

## Product Data Sheet

Product: Unidirectional (Single Axis) Tank Cleaning Machine

Type: LT/LTFT/LTQ/BC



*There are times when a 360° impact indexed coverage of a vessel is not desired and more targeted cleaning is needed. Examples would include cleaning a spray drying column, smokestack, ribbon blender or cleaning machine oil from the outside of tanks during the manufacturing process. This is when the choice of a Butterworth Unidirectional Tank Cleaning Machine should be made.*

## Operational

The nozzle bodies on the Butterworth Unidirectional Machines are pinned such that they do not rotate.

**For the LT Machine**, this means that while the body of the machine still rotates about the inlet or x-axis, the nozzles will then be pinned at 9 and 3 o'clock. This allows the machine to be used in an open tube, such as a spray dryer or smokestack, to target clean only the walls of the vessel. For this operation, the machine would be lowered on a hose to the bottom, then slowly raised as the unit rotates, cleaning the entire length of the vessel.

**For the LTQ and BC machines**, the options depend on the operation. The typical configuration is to pin two nozzles at the 4:30 and 7:30 positions. However, these could be pinned in any configuration to meet needed requirements. Three and four nozzle configurations are also available. These machines are typically used in ribbon blenders and for cleaning steel tanks during the manufacturing process.

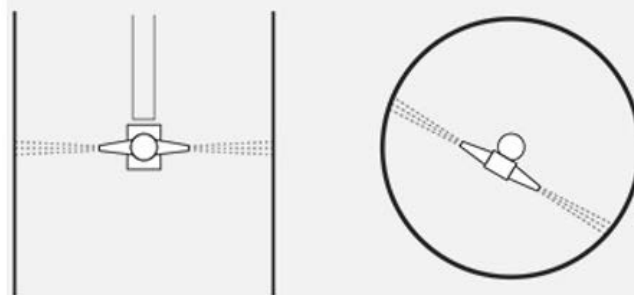
## User Benefits

- High Jet-Stream Impact
- Improved Capital Equipment Utilization
- Reduced Cleaning Times
- Reduced Effluent Generation
- Reduced Energy Costs
- Targeted Cleaning



## Cleaning Pattern Simulation

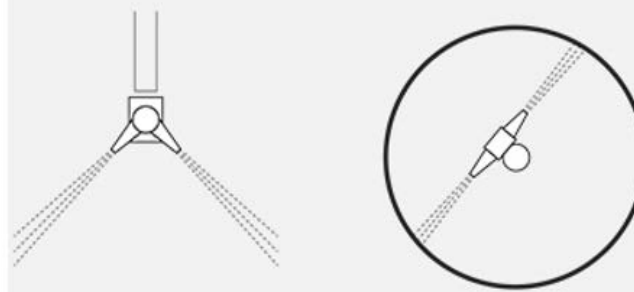
### LT Unidirectional Machine



Pattern Side View

Pattern Top View

### LTQ / BC Unidirectional Machines



Pattern Side View

Pattern Top View

## How to Specify Part Numbers

The **-05** at the end of any LT/LTFT/LTQ/BC part number indicates that it is a Unidirectional Tank Cleaning Machine.

Examples:

LT10Z21N0FT-05

LTQ634Z31N0FT-05

Please see machine specific data sheet for performance.

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