

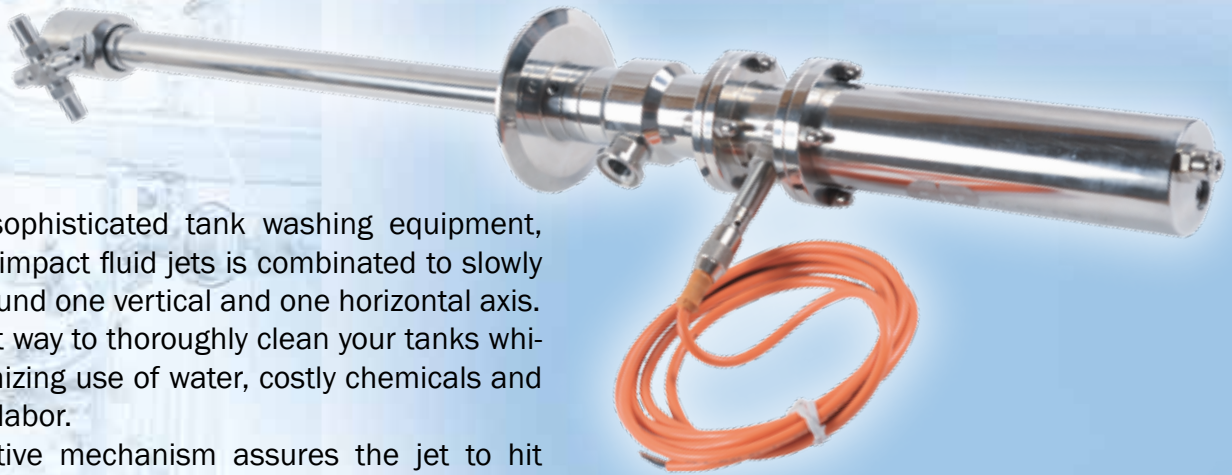


# Tank Cleaning and Washing Devices



Sanitary  
flow  
equipment

# AUTOMATIC ORBITAL TANK WASHING



The most sophisticated tank washing equipment, where high impact fluid jets is combined to slowly rotation around one vertical and one horizontal axis.

- The best way to thoroughly clean your tanks while minimizing use of water, costly chemicals and manual labor.
- The motive mechanism assures the jet to hit always different paths at each turn, so that each single point of the inner tank surface is surely cleaned.

Powered from electric or compressed air motors, according to the plant operating environment, engine and drive unit are located outside of the tank are easily serviced, only the shaft protruding inside.

This design offers a remarkable advantage because of the lower rotation velocity

- all of impact energy can be transferred to the tank surface.
- the jets remain coherent without being broken into droplets by centrifugal force

Total length inside the tank, tank connection and feed media connection completely customizable.

1. Electric/Air driven options
2. Powerful
3. 360° spray pattern coverage
4. 316 stainless steel mechanical parts
5. 0-150°C rated temperature



CODE	DDL-030P---14A <i>30 l/min</i>	DDL-060P---14A <i>60 l/min</i>
n. revolutions	22	31
Working pressure	4 bar	4 bar
Flow rate	30 l/min	60 l/min
Max pressure	10 bar	10 bar
Max temperature	90°C - 150°C sterilization	90°C - 150°C sterilization
Coverage radius	4m	5m
Air Engine power	0,38Kw (#)	0,38Kw (#)
1 molar soda solution	Ok	Ok
Drainage by 3bar air	Ok	Ok

(#) Electrical engine available (84 W)



# ROTATIVE SPRAY HEAD



Rotative Spray Head (RSH) series are completely made out of stainless steel, with the rotating sphere rolling on two ball bearing rows, to make operation possible in any position.

Inner and outer surfaces are carefully machined, cleaned and polished to avoid contamination for bacterial growth.

These kind of rotative devices are agent driven, it is the cleaning media flow that allow rotating the spraying head.

Their robust and simple design, high quality construction, long trouble-free service and remarkable efficiency have made them very popular for general purpose applications.

**RSH are available with three different connections:** clip, butt/pocket weld or BSP female thread, any other connections available on request

Weld-on connection when the head can be left in place between two washing cycles, or where the complete assembly of pipe and washing head can be removed from the top.

