# Fast, Effective Impact Cleaning

## Alfa Laval TJ MultiJet 50 Rotary Jet Head (4 nozzles)

### Application

The Toftejorg MultiJet 50 rotary jet head provides 3D indexed impact cleaning over a defined time period. It is automatic and represents a guaranteed means of achieving quality assurance in tank cleaning. The device is suitable for processing, storage and transportation tanks and vessels between 250 and 1,250 m³.

## Working principle

The flow of the cleaning fluid makes the nozzles perform a geared rotation around the vertical and horizontal axes. In the first cycle, the nozzles lay out a coarse pattern on the tank surface. The subsequent cycles gradually make the pattern more dense, until a full pattern is reached after 8 cycles.



## TECHNICAL DATA

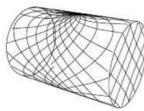
Lubricant: . . . . . . . . . . . Self-lubricating with the cleaning fluid

Max throw length: . . . . . . . . 9 - 26 m Impact throw length: . . . . . . 5 - 14 m

## Pressure

Working pressure: . . . . . . . 3 - 12 bar Recommended pressure: . . . . 5 - 6.5 bar

## Cleaning Pattern





First cycle

Full pattern

The above drawings show the cleaning pattern achieved on a cylindrical horizontal vessel. The difference between the first cycle and the full pattern represents the number of additional cycles available to increase the density of the cleaning.

## Certificates

2.1

## PHYSICAL DATA

#### Materials

1.4404 (316L), PTFE, PVDF, PEEK, Carbon, ETFE, TFM.

Surface finish: . . . . . . . . . . . . . . Mat

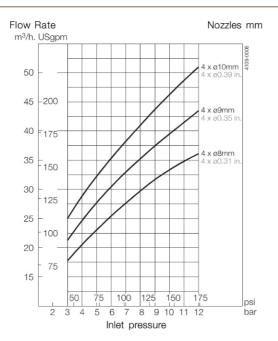
## Temperature

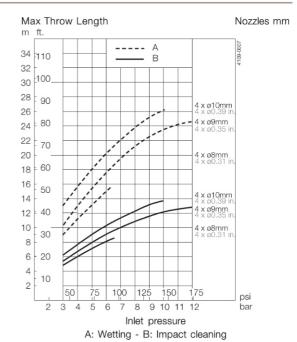
## Connections

Standard female thread: ...... 2" Rp (BSP) NPT, female

## Caution

Do not use for gas evacuation or air dispersion.

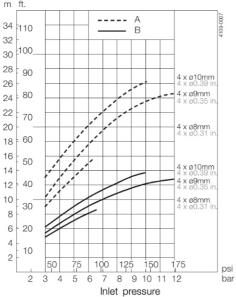




Flow rate

Cleaning Time, Complete PatternNozzles mm





Dimensions (mm / inch)

#### Standard Design

The choice of nozzle diameters can optimise jet impact length and flow rate at the desired pressure. The Toftejorg MultiJet 25 is also available with PEEK impeller. A welding adaptor with sealing for 1" ISO, 1" ANSI, 1 1/2" ISO Dairy Pipe or 1 1/2" SWG Pipe is available as an accessory.

#### Ordering

Please specify nozzle size, inlet/guide configuration and connections and confirm application suitability Sizing/selection and installation drawings are available in Alfa Laval's Selection Tools for Tank Cleaning Equipment

#### Options

Electronic rotation sensor to verify 3D coverage

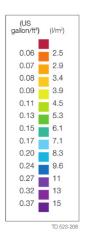
#### TRAX simulation tool

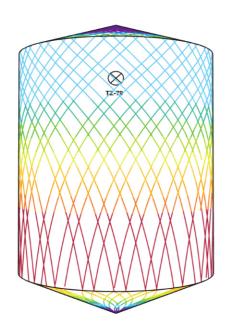
TRAX is a unique software that simulates how the Toftejorg MJ50 performs in a specific tank or vessel.

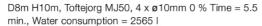
The simulation PPI00381EN 0910 Alfa Laval reserves the right to change specifications without prior notification. How to contact Alfa Laval Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com. gives information on wetting intensity, pattern mesh width and cleaning jet velocity. This information is used to determine the best location of the tank cleaning machine and the correct combination of flow, time and pressure to implement.

A TRAX demo containing different cleaning simulations covering a variety of applications can be used as reference and documentation for tank cleaning applications. The TRAX demo is free and available upon request.

## Wetting Intensity









D8m H10m, Toftejorg MJ50, 4 x  $\emptyset$ 10 mm, 0 % Time = 23.3 min., Water consumption = 10868 I