

ALFA
LAVAL

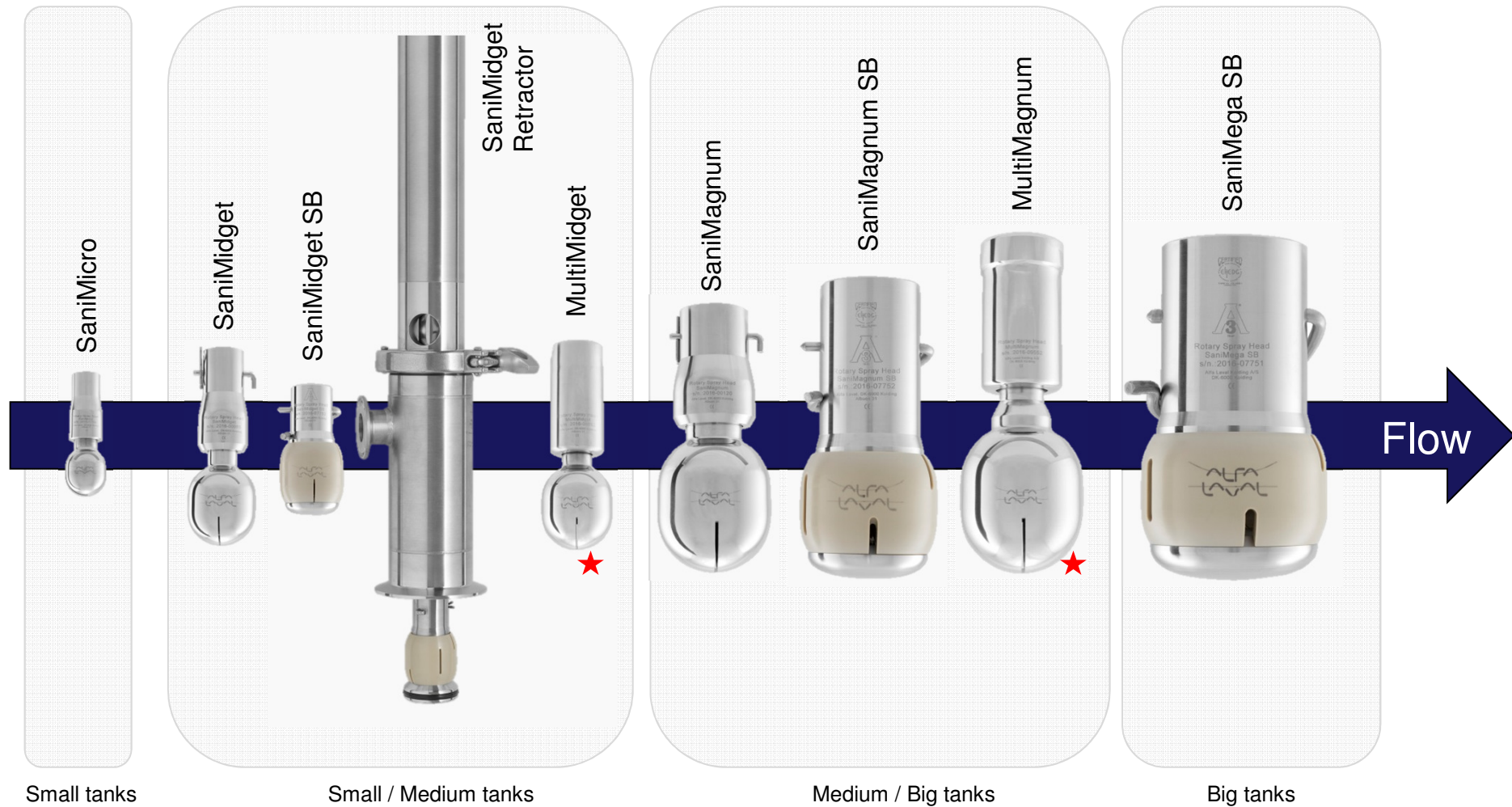
Tank cleaning

Portfolio



Alfa Laval Rotary Spray Head

- Product range



★ Industrial applications

www.alfalaval.com

SaniMicro

- Application : Sanitary application
- Tank size : Small tanks (0,05–1m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 0,6m
 - Flowrate : 1,5-2,8m³/h
- Feature : Double ball bearing race, allowing the unit to be orientated in any angle
- Certificates : Q-doc (3.1B), ATEX
- Connection : Thread, weld-on, clip
- Cleaning cost : Medium



