.4	64.1	74.2	82.9	90.9					



Standard Materials: nozzle: 316L; ball bearings: 316 stainless steel

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CALL 413-772-0846  
Call for the name of your nearest BETE representative.