



TANKJET® TANK CLEANING PRODUCTS



TANKJET[®] FROM SPRAYING SYSTEMS CO.: THE PRODUCTS, EXPERTISE & SERVICES TO OPTIMIZE TANK CLEANING

It takes more than equipment to ensure proper cleaning of your tanks, totes, vats, drums and more. It takes experience and expertise in addition to an extensive product line. The ultimate goal is to ensure tanks are cleaned thoroughly, in the least amount of time, using the least amount of water/chemicals possible. The right partner will guide you through the entire process, from equipment selection, to system evaluation and optimization, and ongoing support. We're that partner. We have dozens of TankJet products and decades of experience helping customers in hundreds of industries optimize tank cleaning.

- Use this catalog to research TankJet product options. It is organized by tank diameter. In each section, you'll find a wide range of products that provide gentle rinsing to high-impact cleaning. Many tank cleaners are available in a wide range of flow rates and materials. Some are available with different coverages, nozzle configurations, a choice of connection styles, extension lengths and more.
- Tap into local spray expertise: once you've evaluated the options, contact your local expert by phone or chat on tankjet.com. Your local expert can conduct an on-site evaluation of your tank cleaning operations, demonstrate products, conduct proof-of-concept tests, assist with payback calculations and arrange for no-obligation product trials.
- Consider how TankJet products can advance your sustainability goals. Your local expert can help you estimate your potential savings by reducing water, chemical and energy use with automated tank cleaners.
- Ongoing optimization assistance: In addition to the educational resources such as the optimization tips found on page A4, demonstration videos and tutorials on YouTube/ sprayingsystems and informative case studies at spray.com/ results, your local spray expert is always nearby and willing to help. Even when your TankJet tank cleaner is working properly, there may be ways to further improve cleaning efficiency. An on-site inspection is always just a call away.



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TECHNICAL REFERENCE

TANKJET[®] QUICK REFERENCE GUIDE

Nozzle	Max. Tank Dia. ft. (m)	Operating Principle	Flow Rate gpm (lpm)	Operating Pressure psi (bar)	Spray Coverage	Min. Tank Opening in. (mm)	Max. Temp. °F (°C)	Recommended Strainer Mesh (micron)	Page No.
TankJet 360	100	Fluid-driven turbine	30 to 300 (114 to 1136)	40 to 350 (2.8 to 24.1)	360°	6.25 (159) for 2 nozzle; 10.25 (260) for 3 nozzle	250 (121)	20 (840)	B4
TankJet AA290	(30.5)	Motor-driven	24 to 284 (91 to 1075)	50 to 250 (3.4 to 17.2)	360°	7.25 (184) for 2 nozzle; 8.25 (210) for 4 nozzle	200 (93)	100 (150)	B6
TankJet 180	80 (24.4)	Fluid-driven turbine	30 to 300 (114 to 1136)	40 to 350 (2.8 to 24)	180°	12.25 (311)	250 (121)	20 (840)	B10
TankJet 80 & 80H	50 (15.2)	Fluid-driven turbine	53 to 142 (200 to 538)	60 to 200 (4.1 to 13.8)	360°	6.5 (165) for 2 nozzle; 12.5 (318) for 3 nozzle	250 (121)	20 (840)	B12
TankJet 78 & 78D	45 (13.7)	Fluid-driven turbine	65 to 165 (246 to 625)	25 to 100 (1.7 to 6.9)	360°	TJ78: 5.75 (146) TJ78D: 7.63 (194)	200 (93)	50 (300)	C4
TankJet 65 & 65HT	40	Fluid-driven turbine	30 to 150 (114 to 568)	50 to 150 (3.4 to 10.3)	360°	7.5 (190)	TJ65: 250 (121) TJ65HT: 500 (260)	20 (840)	C6
TankJet AA190 Ex	(12.2)	Motor-driven	3.1 to 44 (11.8 to 167)	100 to 1000 (6.9 to 69)	180°, 360°	3.75 (95) for 360°; 4.5 (114.3) for 180°	200 (93)	100 (150)	C8
TankJet YMD3	30	Motor-driven	8.6 to 37.5 (32.6 to 142)	725 to 4350 (50 to 300)	360°	3.75 (95)	176 (80)	100 (150)	C12
TankJet 75 & 75H	(9.1)	Fluid-driven turbine	15.0 to 33 (57 to 125)	75 to 300 (5.2 to 21)	360°	3.75 (95)	250 (121)	200 (80)	C14
TankJet 27500 & 27500-R	10 to 25 (3.0 to 7.6)	Fluid-driven reactionary force	4.0 to 224 (15.3 to 850)	10.0 to 50 (0.7 to 3.4)	180° up/down, 270° up/down, 360°	2 to 7 (51 to 178)	200 (93)	100 (150)	C16, D4, E4
TankJet	24 (7.2)	Fluid-driven turbine	36 to 76 (136 to 288)	50 to 200 (3.4 to 13.8)	180° up/down, 270° down, 360°	3 (76)	250 (121)	20 (840)	C18
TankJet 28500 & 28500-R	18 (5.5)	Fluid-driven reactionary force	9.0 to 78.3 (34 to 296)	10.0 to 50 (0.7 to 3.4)	180° up/down, 270° up/down, 360°	2.5 to 4 (64 to 102)	200 (93)	100 (150)	D6
TankJet 12900	18 (5.5)	Fixed stationary	72 to 385 (280 to 1470)	20 to 50 (1.4 to 3.4)	360° and custom spray angles	10 (254)	212 (100)	16 to 100 (1190 to 150)	D8
TankJet AA090	16 (4.9)	Motor-driven	1.5 to 7.3 (5.7 to 28)	100 to 500 (6.9 to 34.5)	360°	2.3 (59)	200 (93)	100 (150)	D10
TankJet D26984 & D40159	10 to 16 (3.0 to 4.9)	Fluid-driven constant speed	3.2 to 19.8 (12.0 to 75)	30 to 90 (2.1 to 6.2)	65° down, 120° down, 180° up/down, 260° up/down, 360°	Thread: 2.25 (56) CIP version: 4 (102)	160 (70)	200 (74)	D14