SaniMidget

- Application : Sanitary application
- Tank size : Small/medium tanks (1-10m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 1,4m
 - Flowrate : 3,5-5,8m³/h
- Certificates : Q-doc (3.1B), ATEX
- Connection : Thread, weld-on, clip
- Cleaning cost : Medium



SaniMidget SB

- Application : Sanitary application
- Tank size : Small/medium tanks (1-10m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 1,4m
 - Flowrate : 6,7m³/h
- Certificates : Q-doc (3.1B), ATEX, 3A, EHEDG
- Feature : Slide bearing, minimum wear and long life time
- Connection : weld-on, clip
- Cleaning cost : Medium



MultiMidget

- Application : Industrial application
- Tank size : Small/medium tanks (1-10m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 1,4m
 - Flowrate : 3,5-5,8m³/h
- Certificates : 2,1
- Feature : Double ball bearing race, allowing the unit to be orientated in any angle
- Connection : weld-on, thread
- Cleaning cost : Medium



SaniMidget retractor

- Application : Industrial application, spray drying application
- Tank size : Small/medium tanks (1-10m³) and ducts
- Performance data based on recommended pressure:
 - Recommended pressure : 3 bar
 - Impact cleaning radius : 1,7m
 - Flowrate : 7,8m³/h
- Certificates : Q-doc (3.1B) ATEX
- Feature : Retractable unit, to be used in application where the unit can not be fix installed in the process, such as ducts
- Connection : weld-on, clamp
- Cleaning cost : Medium



SaniMagnum

- Application : Sanitary application
- Tank size : Medium / big tanks (5-50m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 2m
 - Flowrate : 10-15m³/h
- Certificates : Q-doc (3.1B), ATEX
- Connection : Thread, weld-on, clip
- Cleaning cost : Medium



SaniMagnum SB

- Application : Sanitary application
- Tank size : Medium / big tanks (5-50m³)
- Performance data based on recommended pressure
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 2,4m
 - Flowrate at recommended pressure : 11,5m³/h
- Certificates : Q-doc (3.1B), ATEX, 3A, EHEDG
- Feature : Slide bearing, minimum wear and long life time
- Connection : weld-on, clip
- Cleaning cost : Medium



MultiMagnum

- Application : Industrial application
- Tank size : Medium / big tanks (5-50m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 2m
 - Flowrate : 10-15m³/h
- Certificates : 2,1
- Feature : Double ball bearing race, allowing the unit to be orientated in any angle
- Connection : weld-on, thread
- Cleaning cost : Medium



SaniMega SB

- Application : Sanitary application
- Tank size : Big tanks (50-450m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 2-3 bar
 - Impact cleaning radius : 3m
 - Flowrate : 17-28m³/h
- Special model with high flowrate is available, flow rate 35m³/h@2 bar
- Certificates : Q-doc (3.1B), ATEX, 3A, EHEDG
- Feature : Slide bearing, minimum wear and long life time
- Connection : weld-on, clip
- Cleaning cost : Medium



Alfa Laval Rotary Jet Heads

- Product range

	Small tanks				Medium tanks		Large tanks				
Pharma Biotech etc.											
			SaniJet 20		SaniJet 25						
Food Soft drinks Beer Dairy etc.											
			TZ-89		TJ20G & TJ20G distillery version		TJ40G & TJ40G-HD				
Retrofit SSB											
		GJ A2	GJ A6		GJ PF FT						
Pulp & Paper Chemicals Ethanol Starch etc.											
	GJ 7	GJ BB	GJ 9	GJ 10	GJ PF	MultiJet 25 (ATEX)	GJ 8	MultiJet 40 (ATEX)	GJ 4	MultiJet 50 (ATEX)	i40S & i40D

