

HydroWhirl® Orbitor



(HWO) High Impact Rotary Tank Cleaning Machine



DESIGN FEATURES

- Easily field-serviced to reduce maintenance costs
- Minimum moving parts to extend operating life
- Self-cleaning; self-lubricating
- High-impact jets; orbital wash pattern = high efficiency cleaning process
- Female connections



All HydroWhirl Orbitor tank cleaning machines are available with ATEX approval.

SPRAY CHARACTERISTICS

- Variable cycle times
 - High impact cleaning
- Spray Angles:** Complete 360° spray, 180° spray angle pattern available upon request.

Flow Rates: 22.6 to 160 GPM

Working Pressure: 45 to 145 psi

Max Temperature: 200°F/93°C

Filtration: Line strainer with a mesh size of 0.002 in/200 mesh

Max. Working Temp.: 200 °F (95 °C)

Max. Ambient Temp.: 285 °F (140 °C)

Weight: 16.5 lbs

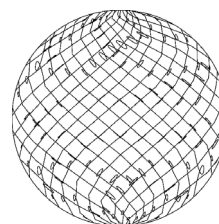
Materials:

Housing and Nozzle Head: 316L

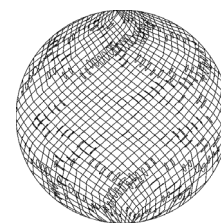
Gears: PEEK + 316 SS

Bushings/Seals: Carbon Filled PTFE

Minimum opening size is 5" for either 2-nozzle or 4-nozzle standard-capacity model with jets vertically aligned.



Orbitor 2 nozzle spray pattern



Orbitor 4 nozzle spray pattern

HYDROWHIRL® ORBITOR - 4 NOZZLE FLOW RATES

Nozzle Number	4 X 4.2 mm			4 X 5 mm			4 X 6 mm			4 X 7 mm			4 X 8 mm		
Female Connection Size	1" and 1 1/2"			1" and 1 1/2"			1 - 1/2" FNPT, BSP			1 - 1/2" FNPT, BSP			1 - 1/2" FNPT, BSP		
Pressure (psi)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)
45	22.6	9.50	11.0	31.4	13.1	13.0	38.6	17.4	15.5	59.1	21.3	11.4	68.3	23.6	15.5
60	26.5	9.80	9.30	36.4	13.8	10.8	45.7	18.7	12.9	67.7	23.3	9.80	79.0	26.2	12.9
75	30.0	11.5	7.90	40.8	15.4	9.40	52.1	20.3	11.0	75.2	25.3	8.70	88.4	29.5	11.1
90	33.3	13.1	6.90	44.8	17.1	8.00	58.0	23.0	9.50	81.9	27.9	8.10	96.9	32.5	9.50
100	35.3	16.4	6.30	47.2	20.7	7.30	61.8	26.2	8.40	86.0	30.8	7.50	102	34.8	8.50
115	38.1	20.3	5.80	50.8	24.6	6.80	67.0	30.8	7.60	91.9	33.8	7.10	110	36.7	7.80
130	40.8	23.3	5.60	54.0	27.9	6.50	72.1	33.8	7.00	97.3	36.7	6.90	117	40.0	7.00
145	43.4	25.6	5.50	57.2	29.5	6.40	76.8	36.7	6.90	102	39.4	6.60	123	42.6	6.90

HYDROWHIRL® ORBITOR - 2 NOZZLE FLOW RATES

Nozzle Number	2 x 6 mm			2 X 7 mm			2 X 8 mm			*2 X 10 mm			*2 X 12.5 mm		
Female Connection Size	1 - 1/2" FNPT, BSP			1 - 1/2" FNPT, BSP			1 - 1/2" FNPT, BSP			1 - 1/2" FNPT, BSP			1 - 1/2" FNPT, BSP		
Pressure (psi)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)	Flow (GPM)	Jet Length (ft)	Cycle Time (min)
45	21.5	18.0	33.0	26.1	21.3	37.5	33.5	23.6	25.7	59.1	32.1	41.0	89.4	33.1	26.8
60	25.4	19.7	27.2	31.3	23.6	31.6	39.3	26.2	22.9	68.7	34.4	34.2	103	36.7	24.0
75	28.8	20.7	24.7	36.0	25.9	28.2	44.4	29.5	20.5	77.2	37.7	30.5	115	39.7	21.7
90	31.9	23.0	22.6	40.4	27.9	25.8	49.1	32.5	18.9	84.9	41.7	28.0	126	44.0	19.8
100	33.9	26.2	21.0	43.2	29.2	24.0	52.0	34.8	17.5	89.8	45.6	26.0	133	48.5	18.4
115	36.7	29.5	19.5	47.2	30.2	22.3	56.2	36.7	16.4	96.6	49.9	24.5	143	53.8	17.2
130	39.4	33.5	18.4	51.1	37.0	21.0	60.1	40.0	15.6	103	55.8	23.2	152	60.0	16.3
145	41.9	37.7	17.4	54.7	40.4	20.0	63.8	42.6	14.9	109	61.7	22.0	160	65.9	15.5

Performance may vary with ATEX models.

*High Capacity Jet Machine