TANKJET[®] QUICK REFERENCE GUIDE

TECHNICAL REFERENCE

1	Nozzle	Max. Tank Dia. ft. (m)	Operating Principle	Flow Rate gpm (lpm)	Operating Pressure psi (bar)	Spray Coverage	Min. Tank Opening in. (mm)	Max. Temp. °F (°C)	Recommended Strainer Mesh (micron)	Page No.
NEW TankJet D41800E		10 to 16 (3.0 to 4.9)	Fluid-driven constant speed	3.0 to 22.8 (11.0 to 86)	30 to 90 (2.1 to 6.2)	360°	1.25 (32)	265 (130)	200 (74)	D16
TankJet D41990		6.5 to 16 (2.0 to 4.9)	Fluid-driven reactionary force	2.4 to 37.4 (9.0 to 141)	15.0 to 60 (1.0 to 4.1)	180° up/down, 360°	Thread: 1 to 1.5 (25 to 38) CIP version: 2 to 4 (51 to 102)	265 (130)	200 (74)	D18, E10
TankJet 9 A, B & C		6 to 16 (1.8 to 4.9)	Fluid-driven reactionary force	1.3 to 38 (4.9 to 144)	10.0 to 120 (0.7 to 8.3)	2 x 175°, 360°	TJ9-A: 1.25 (32) TJ9-B: 1.5 (38) TJ9-C: 1.75 (44)	190 (88)	20 (840)	D20, E14
TankJet 63225		13 (4.0)	Fixed stationary	22 to 51 (83 to 192)	15.0 to 40 (1.0 to 2.8)	360°	1.5 to 4 (38 to 102)	400 (204)	16 to 50 (1190 to 300)	D22
TankJet 14 & 19		12 (3.7)	Fluid-driven turbine	10.0 to 30 (38 to 114)	50 to 200 (3.4 to 13.8)	180° up/down, 270° down, 360°	2 (51)	250 (121)	20 (840)	D26
TankJet 6353 & 6353-MFF		10 (3.0)	Fixed stationary	8.9 to 80 (35 to 301)	20 to 50 (1.4 to 3.4)	360°	6 (152)	212 (100)	16 to 100 (1190 to 150)	E6
TankJet 18250A	L	8 (2.4)	Fluid-driven reactionary force	10.5 to 55 (48 to 205)	10.0 to 60 (0.7 to 4.1)	360°	2.38 (60)	350 (177)	200 (74)	E8
TankJet D41892	€ ↓	6.5 (2.0)	Fluid-driven reactionary force	4.0 to 7.5 (15.9 to 29)	20 to 70 (1.4 to 4.8)	360°	1.5 (37)	160 (70)	200 (74)	E12
TankJet M60	P		Motor-driven	1.1 to 10.1 (4.2 to 38)	100 to 1000 (6.9 to 69)	360°	1.75 (44.5)	180 (82)	100 (150)	F4
TankJet D26564	1	5	Fluid-driven reactionary force	2.4 to 5.4 (9.0 to 20.5)	14.5 to 72.5 (1.0 to 5.0)	180° up/down	1.5 (37)	194 (90)	200 (74)	F6
TankJet 21400A		(1.5)	Fluid-driven reactionary force	5.0 to 22 (23 to 82)	10.0 to 60 (0.7 to 4.1)	360°	2.25 (60)	350 (177)	200 (74)	F7
TankJet VSM	8		Fixed stationary	2.7 to 72 (10.4 to 269)	10.0 to 150 (0.7 to 10.3)	240° down	2 (51)	200 (93)	50 (297)	F8
TankJet 30473	Į	3	Fluid-driven reactionary force	2.1 to 4.5 (7.8 to 18.0)	10.0 to 50 (0.7 to 3.4)	180° up/ down, 360°	1 (25)	200 (93)	200 (74)	F9
TankJet 23240-2 23240-3	ĮĮ	(0.9)	Fluid-driven reactionary force	3.5 to 22 (14.0 to 79)	20 to 200 (1.4 to 13.8)	360°, side spray	1.03 (26)	350 (177)	200 (74)	F10



TECHNICAL REFERENCE



CLEANING POWER GUIDELINES

Choosing a tank cleaner is based primarily on tank size and level of cleaning required. Understanding the definitions that follow will help ensure you select the right tank cleaner for your application.

High-impact cleaning is required to remove stubborn residues such as layers of a dried substance. Tank cleaners in this category generally use high pressure and/or high flow and spin at slow rotational speeds to maintain high impact. Solid stream nozzles are used to maximize impact.

Medium-impact cleaning is required when good impingement is needed to remove residues. Tank cleaners that provide medium impact generally use solid stream nozzles at medium flows and pressures. Rotational speed is slightly faster than high impact tank cleaners but much slower than free-spinning nozzles to ensure adequate impact on target areas.

Rinsing is used when distributing cleaning solution throughout the tank without impact provides sufficient cleaning. Rinsing nozzles are typically free-spinning or stationary spray balls.



TANKJET® TANK CLEANER OVERVIEW BY TANK DIAMETER

The chart on the next page shows our tank cleaning products and the maximum and minimum tank diameter each unit can clean. The maximum tank diameter is defined as the total distance the spray can travel to tank walls assuming the unit is positioned in the center of the tank. The closer the nozzle is to the tank wall, the greater the impact. It is possible to use some tank cleaners in smaller tanks than recommended, but be sure to keep clearance, tank material and drainage capacity in mind.