Comparison of features: Gamajet versus Toftejorg

Feature (Gamajet)	Feature (Toftejorg)	Effect (Gamajet)	Customer experience (Gamajet)
Small size machines	Larger size machines	Fits through existing inlet sizes from 2" and up, with no reworking of the tank	Retrofit potential: When higher cleaning efficiency is required it is easy and with low installation costs to upgrade with Rotary Jet Heads through existing inlet: - Faster cleaning = More production uptime: - More efficient cleaning = Minimizing risk of product lost due to contamination - Impact cleaning = Reducing the use of water and chemicals - Automated cleaning = Validated process ensuring high product quality - Fast payback = Often less than 1 year, due to low operating cost
2 or 3 nozzles tank cleaning machine	4 nozzles tank cleaning machine	Higher impact pr. nozzle	Longer cleaning and wetting distance
2 or 3 nozzles tank cleaning machine	4 nozzles tank cleaning machine	More "open" cleaning pattern	Less cleaning effect from "overlapping" wall shear stress
Higher working and recommended pressure	Low working and recommended pressure	Can provide higher cleaning impact	The high mechanical force generated by the strong jet impingement, efficiently removes remaining product and residues to provide the best conditions required for effective cleaning
Relatively high pressure loss through the machine	Low pressure loss through the machine	Larger supply pump for providing the necessary flow and pressure	High pressure drop = less impact = higher energy consumption
Closed grease lubricated gear design	Open gear design, media lubricated	No media flow-through in the gear design	Robust in aggressive applications and/or in applications with particles in recirculating CIP liquids, as it will not damage and/or build up in the gear, with the risk of breakdown
Small gear construction	Large robust gear construction	Higher wear of gear construction	More frequent service and maintenance required to avoid breakdown and down time
Available certificates: 2.1	Available certificates: 2.2, Q-doc, Q-doc inkl. FAT-SAT, ATEX	Not applicable in industries/applications with 3.1 and/or ATEX requirements	Not applicable in industries/applications with 3.1 and/or ATEX requirements

SaniJet 20

- Application : High level Sanitary application, such as pharma, biotech
- Tank size : Small tanks (0,5-30m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 5-8 bar
 - Impact cleaning radius : 1,5-4m
 - Flowrate : 1,5-7,7m³/h
- Feature : Available in Hastelloy, Pneumatic motor drive, available in improved surface finish (see PD leaflets)
- Certificates : Q-doc (3.1B), ATEX
- Tank inlet opening : 4" clamp, 3" available on request
- Cleaning cost : low



SaniJet 25

- Application : High level Sanitary application, such as pharma, biotech, food requiring EHEDG
- Tank size : Small tanks (15-150m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 5-6,5 bar
 - Impact cleaning radius : 5,5-10m
 - Flowrate : 9,5-14,5m³/h
- Feature : Only EHEDG approved Rotary Jet head on the market, superior hygienic design
- Certificates : Q-doc (3.1B), ATEX, EHEDG
- Tank inlet opening : 110mm
- Cleaning cost : low



