

HydroWhirl® Orbitor Tank Cleaning Machines Ideal for High Impact Cleaning

The HydroWhirl Orbitor and HydroWhirl Orbitor 100 are versatile tank cleaning machines designed to meet the high standards required in the food, brewing, beverage, dairy, and chemical industries combining high performance cleaning efficiency with extended operating life and reduced life cycle costs.

Advantages of the HydroWhirl® Orbitor tank cleaning machines

- The HydroWhirl Orbitor and Orbitor 100 can be stripped, maintained, and rebuilt in less than 15 minutes
- The HydroWhirl Orbitors are self cleaning and self lubricated
- Enhanced external cleaning with dedicated nozzles that clean the external surfaces of the machine and its mounting pipe
- Designed for use where high impact cleaning is required
- The HydroWhirl Orbitors are ideal for use in larger tanks and where the product is difficult to clean
- Designed with minimum moving parts to ensure extended operating life and reduced down time

AVAILABLE VERSIONS

- 2 or 4 nozzle machines
- Variable cycle times
- Male or female connections
- 360° wash pattern
- 180° down wash pattern
- 180° up wash pattern

Typical HydroWhirl® Orbitor Applications

Typically used where high impingement cleaning is required and where the most efficient use of utilities is necessary.

BREWING

Bright beer tanks, coppers, maltings

COATINGS AND PAINTS

Storage silos, process vessels, mixers

FOOD AND DAIRY

Raw milk storage, spray driers, process vessels, storage silos

CHEMICAL

Process vessels, mixers, storage silos

BEVERAGE

Process vessels, storage silos



Key Features and Benefits:

- Designed to meet hygienic standards; external surface finish of 0.5 µm (microns) R_a or better
- Optimum consumption of water, chemicals, and time = reduced operating costs
- Minimum moving parts = reduced lifecycle costs
- Self cleaning; self lubricating = no process contamination
- High impact jets; orbital wash pattern = high efficiency cleaning process
- Compact design = will fit through small access flanges
- 2 or 4 nozzle configuration = wash pattern variable up to super intense



All HydroWhirl Orbitor and HydroWhirl Orbitor 100 tank cleaning machines are available with ATEX approval.

HydroWhirl® Orbitor 100

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
- Ideal for small to medium tanks, easily fits through Ø100 mm (4") openings or Ø85 mm (3.35") when nozzle head is vertically aligned
- 4 nozzle configurations
- Female connections

SPRAY CHARACTERISTICS

- 360° wash pattern
 - Variable cycle times
 - High impact cleaning
- Flow rates:** 44.8 - 198 L/min
Working Pressure: 3 - 10 bar

Materials:

Housing and Nozzle Head: 316L
 Gears: PEEK + 316 SS
 Bushings/Seals: Carbon Filled PTFE

Max. Working Temp.: 95 °C (200 °F)

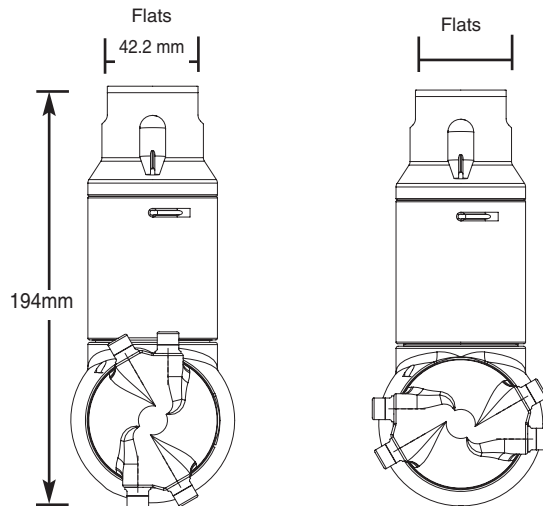
Max. Ambient Temp.: 140 °C (285 °F)

Weight: 2.5 kg



Orbitor 100

HydroWhirl Orbitor



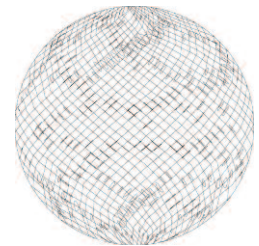
Vertical Nozzle Head Alignment
 Clearance Diameter: 85 mm

Horizontal Nozzle Head Alignment
 Clearance Diameter: 100 mm



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Performance may vary with ATEX models.



4 nozzle spray pattern

Jet lengths are effective cleaning lengths

# Nozzles X Orifice Size	4 x 3 mm			4 x 4 mm			4 x 5 mm			4 x 6 mm		
	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	45.0	1.0	6.0	66.7	2.0	5.5	88.3	2.5	4.5	115	3.0	4.0
4	51.7	1.5	5.5	75.0	2.5	4.8	100	3.0	4.0	127	3.5	3.5
5	58.3	2.0	5.0	85.0	3.0	4.3	110	3.5	3.5	138	4.0	3.0
6	65.0	2.0	4.4	93.3	3.0	3.8	120	3.5	3.0	152	4.0	2.7
7	71.7	2.5	4.0	102	3.5	3.3	130	4.0	2.8	163	4.5	2.4
8	78.3	2.5	3.5	110	3.5	2.9	140	4.0	2.5	175	4.5	2.1
9	85.0	3.0	3.1	118	4.0	2.6	148	4.5	2.1	187	5.0	1.8
10	90.0	3.5	3.0	127	4.0	2.5	157	4.5	2.0	198	5.0	1.8