SPRAY DISTANCE

										1	ank	Diam	eter	Ran	ge									
Feet	0.5	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	30	40	50	60	70	80	90	100
Meters	0.2	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3	3.7	4.3	4.9	5.5	6.1	9.1	12	15	18	21	24	27	30
TankJet [®] 360																								100
TankJet AA290																								100
TankJet 180																							80	
TankJet 80																				50				
TankJet 78 & 78D																			4	15				
TankJet 65 & 65HT																			40					
TankJet AA190																			40					
TankJet YMD3																		30						
TankJet 75																		30						
TankJet 27500																	2	5						
TankJet 16		_															24							
TankJet 27500 & 27500-R																	20							
TankJet 28500 & 28500-R																18								
TankJet 12900																18								
TankJet AA090															16									
TankJet D26984															16									
TankJet D40159															16									
TankJet D41800E															16									
TankJet D41990															16									
TankJet 9-C															16									
TankJet 63225 & 63225-3A													1	3										
TankJet 9-B													12											
TankJet 14 & 19													12											
TankJet 6353 & 6353-MFP										_		10												
TankJet 18250A										8														
TankJet D41892									6.5															
TankJet 9-A								6																
TankJet M60							5																	
TankJet D26564							5																	
TankJet 21400A							5																	
TankJet VSM							5																	
TankJet 30473					3																			
TankJet 23240-2, 23240-3					3																			



OPTIMIZING YOUR TANK CLEANING OPERATIONS

Tank cleaning equipment is designed to yield specific performance under specific conditions. A variety of factors can affect results. Even when tank cleaning equipment appears to be working as expected, there may be room for improvement. Adjustments are often possible to achieve more consistent results, improve efficiency, reduce the length of time tanks are out of service and lower operating costs.

Here are seven optimization tips to consider as you evaluate the current performance of your tank cleaning equipment.

1. HEATED WATER VS. IMPACT

Hot water is costly but may be needed to remove some residues. However, in some cases, hot water may be eliminated by increasing cleaning impact. This can result in a dramatic reduction in energy costs and savings of thousands of dollars annually. Ask your local sales engineers for assistance in determining if increasing impact can eliminate hot water use in your application. This may involve a proof-of-concept test to compare the cleaning performance of high impact vs. hot water.

Don't try to evaluate impact without expert advice. Impact, or the amount of force the cleaning liquid applies to the tank surface, is difficult to measure. There is no industry standard for reporting impact data. Even though nozzles produce the same type of pattern, such as a solid stream, performance will vary based on how the nozzles were designed and machined.

2. OPERATIONAL CONSIDERATIONS

Two tanks that are the same size with the same residue may require completely different tank cleaners and cleaning times. For example, a 12 ft. (3.7 m) diameter tank used for paint mixing may be cleaned using a medium-impact tank cleaner with cycle times averaging 10 minutes if the paint residue is still wet. The same size tank may require a high-impact tank cleaner and take longer to clean if the paint has dried in the tank.

3. LOOK FOR ISSUES ASSOCIATED WITH "STRIPING"

High-impact tank cleaners that provide 360° cleaning coverage use solid stream sprays. These sprays don't overlap as they rotate, so there's a small distance between each path and striping occurs. The greater the distance the nozzles are from the vessel walls, the greater the distance between paths. In some operations, striping can be a contamination risk. Switching to a three- or four-nozzle configuration, rather than the standard two-nozzle configuration, is one way to reduce striping and minimize risk.







Striping effect with two-nozzle hub configuration





4. SHORTEN CLEANING TIME BY INCREASING IMPACT

Simple adjustments to liquid pressure and flow may enable a reduction in the number of cycles needed for thorough cleaning. Faster cleaning saves time and reduces water and chemical use. To increase impact and cleaning efficiency, it's far more effective to increase flow than liquid pressure since increasing flow rate intensifies impact at a greater rate than increasing pressure. In fact, doubling flow rate boosts impact as much as 100% while doubling liquid pressure provides only 40% more impact. In addition, there are other drawbacks to increasing pressure. Higher liquid pressures can introduce turbulence to the jet stream, reducing throw and cleaning efficiency.

Relative Impact

Flow Rate	Liquid Inlet Pressure	Relative Impact
13 gpm (49.2 lpm)	45 psi (3.1 bar)	1.0
13 gpm (49.2 lpm)	90 psi (6.2 bar)	1.4
26 gpm (98.4 lpm)	45 psi (3.1 bar)	2.0

5. CLEANING HARD-TO-REACH AREAS

Internal obstructions, like agitator shafts/blades, coils, etc., block the spray from hitting the tank wall. Certain areas, such as skim lines, require more cleaning than others. Having the flexibility to reposition tank cleaning equipment can help you achieve complete cleaning in less time and reduce operating costs. An adjustable ball fitting can be used to clean vessels in sections: Clean the top half of the vessel, then lower the device and clean the bottom half of the vessel, or change the angle to clean difficult locations.

Lances and adjustable flanges can also be used to help position nozzles properly. For example, if the tank only has a single entry opening, special lances and flanges can be used so the nozzle turret can be easily moved to multiple locations in the tank. Special lances and flanges can also be used to position nozzles so the spray impacts directly on heavily soiled areas or skim lines.

6. REVIEW SYSTEM COMPONENTS

In addition to the tank cleaner, other equipment can affect cleaning performance.

- ✓ Pumps: Check that you have the correct pump for your system. The efficiency of the pump will have a direct impact on flow and the performance of the tank cleaning equipment.
- Piping and Valves: Be sure pipes and valves are properly sized. Incorrect sizing can lead to inadequate flow, pressure and fluid velocity.
- ✓ Filtration: Confirm that required filtration products are installed. Filters or strainers should be properly sized and installed to prevent clogging.



 Monitoring: Ensure gauges or flow meters are placed in critical locations. System

monitoring will enable quick detection and resolution of problems.

7. PERFORM REGULAR MAINTENANCE

After installing the tank cleaner, be sure to document performance to establish a baseline for later comparison. Also, be sure to inspect equipment on a regular basis. Verifying operation can be challenging since it is difficult to visually observe tank cleaning equipment while operating. Problems with tank cleaning equipment often become evident when trace amounts of residue are detected after cleaning.

Watch for debris build-up. Debris can clog nozzles, become embedded in bushings and gears and cause the unit to stop working or reduce service life. Even if you are just cleaning with water, rust or scale from piping may accumulate in the unit. Make sure to put your tank cleaners on a routine maintenance program to check bushings, seals, bearings and nozzles and make sure they are not worn or clogged.