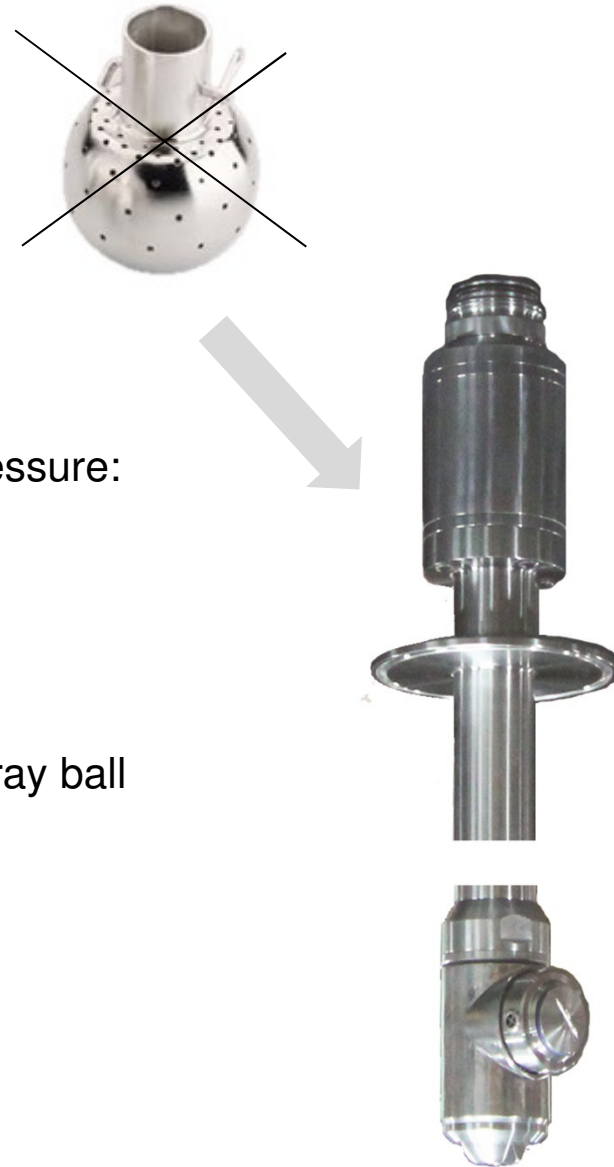
TZ-89

- Application : Sanitary application, such as Pharma, Personal care, small reactors
- Tank size : Small tanks (0,5-50m³)
- Performance data based on recommended pressure:
 - Recommended pressure : 5-6,5 bar
 - Impact cleaning radius : 2,5-4m
 - Flowrate : 1,8-3,4m³/h
- Feature : Adjustable downpipe, small inlet opening
- Certificates : 2,1
(SaniJet 20 if you need higher level of certificates)
- Tank inlet opening : 3"
- Cleaning cost : low



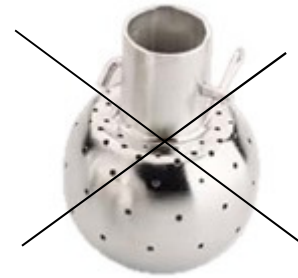
GJ A2

- Application : Sanitary retrofit application, where Static Spray ball does not provide optimal cleaning performance
- Tank size : Small tanks
- Performance data based on recommended pressure:
 - Recommended pressure : 4-10 bar
 - Impact cleaning radius : 2 2m
 - Flowrate : 1,0-5,4m³/h
- Feature : Perfect choice for replacing static spray ball
- Certificates : 2,1
- Tank inlet opening : 47mm
- Cleaning cost : low



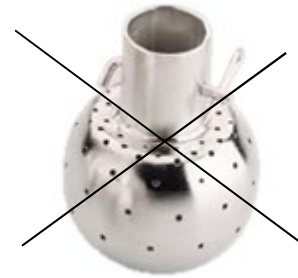
GJ A6

- Application : **Sanitary retrofit application,** where Static Spray ball does not provide optimal cleaning performance
- Tank size : Small tanks
- Performance data based on recommended pressure:
 - Recommended pressure : 2-10 bar
 - Impact cleaning radius : 6m
 - Flowrate : 2,5-6,7m³/h
- Feature : Perfect choice for replacing static spray ball
- Certificates : 2,1
- Tank inlet opening : 70mm
- Cleaning cost : low



GJ PF FT

- Application : **Sanitary retrofit application,** where Static Spray ball does not provide optimal cleaning performance
- Tank size : medium tanks
- Performance data based on recommended pressure
 - Recommended pressure : 4-20 bar
 - Impact cleaning radius : 14m
 - Flowrate : 9-25m³/h
- Feature : Perfect choice for replacing static spray ball
- Certificates : 2,1
(TJ20G if you need higher level of certificates)
- Tank inlet opening : 98mm
- Cleaning cost : low