Clip-on connection this model can be assembled, onto a fixed pipe entering the tank shell by simple spring retaining pin, that offers a simple way for a quick removal the spray head from its location.

## **RSH Features**

- Cleans more quickly, and uses less water and lower pressure than static tank washers.
- Lower flow and pressure mean smaller pump size resulting in lower operating costs.
- Self-cleaning bearings are lubricated by water flow to clear away particles.





# STATIC SPRAY BALL

The fixed spray-balls are simple and efficient objects that can be easily cleaned; permanently installed spray-balls are used for low pressure internal, cold or hot cleaning, in horizontal and vertical tanks or vessels and containers of all kinds. Operating in continuous spraying mode for fluids that can be washed off easily or in pulse-pause mode for fluids which require a reaction time to be washed off.

The absence of moving or rotational parts contributes to the reliability and durability of cleaning processes with spray balls.

High volume fluid requirement and low impact properties limit their use to small tank sizes.

## Typical sanitary tank cleaning applications

- Pharmaceutical processing
- High purity chemical processing
- Food and beverage production
- Dairies

## Executions and Configurations

The Standard spray-balls are completely round while the Flat Shoulder version have a flat plane close to the inlet fluid connection, both available with the following patterns:

360° spray angle

180° spray angle top

180° spray angle bottom

180° spray angle one side only

**Standard available connections:** clip, butt weld or BSP female thread, any other connections available on request

**Material:** Completely in AISI 316L stainless steel

Specific feature of new mini spray-balls: small diameter, 19mm only can be installed onto 1" connection and it is able to clean the inside face of 1" TUBE.

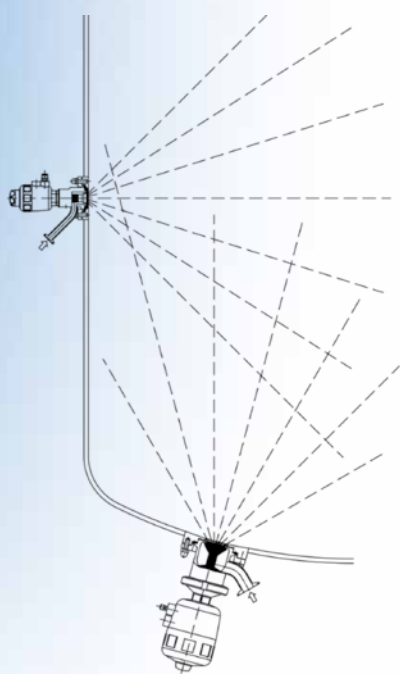


# FLUSH TANK WASHING VALVES

The VAW aseptic valve flush washing, is a sanitary valve designed to reinforce the hygiene of process tanks equipped with traditional agitation systems or magnetic mixers. Extremely clean design of valve, guarantee it's full drainability avoid possible product stagnation and "dead leg"; allow a large number of application in pharmaceutical, biotechnology, cosmetics, chemical and food process where the more restrictive norms must be respected.

Valves are equipped with oriented holes that direct the conical projection of a CIP solution into the tank, the consumption of water and cleaning agents is reduced by approximately 50% compared to conventional spray balls. The valve, should be placed opposite the equipment to be cleaned, is therefore generally welded either to the bottom of the tank, to clean the underside of the agitator blades or on the side to clean the scrapers. For different applications, can be placed also on the top of vessel.

In the standard application, the valve is fixed to the tank by an independent welding flange type TKX connection with a special profile where is installed the TFM PTFE spray-plate.







ASEPTIC SAMPLING VALVES



SANITARY SAMPLING VALVES



SANITARY SAMPLING BOTTLE



TANK BOTTOM ASEPTIC VALVE



SPRING CHECK VALVES



HIGH PURITY BALL VALVES



BUTTERFLY VALVES



DTS HEAT EXCHANGERS



SIGH GLASS-FLOW INDICATOR



CLAMP FITTINGS



TANK CONNECTIONS



SILICONE HOSE & FITTINGS



MAGNETIC MIXER



DIAPHRAGM VALVES



WASHING DEVICES



Sanitary flow equipment

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