Be sure to document when service is done and how frequently components are replaced.

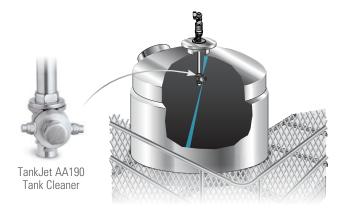


OPTIMIZING TANK CLEANING WILL PAY FOR ITSELF QUICKLY. HERE ARE A FEW EXAMPLES:

PHARMACEUTICAL MANUFACTURER **REDUCES CLEANING TIME BY 80%**

Before: Spray balls were used to clean two 6.25 ft dia. x 9 ft tall (1900 mm diameter x 2790 mm tall) processing tanks.

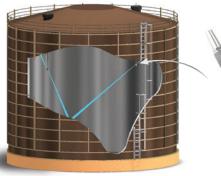
After: A TankJet® AA190, equipped with a 1 ft. (317 mm) shaft, operates at pressures up to 500 psi (34 bar) to provide highimpact, 360° cleaning. Even with stubborn residue, cleaning time has been reduced from 1 hour to 12 minutes.



FERMENTER CLEANING TIME REDUCED FROM 45 MINUTES TO 20 MINUTES

Before: Tank cleaning nozzle operating at 40 psi (2.8 bar) required two cleaning cycles, extending cleaning time and increasing use of water and chemicals.

After: Two fluid-driven TankJet 360 tank cleaners, each with a two-nozzle hub, operating at 90 psi (6.2 bar) provide thorough cleaning of the fermenter in less than half the time. High-impact, high-efficiency 0.375 inch (9.5 mm) nozzles rotate 360° in horizontal and vertical planes, creating a criss-crossing pattern that thoroughly removes residue.



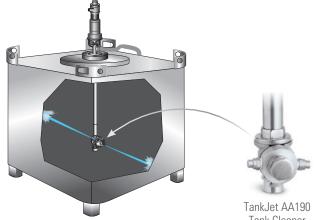


TankJet 360 Tank Cleaner

TOTE CLEANING TIME REDUCED FROM 45 MINUTES TO 10 MINUTES

Before: Turbine-driven rotating nozzle spraying hot water at 10 gpm (37.8 lpm) at 100 psi (6.9 bar). Wash cycle was often repeated a second time for complete removal of residue.

After: A TankJet AA190 now cleans the totes at 500 psi (34 bar) and a flow rate of 20 gpm (75.7 lpm). Operating at greater flow rates and higher pressures increases cleaning impact and results in cycle times of just 10 minutes.



Tank Cleaner

CONSULT WITH EXPERTS

If you would like help optimizing your tank cleaning operations, our local sales engineers are always available for assistance and workshops at your facility. After evaluating your current operations and equipment, we'll offer optimization suggestions designed to achieve your specific cleaning objectives. More information on local sales services are available at www.tankjet.com.



FOR TANK DIA. UP TO **100** ft. (30.5 m)

PAINT TANKS • CHEMICAL TANKS ADHESIVE TANKS • BLENDERS TANKER TRUCKS • WINE VATS BROKE CHESTS • PROCESS TANKS FOOD AND BEVERAGE TANKS BREWERY TANKS



TANK DIA. UP TO 100 FT. (30.5 M) I N T R O D U C T I O N



CLEAN HARD-TO-REMOVE RESIDUES WITH HIGH-IMPACT, HIGH-EFFICIENCY SPRAYS

IDEAL FOR CLEANING LARGE TANKS

Designed to clean large vessels, these tank cleaners deliver high-impact, high-efficiency sprays for the complete removal of contaminants and residues. Designed to provide effective cleaning in the least amount of time possible, TankJet[®] 360, AA290, 180 and 80 tank cleaners ensure tanks are returned to service quickly.



QUICK REFERENCE GUIDE

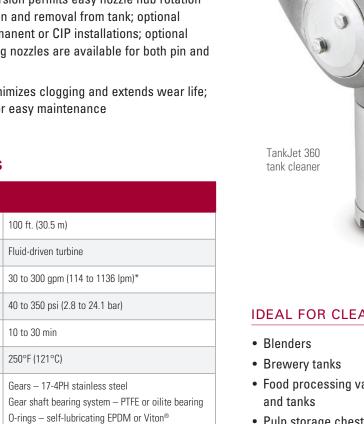
Model	Cleaning Power	Max. Tank Diameter ft. (m)	Operating Principle	Flow Rate Range gpm (lpm)	Operating Pressure psi (bar)	Spray Coverage	Max. Temperature °F (°C)	Materials	Page Number
TankJet® 360	High impact	100 (30.5)	Fluid-driven turbine	30 to 300 (114 to 1136)	40 to 350 (2.8 to 24.1)	360°	250 (121)	Gears – 17-4PH stainless steel Gear shaft bearing system – PTFE or oilite bearing O-rings – self-lubricating EPDM or Viton® Seals – high-performance spring-energized PTFE All other metallurgy – 316 stainless steel	В4
TankJet AA290	High impact	100 (30.5)	Motor-driven	24 to 284 (91 to 1075)	50 to 250 (3.4 to 17.2)	360°	200 (93)	Seals – PTFE fluoropolymer resin All other metallurgy – 316 stainless steel	B6
TankJet 180	High impact	80 (24.4)	Fluid-driven turbine	30 to 300 (114 to 1136)	40 to 350 (2.8 to 24)	180°	250 (121)	Gears – 17-4PH stainless steel O-rings – self-lubricating EPDM or Viton Seals – high-performance spring-energized PTFE Gear shaft bearing system – PTFE or oilite bearing All other metallurgy – 316 stainless steel or Viton	B10
TankJet 80	High impact	50 (15.2)	Fluid-driven turbine	53 to 142 (200 to 538)	60 to 200 (4.1 to 13.8)	360°	250 (121)	316 stainless steel, PTFE and UHMW-PE	B12



TANK DIA. **100 ft.** (30.5 m)

