

# 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
- Male or female connections



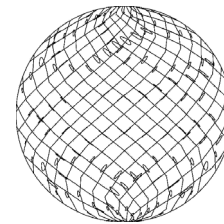
All HydroWhirl Orbitor tank cleaning machines are available with ATEX approval.

## SPRAY CHARACTERISTICS

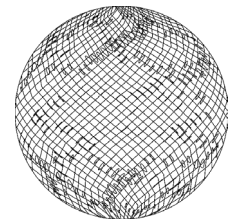
- Variable cycle times
  - High impact cleaning
- Spray Angles:** Complete 360 degree spray, 180 spray angle pattern available upon request.
- Flow Rates:** 80 to 600 l/min
- Working Pressure:** 3 to 10 bar
- Max Temperature:** 200°F/93°C
- Filtration:** Line strainer with a mesh size of 0.075 mm/ 200 mesh

**Max. Working Temp.:** 200 °F (95 °C)  
**Max. Ambient Temp.:** 285 °F (140 °C)  
**Weight:** 7.5 kg  
**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		
	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		
Female Connection Size	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)
3	80.0	2.90	11.0	112	4.00	13.0	138	5.30	15.5	217	6.50	11.4	250	7.20	15.5
4	100	3.00	9.30	137	4.20	10.8	170	5.70	12.9	252	7.10	9.80	293	8.00	12.9
5	115	3.50	7.90	155	4.70	9.40	200	6.20	11.0	283	7.70	8.70	333	9.00	11.0
6	127	4.00	6.90	173	5.20	8.00	220	7.00	9.50	310	8.50	8.10	367	9.90	9.50
7	138	5.00	6.30	185	6.30	7.30	240	8.00	8.40	333	9.40	7.50	395	10.6	8.50
8	147	6.20	5.80	195	7.50	6.80	257	9.40	7.60	350	10.3	7.10	418	11.2	7.80
9	153	7.10	5.60	202	8.50	6.50	270	10.3	7.00	367	11.2	6.90	438	12.2	7.00
10	157	7.80	5.50	207	9.00	6.40	282	11.2	6.90	380	12.0	6.60	458	13.0	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		
	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		
Female Connection Size	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)	Flow (L/min)	Jet Length (m)	Cycle Time (min)
3	80.0	5.50	33.0	93.3	6.50	37.5	117	7.20	25.7	217	9.80	41.0	330	10.1	26.8
4	91.7	6.00	27.2	117	7.20	31.6	150	8.00	22.9	255	10.5	34.2	383	11.2	24.0
5	108	6.30	24.7	137	7.90	28.2	172	8.70	20.5	290	11.5	30.5	433	12.1	21.7
6	122	7.00	22.6	153	8.50	25.8	190	9.40	18.9	320	12.7	28.0	473	13.4	19.8
7	130	8.00	21.0	168	9.20	24.0	203	10.3	17.5	347	13.9	26.0	512	14.8	18.4
8	140	9.00	19.5	182	10.4	22.3	213	11.3	16.4	368	15.2	24.5	547	16.4	17.2
9	148	10.2	18.4	192	11.3	21.0	223	12.4	15.6	390	17.0	23.2	572	18.3	16.3
10	157	11.5	17.4	200	12.3	20.0	232	13.5	14.9	405	18.8	22.0	600	20.1	15.5