

Alfa Laval SaniJet 25 UltraPure

Rotary jet heads

Introduction

The Alfa Laval SaniJet 25 UltraPure is a rotary jet head tank cleaning machine for hygienic environments. Built to clean tanks with capacities from 15-150 m3 it combines pressure and flow to create high-impact cleaning jets that rotate in a repeatable and reliable 360-degree cleaning pattern.

The SaniJet 25 UltraPure minimizes the consumption of water, and cleaning media. Easy to customize to meet customer requirements, it allows companies to spend less time cleaning and more time producing.

Alfa Laval UltraPure equipment is designed and configured to meet the high demands of the biotech and pharmaceutical industry. Special attention is given to documentation, material and surface finish, in compliance with current Good Manufacturing Practices (cGMP) and other guidance for this industry.

Application

The Alfa Laval SaniJet 25 UltraPure is designed for the removal of the toughest residues from hygienic tanks across a broad range of industries, such as the pharmaceutical and personal care industries.

Benefits

- 60% faster cleaning = more time for production
- Saves up to 70% of your cleaning cost
- Eliminates the need for confined space entry for manual tank cleaning
- High-impact cleaning in a 360° repeatable cleaning pattern
- Cleaning process can be validated using Alfa Laval Rotacheck
- Alfa Laval Q-doc documentation package

Standard Design

The choice of nozzle diameters can optimize jet impact length and flow rate at the desired pressure.

Working principle

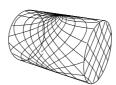
The high-impact jet stream from the Alfa Laval SaniJet 25 UltraPure rotary jet head is designed to cover the entire surface of the tank interior in a successively denser pattern. This achieves a powerful mechanical impact with a low volume of water and cleaning media.

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 course pattern on the tank surface. The subsequent cycles gradually make the pattern denser until at full cleaning pattern is reached. Once the full cleaning pattern is reached, the machine will start over again and continue to perform the next full cleaning pattern.

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

Q-doc, Q-doc incl. FAT/SAT and ATEX







TECHNICAL DATA

Lubricant	Self-lubricating with the cleaning fluid
Standard Surface finish:	Ra 0.5µm exterior / Ra 0.8µm internal
Max throw length:	12.5 - 17 m
Impact throw length:	5.5 - 10m
Pressure	
Working pressure:	3 - 8 bar

5 - 6.5 bar

PHYSICAL DATA

Recommended pressure:

Materials

316L (UNS S31603), Duplex steel (UNS N31803), Duplex steel (UNS S21800), PEEK*, PFA* and EPDM*

Welding connection

1" ISO, 1" ANSI/Sch40, 11/2" BPE US/SWG, 11/2"Dairy, 11/2"ANSI/Sch40 or NW40.

Temperature	
Max. working temperature:	95°C
Max. ambient temperature:	140°C
Weight:	6.3 kg

Options

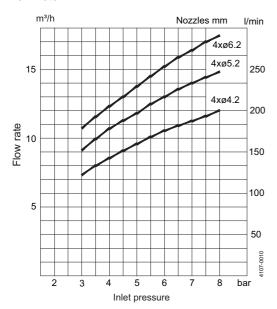
Declaration of Conformity with ATEX approved, Category 1 for installation in zone 0/20.

Caution

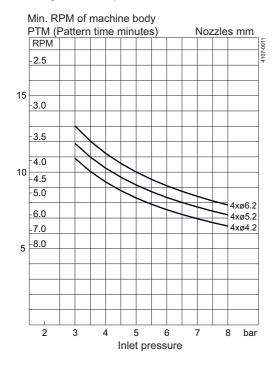
Avoid hydraulic shock, hard and abrasive particles in the cleaning liquid, as this can cause increased wear and/or damage of internal mechanisms. In general, a filter in the supply line is recommended. Do not use for gas evacuation or air dispersion. For steaming we refer to the manual.

^{*} FDA compliance 21CFR§177

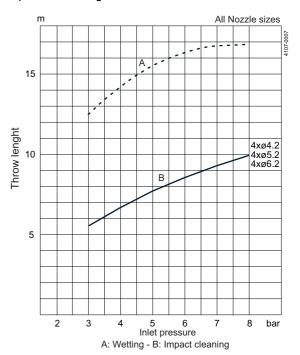
Flow Rate



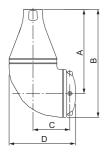
Cleaning Time, Complete Pattern

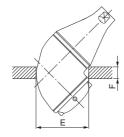


Impact Throw Length

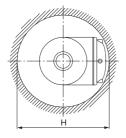


Dimensions









	Α	В	С	D	E	F	G	Н
mm	178	228.5	80	140	ø110	max. 25	ø150	ø195

Qualification Documentation

Documentatio	n specification

Equipment Documentation includes:

- EN 1935/2004 DoC

EN 10204 type 3.1 inspection Certificate and DoC

- FDA DoC

Q-doc - GMP EC 2023/2006 DoC

- EU 10/2011 DoC

- ADI DoC

- QC DoC

- USP Class VI certificate

Qualification Documentation includes:

- Q-doc

Q-doc +

- RS, Requirement Specification

FAT-SAT

ATEX

DS, Design specification incl. Traceability Matrix

- FAT, Factory acceptance Test incl. IQ and OQ

- SAT, Site Acceptance Test protocol incl. IQ and OQ for End-User Execution

ATEX approved machine for use in explosive atmospheres.

Catagory 1 for installation in zone 0/20 in accordance with Directive 2014/34/EU

II 1G Ex h IIC 85°C ...175°C Ga

II 1D Ex h IIIC T85°C ...T140°C Da

Alfa Laval reserves the right to change specifications without prior notification.