FEATURES AND BENEFITS

- Provides consistent, high-impact, high-efficiency cleaning over the entire pressure range for short cycle times
- Can be used for high-concentration chemical recirculation cleaning or low-pressure, high-volume cleaning
- Choice of dual- or triple-nozzle fluid-driven hubs in food-grade, oil-lubricated or flow-through gearbox designs
- Nozzles rotate 360° in horizontal and vertical planes, creating a crisscrossing pattern to thoroughly clean tanks and remove the stickiest of residues
- · All units are built-to-order, lightweight for easy portability and compact to fit in small tank openings
- · Standard clutch version permits easy nozzle hub rotation by hand for insertion and removal from tank; optional pin version for permanent or CIP installations; optional external, self-rinsing nozzles are available for both pin and clutch versions
- · Built-in strainer minimizes clogging and extends wear life; user-serviceable for easy maintenance





IDEAL FOR CLEANING:

- Food processing vats
- · Pulp storage chests
- Petrochemical/chemical processing reactors
- Processing tanks
- Tanker trucks
- Wine vats

TRY BEFORE YOU BUY:

Ask About Our Free 15-Day Trial Program

SPECIFICATIONS

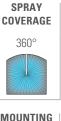
Fluid-driven turbine				
30 to 300 gpm (114 to 1136 lpm)*				
40 to 350 psi (2.8 to 24.1 bar)				
10 to 30 min				
250°F (121°C)				
Gears – 17-4PH stainless steel Gear shaft bearing system – PTFE or oilite bearing O-rings – self-lubricating EPDM or Viton® Seals – high-performance spring-energized PTFE All other metallurgy – 316 stainless steel				
2" NPT (F) with 2-1/2" quick disconnect (M) 2" NPT (F) with 2-1/2" NST (NH) hose thread (M) 2" BSPT (F) with 2-1/2" quick disconnect (M)				
Strainers, recommended mesh size:				

*For flow rates below 30 gpm (114 lpm), contact your local sales engineer for information about TankJet 363 tank cleaners with patented low-flow technology that reduces wastewater costs.



B4





OPTIONS

45° Down 🗡 🌂

▲ ↓

4 -

XX

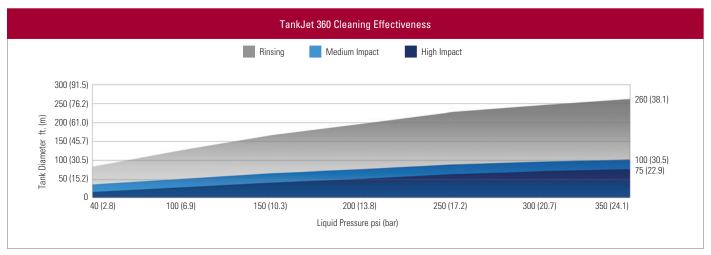
Vertical

Horizontal

45° Up

TANK DIA. **100 ft.** (30.5 m)

PERFORMANCE DATA



DIMENSIONS AND WEIGHTS

TankJet 360 Tank Cleaner	No. of Nozzles	L in. (mm)	Min. Tank Opening in. (mm)
MIN. TANK OPENING	2	13.3 (338)	6.25 (158)
MIN. TANK OPENING	3	13.3 (338)	10.25 (260)

For lances, mounting kits, adapters and more, see page G6

ORDERING INFORMATION

Call your local spray expert for application assistance or to place an order.

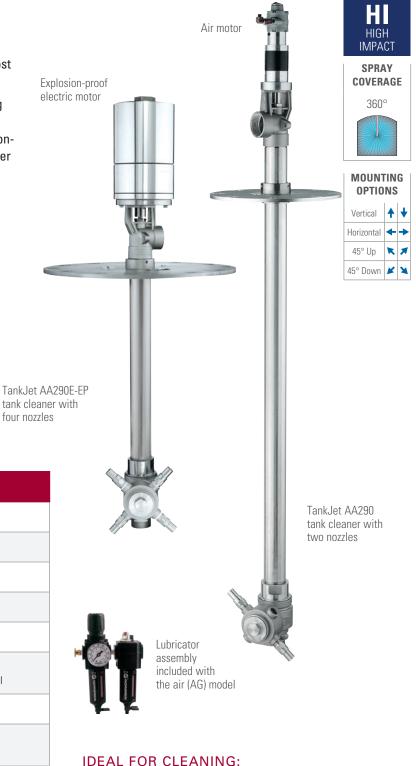




TANKJET AA290 TANK CLEANER FEATURES AND BENEFITS

TANK DIA. **100 ft.** (30.5 m)

- · Dependable, durable motor-driven units provide consistent, high-impact cleaning to remove the most stubborn residues
- Motor is positioned outside the tank to ensure long life and eliminate failures caused by exposure to harmful cleaning solutions; constructed of corrosionresistant 316 stainless steel with PTFE fluoropolymer resin seals
- 55430 series solid stream nozzles provide optimum impact and have removable stabilizer vanes for easy maintenance
- Flow rates can be controlled through nozzle selection or adjustments to inlet pressure
- Customize by selecting:
 - CE-rated air (AG) or explosion-proof (EP) electric motor
 - Two- or four-nozzle configuration
 - Extension lengths from 3 ft. (0.9 m) up to 10 ft. (3 m)



- Fermentation and yeast tanks and vats
- Flour silos

SPECIFICATIONS

TankJet AA290 Tank Cleane	r		
Max. tank diameter:	100 ft. (30.5 m)		
Operating principle:	Motor-driven		
Flow rate:	24 to 284 gpm (91 to 1075 lpm)		
Operating pressure:	50 to 250 psi (3.4 to 17.2 bar)		
Max. temperature:	200°F (93°C)		
Materials:	Seals – PTFE fluoropolymer resin All other metallurgy – 316 stainless steel		
Inlet connection:	2" NPT or BSPT (F)		
Flanges:	8" (203 mm) flange for two-nozzle hub 10" (254 mm) flange for four-nozzle hub		
Motor options:	Air or explosion-proof electric See page B8		
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron). See page G2		