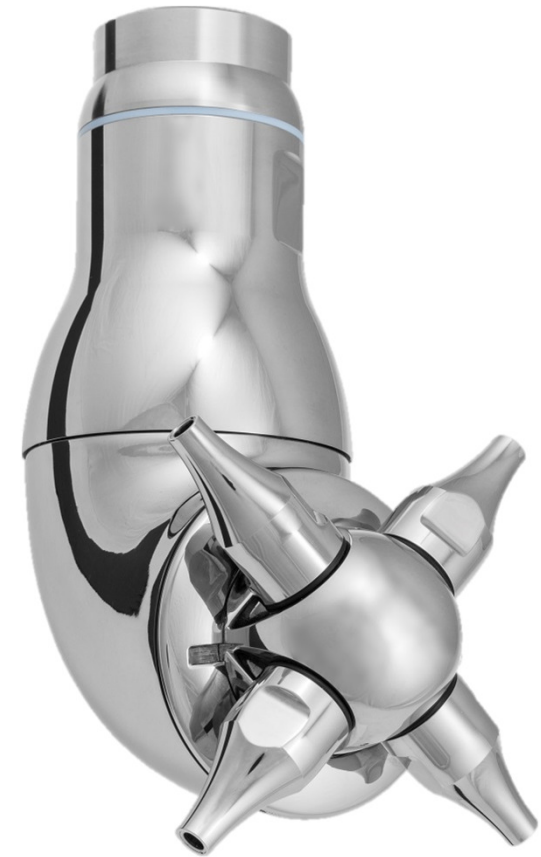
TJ20G

- Application : Sanitary application, such as Food, Beer, Dairy, Personal care, Alcohol
- Tank size : Small tanks (15-150m³)
- Performance data based on recommended pressure
 - Recommended pressure : 5-6,5 bar
 - Impact cleaning radius : 5,2-6,2m
 - Flowrate : 7-12m³/h
- Feature : Available in Hastelloy, available as a distillery version what can handle particles in cleaning media
- Certificates : 3,1, ATEX (SaniJet 25 if you need EHEDG)
- Tank inlet opening : 110mm (GJ PF FT if you require smaller inlet opening)
- Cleaning cost : low



TJ40G & TJ40G-HD

- Application : Sanitary application, such as Food, Beer, Dairy, Personal care, Alcohol
- Tank size : Small tanks (50-500m³)
- Performance data based on recommended pressure
 - Recommended pressure : 5-7 bar
 - Impact cleaning radius : 10,5m
 - Flowrate : 16-38m³/h
- Feature : Available as a heavy duty that can handle particles in cleaning media
- Certificates : 3,1, ATEX
- Tank inlet opening : 167mm
Cleaning cost : low



GJ 7

- Application : **Industrial application level**, such as Gas Separators or Pill Coaters with limited access
- Tank size : Small tanks
- Performance data based on recommended pressure
 - Recommended pressure : 7-55 bar
 - Impact cleaning radius : 0,25-3,0m
 - Flowrate : 0,65-1,4m³/h
- Feature : Small, light weight. Small inlet opening, enclosed gear box for better particle handling (grease lubricated gearbox)
- Certificates : 2.1
- Tank inlet opening : 43mm
- Cleaning cost : low



GJ BB

- Application : Industrial application level, such as drum and barrels
- Tank size : Small tanks
- Performance data based on recommended pressure
 - Recommended pressure : 5,5-55 bar
 - Impact cleaning radius : 0,25-2,8m
 - Flowrate : 0,8-1,4m³/h
- Feature : Small inlet opening, enclosed gear box for better particle handling (grease lubricated gearbox)
- Certificates : Small, light weight
- Tank inlet opening : 44mm
- Cleaning cost : low



GJ 9

- Application : **Industrial application level**, such as IBC containers and industrial tanks
- Tank size : Small tanks
- Performance data based on recommended pressure
 - Recommended pressure : 4-40 bar
 - Impact cleaning radius : 0,9-4m
 - Flowrate : 0,9-6,7m³/h
- Feature : Small, light weight , Perfect choice for cleaning IBC containers. Small inlet opening, enclosed gear box for better particle handling (grease lubricated gearbox)
- Certificates : 2.1 (TJ20G if you need higher level of certificates)
- Tank inlet opening : 70mm
- Cleaning cost : low



GJ 10

- Application : **Industrial application level**, such as under ground fuel storage tanks
- Tank size : Small tanks
- Performance data based on recommended pressure
 - Recommended pressure : 3,5-18,5 bar
 - Impact cleaning radius : 5-14m
 - Flowrate : 4-16,5m³/h
- Feature : designed to cleaning underground fuel storage tanks. Small inlet opening, enclosed gear box for better particle handling (grease lubricated gearbox)
- Certificates : 2.1 (MultiJet 25 is ATEX is required)
- Tank inlet opening : 100mm
- Cleaning cost : low