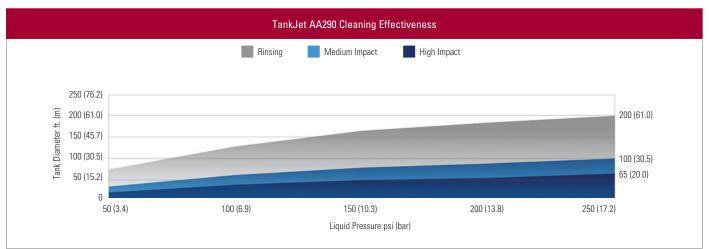
· Mixing tanks

· Paint tanks



TANK DIA. **100 ft.** (30.5 m)

PERFORMANCE DATA



Model	AA290	Total Flow of Equal Capacity, gpm (lpm)* Liquid Inlet Pressure											
	Capacity	50 psi (3.4 bar)		100 psi (6.9 bar)		150 psi (10.3 bar)	200 psi (13.8 bar)	250 psi (17.2 bar)			
Nozzle	Size	Two Nozzles	Four Nozzles	Two Nozzles	Four Nozzles	Two Nozzles	Four Nozzles	Two Nozzles	Four Nozzles	Two Nozzles	Four Nozzles		
	00100	24 (91)	47 (179)	33 (128)	65 (247)	42 (154)	80 (297)	48 (190)	92 (360)	53 (200)	101 (379)		
	00200	45 (170)	88 (336)	63 (241)	124 (475)	79 (293)	151 (564)	91 (360)	169 (653)	101 (380)	177 (667)		
55430-H3/4U	00250	56 (212)	108 (410)	77 (296)	151 (577)	96 (356)	184 (685)	110 (434)	205 (796)	122 (458)	216 (816)		
	00350	77 (293)	144 (546)	109 (415)	190 (725)	133 (496)	225 (841)	150 (584)	248 (958)	160 (602)	259 (978)		
	00400	88 (335)	161 (613)	123 (470)	215 (820)	150 (559)	254 (948)	167 (648)	277 (1064)	176 (664)	284 (1075)		

*Note: Liquid inlet pressure measured near inlet connection of tank cleaner.

AIR MOTOR (AG) CYCLE TIME DATA

Air	Air	Approx (rp	•	Approx. Time for One Complete Cycle (min.)						
Pressure psi (bar)	Consumption scfm (Ipm)		Liquid Pressure psi (bar)							
		50 (3.4)	250 (17.2)	50 (3.4)	250 (17.2)					
6.0 (0.4)	3.2 (91)	1.2	1.0	50.8	61.0					
8.0 (0.6)	4.1 (116)	4.8	4.4	12.7	13.9					
10.0 (0.7)	4.9 (139)	7.9	7.1	7.7	8.6					

EXPLOSION-PROOF MOTOR (EP) CYCLE TIME DATA

Approx. Speed (rpm)	Supply	Approx. Time for One Complete Cycle (min.)
4.0	120 VAC 60 Hz	16.0

For lances, mounting kits, adapters and more, see section G, Accessories

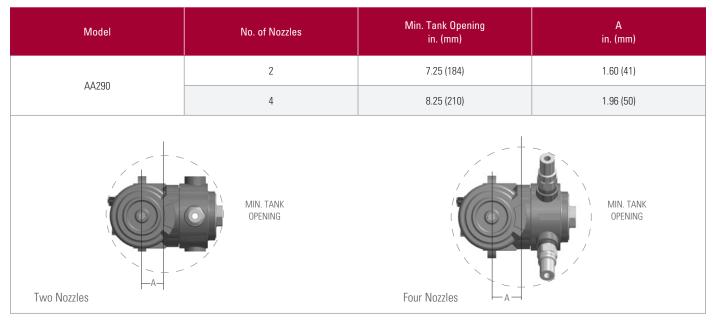


DIMENSIONS AND WEIGHTS

TankJet AA290 Tank Cleaner	Model	A Extension Length ft. (m)	B Overall Length ft. (m)	Weight with 8" Flange Ibs. (kg)	Weight with 10" Flange Ibs. (kg)
Air motor (AG)	AA290AG_F	3 (0.9)	60.88 (1.5)	56 (25.5)	63 (28.7)
	AA290AG_F	4 (1.2)	72.88 (1.8)	60 (27.3)	67 (30.5)
	AA290AG_F	6* (1.8)	96.88 (2.5)	69 (31.4)	76 (34.6)
Electric motor Explosion Proof (E-EP)	AA290E_F-EP	3 (0.9)	61.75 (1.6)	66 (30.1)	73 (33.2)
	AA290E_F-EP	4 (1.2)	73.75 (1.8)	70 (31.9)	77 (35)
	AA290E_F-EP	6* (1.8)	97.75 (2.5)	79 (36)	86 (39.1)

* Extensions up to 10 ft. (3 m) available on request

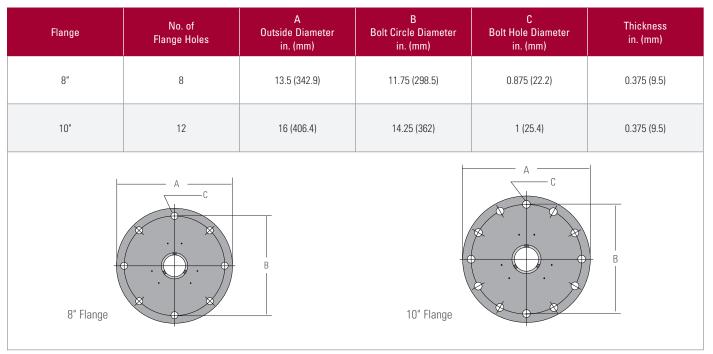
SPRAY HEAD TANK OPENING DIAMETER



TANKJET® AA290 TANK CLEANER

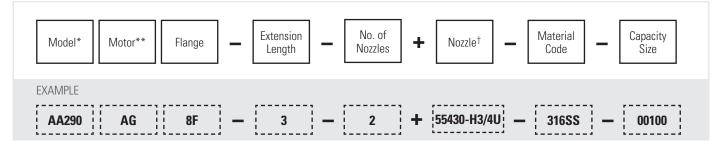
TANK DIA. **100** ft. (30.5 m)

FLANGE SPECIFICATIONS

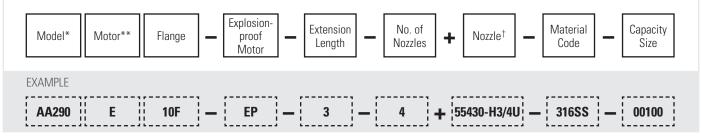


ORDERING INFORMATION

TANKJET AA290AG TANK CLEANER



TANKJET AA290E-EP TANK CLEANER



*Add B after AA in the tank cleaner model for BSPT connections.

**Motor: Specify AG for air and E-EP for electric explosion-proof.

†Use nozzle number 55430-HB3/4U for BSPT connections.



TANKJET 180 TANK CLEANER FEATURES AND BENEFITS

- Customizable to your operation, the TankJet 180 can be used for high-concentration chemical recirculation cleaning or low-pressure, high-volume cleaning
- Food-grade, oil-lubricated or flow-through gearbox designs are fluid-driven and ideal for open top tanks; a built-in strainer minimizes clogging
- Nozzles rotate on multiple axes creating a crisscross pattern to thoroughly clean tanks and remove the stickiest of residues
- Concentrated cleaning stream effectively cleans bottom and shadow areas of tanks, outperforming other fluiddriven tank cleaners
- All units are built-to-order and lightweight for easy portability



SPECIFICATIONS

TankJet 180 Tank Cleaner	
Max. tank diameter:	80 ft. (24.4 m)
Operating principle:	Fluid-driven turbine
Flow rate:	30 to 300 gpm (114 to 1136 lpm)
Operating pressure:	40 to 350 psi (2.8 to 24 bar)
Wash cycle time:	10 to 30 min
Max. temperature:	250°F (121°C)
Materials:	Gears – 17-4PH stainless steel O-rings – self-lubricating EPDM or Viton Seals – high-performance spring-energized PTFE Gear shaft bearing system – PTFE or oilite bearing All other metallurgy – 316 stainless steel or Viton
Inlet connection:	2" NPT (F) with 2-1/2" quick-disconnect (M) 2" NPT (F) with 2-1/2" NST hose thread (M) 2" BSPT (F) with 2-1/2" quick-disconnect (M)
Optional accessories:	Strainers, recommended mesh size: 20 (840 micron). See page G2

TankJet 180 tank cleaner

IDEAL FOR CLEANING:

- Adhesive tanks
- Food processing vats and tanks
- Paint tanks

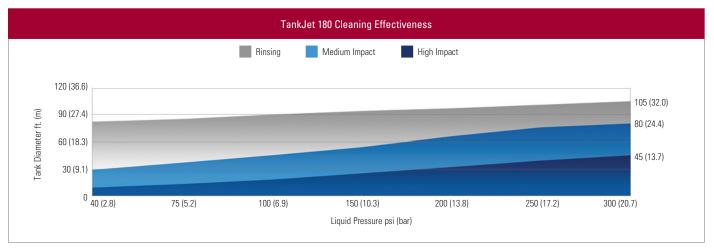
- Petrochemical/chemical processing reactors
- Processing tanks
- Sludge/wastewater tanks

TRY BEFORE YOU BUY:

Ask About Our Free 15-Day Trial Program

танк dia. **80 ft.** (24.4 m)

PERFORMANCE DATA



DIMENSIONS AND WEIGHTS

TankJet 180 Tank Cleaner	Model	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Net Weight Ibs. (kg)
W W W W W W W W W W W W W W W W W W W	TJ180	12.2 (310)	12.13 (308)	12.25 (311)	29 (13.2)

For lances, mounting kits, adapters and more, see page G6

ORDERING INFORMATION

Call your local spray expert for application assistance or to place an order.





TankJet 80

TANKJET 80 & 80H TANK CLEANERS FEATURES AND BENEFITS

талк dia. **50 ft.** (15.2 m)

- Slow rotation provides excellent dwell time on tank surface and offers powerful, reliable cleaning
- Hygienic (H) models feature polished surfaces and enclosed gears, ideal for fermenters, food and brewery applications
- Simple, self-cleaning, flow-through design requires minimal maintenance
- Choice of dual- or triple-nozzle fluid-driven turbine hubs
- Multi-axis rotation provides complete 360° coverage every 45 revolutions
- Lightweight construction for easy portability and installation
- Optional external clean-in-place nozzles help keep unit and drop pipe clean
- Slow Rotation (SR) models available for applications needing longer dwell time

TankJet 80 & 80H Tank Cleaners								
Max. tank diameter:	50 ft. (15.2 m)							
Operating principle:	Fluid-driven turbine							
Flow rate:	53 to 142 gpm (200 to 538 lpm)							
Operating pressure:	60 to 200 psi (4.1 to 13.8 bar)							
Max. temperature:	250°F (121°C)							
Material:	316 stainless steel, PTFE and UHMW-PE							
Rotation speed:	SR: 3 to 8 rpm Std: 8 to 20 rpm							
Inlet connection:	1-1/2" NPT or BSPT (F)							
Optional accessories:	Strainers, recommended mesh size: 20 (840 micron) See page G2							

IDEAL FOR CLEANING:

- · Brewery tanks
- Chemical vessels
- Fermenters
- Food and dairy tanks
- Tanker trucks
- Pulp chests



ing Systems Co.

TankJet®

TJ-80 ^{AL NO: 33567}

Typically used in the brewery industry, external clean-in-place (CIP) nozzles clean unit and down pipe.