GJ PF

- Application : **Industrial application level,** such as Ethanol, Paint, Paper, Steel, Starch
- Tank size : Medium tanks
- Performance data based on recommended pressure
 - Recommended pressure : 4-20 bar
 - Impact : 14m
 - Flowrate : 9-25m³/h
- Feature : Small inlet opening, enclosed gear box for better particle handling (grease lubricated gearbox)
- Certificates : 2,1
(Multijet 25 if you need ATEX)
- Tank inlet opening : 98mm
- Cleaning cost : low



MultiJet 25

- Application : **Industrial application level**, such as Ethanol, Paint, Paper, Steel, Starch
- Tank size : Medium tanks (15-150m³)
- Performance data based on recommended pressure
 - Recommended pressure : 5-6,5 bar
 - Impact cleaning radius : 5,2-6,2m
 - Flowrate at : 7-12m³/h
- Certificates : 2,1, ATEX (TJ20G if you need higher level of certificates)
- Tank inlet opening : 110mm (GJ PF if you require smaller inlet opening)
- Cleaning cost : low



GJ 8

- Application : **Industrial application level,** such as Ethanol, Paint, Paper, Steel, Starch
- Tank size : Big tanks
- Performance data based on recommended pressure:
 - Recommended pressure : 4-20 bar
 - Impact cleaning radius : 10-18m
 - Flowrate : 6,4-31m³/h
- Feature : Enclosed gear box for better particle handling (grease lubricated gearbox)
- Certificates : 2.1 (MultiJet 40 if you need ATEX)
- Tank inlet opening : 121mm
- Cleaning cost : low



MultiJet 40

- Application : **Industrial application level,** such as Ethanol, Paint, Paper, Steel, Starch
- Tank size : Big tanks
- Performance data based on recommended pressure:
 - Recommended pressure : 5-6,5 bar
 - Impact cleaning radius : 5-8m
 - Flowrate : 11-22m³/h
- Feature : Also available as 2 nozzle version that has a longer cleaning distance
- Certificates : 2.1, ATEX (TJ40G-HD if you need higher level of certificates)
- Tank inlet opening : 180mm (4 nozzle version) (GJ 8 if you require smaller inlet opening)
- Cleaning cost : low



GJ 4

- Application : **Industrial application level**, such as Ethanol, Paint, Paper, Steel, Starch
- Tank size : Big tanks
- Performance data based on recommended pressure:
 - Recommended pressure : 3,5-14 bar
 - Impact cleaning radius : 12-23m
 - Flowrate : 6-57m³/h
- Feature : Enclosed gear box for better particle handling (grease lubricated gearbox)
- Certificates : 2.1
(MultiJet 50 or MultiJet 65 if you need ATEX)
- Tank inlet opening : 170mm
- Cleaning cost : low



MultiJet 50

- Application : **Industrial application level,** such as Ethanol, Paint, Paper, Steel, Starch
- Tank size : Big tanks
- Performance data based on recommended pressure:
 - Recommended pressure : 5-6,5 bar
 - Impact cleaning radius : 7-11m
 - Flowrate : 22-37m³/h
- Feature : Also available as 2 nozzle version that has a longer cleaning distance
- Certificates : 2.1, ATEX (TJ40G-HD if you need higher level of certificates)
- Tank inlet opening : 232mm (4 nozzle version) (GJ 4 if you require smaller inlet opening)
- Cleaning cost : low



MultiJet 65

- Application : **Industrial application level,** such as Ethanol, Paint, Paper, Steel, Starch
- Tank size : Big tanks
- Performance data based on recommended pressure:
 - Recommended pressure : 5-10 bar
 - Flowrate : 43-85m³/h
- Feature : Also available as 2 nozzle version that has a longer cleaning distance
- Certificates : 2.1, ATEX (TJ40G-HD if you need higher level of certificates)
- Tank inlet opening : 232mm (4 nozzle version) (GJ 4 if you require smaller inlet opening)
- Cleaning cost : low