HI

HIGH

IMPACT

SPRAY COVERAGE

360°

MOUNTING

OPTIONS

Vertical

SPECIFICATIONS

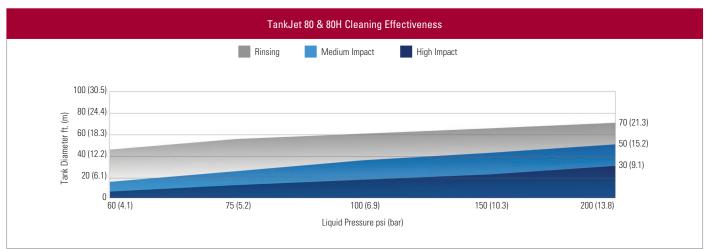


B12

) Spraying Systems Co.®

танк dia. **50 ft.** (15.2 m)

PERFORMANCE DATA



	Model TJ	80 & 80H			Liquid Flow Capacity gpm (lpm)					
No. of Nozzles	Capacity Size	Slow Rotation Option*	CIP Option*	60 psi (4.1 bar)	75 psi (5.2 bar)	100 psi (6.9 bar)	125 psi (8.6 bar)	150 psi (10.3 bar)	175 psi (12.1 bar)	200 psi (13.8 bar)
2	250			27 (102)	30 (113)	34 (130)	38 (144)	41 (157)	44 (168)	47 (179)
2	313			43 (163)	47 (180)	54 (203)	59 (224)	64 (242)	68 (258)	72 (274)
2	375		•	54 (204)	60 (226)	68 (259)	76 (288)	83 (314)	89 (337)	95 (359)
2	438	•	•	63 (239)	70 (264)	79 (299)	87 (330)	94 (358)	101 (383)	107 (406)
3	250			32 (121)	36 (135)	41 (156)	46 (175)	50 (191)	55 (206)	58 (221)
3	313		•	55 (210)	62 (234)	71 (270)	79 (301)	87 (329)	94 (355)	100 (379)
3	375	•	•	68 (258)	76 (287)	87 (330)	97 (368)	106 (402)	114 (433)	122 (462)
3	438			87 (327)	94 (356)	105 (397)	114 (431)	122 (462)	129 (489)	136 (514)

* Avilable with the TankJet 80 only

For lances, mounting kits, adapters and more, see page G6



DIMENSIONS AND WEIGHTS

TankJet 80 & 80H Tank Cleaners	Model	No. of Nozzles	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Net Weight Ibs. (kg)
	80	2	12.75 (324)	3.7 (94)	6.5* (165)	15 (6.8)
	80H	2	13.1 (333)	3.4 (86)	5.5 (140)	12 (5.5)
Per general Tree Tree Tree Tree Tree Tree Tree Tre	80	3	12.75 (324)	11.75 (299)	12.5 (318)	15 (6.8)
MIN. TANK OPENING	80H	3	12.75 (324)	12.0 (304)	12.0 (304)	12 (5.5)

*CIP version 7.0 in. (178 mm)

ORDERING INFORMATION

TANKJET 80 TANK CLEANER



* Leave blank for NPT connection or insert B for BSPT connection.

**Leave blank for standard version

TANKJET 80H TANK CLEANER



* Leave blank for NPT connection or insert B for BSPT connection.

B14



FOR TANK DIA. UP TO 45 ft.

BREW KETTLES • CHEMICAL TANKS DAIRY TANKS & TOTES • TANKER TRUCKS • FOOD & BEVERAGE TANKS PROCESS TANKS • BROKE CHESTS PHARMACEUTICAL TANKS



TANK DIA. UP TO 45 FT. (13.7 M) I N T R O D U C T I O N

aying Systems Co. TankJet® TJ-75 SERIAL NO: 33585



RELIABLE AND CHEMICAL-RESISTANT TANK CLEANING SOLUTIONS

Available in a variety of spray coverage options and impact ratings, these TankJet[®] nozzles effectively clean tanks in shorter cleaning cycles to provide savings on water and chemicals. A range of chemical-resistant materials and differing operating principles make this collection ideal for harsh environments.





QUICK REFERENCE GUIDE

Model	Cleaning Power	Max. Tank Diameter ft. (m)	Operating Principle	Flow Rate gpm (lpm)	Operating Pressure psi (bar)	Spray Coverage	Max. Temperature °F (°C)	Materials	Page Number
TankJet® 78 & 78D	High impact	45 (13.7)	Fluid-driven turbine	65 to 165 (246 to 625)	25 to 100 (1.7 to 6.9)	360°	200 (93)	316L stainless steel, PTFE and EPDM All materials meet FDA Title 21 CFR	C4
TankJet 65	High impact	40 (12.2)	Fluid-driven turbine	30 to 150 (114 to 568)	50 to 150 (3.4 to 10.3)	360°	250 to 500 (121 to 260)	Standard version: Stainless steel, PTFE, UHMW-PE, nylon High-temperature version: Stainless steel	C6
TankJet AA190 Ex	High impact	40 (12.2)	Motor-driven	3.1 to 44 (11.8 to 167)	100 to 1000 (6.9 to 69)	180°, 360°	200 (93)	Seals – PTFE fluoropolymer resin All other metallurgy – 316 stainless steel	C8
TankJet YMD3	High impact	30 (9.1)	Motor-driven	8.6 to 37.5 (32.6 to 142)	725 to 4350 (50 to 300)	360°	176 (80)	316 stainless steel, PTFE and fluororubber	C12
TankJet 75	Medium impact	30 (9.1)	Fluid-driven turbine	15.0 to 33 (57 to 125)	75 to 300 (5.2 to 21)	360°	250 (121)	316 stainless steel, PTFE and UHMWE-PE	C14
TankJet 27500 & 27500-R & x	Medium impact	25 (7.6)	Fluid-driven reactionary force	125 to 391 (475 to 1480)	10.0 to 50 (0.7 to 3.4)	180° up/down, 270° up/down, 360°	200 (93)	PTFE fluoropolymer resin	C16
TankJet 16	Medium impact	24 (7.2)	Fluid-driven turbine	36 to 76 (136 to 288)	50 to 200 (3.4 to 13.8)	180° up/down, 270° down, 360°	250 (121)	316 stainless steel and PTFE	C18



TANKJET 78 & 78D SANITARY TANK CLEANER FEATURES AND BENEFITS

- High-impact 360° coverage ensures tank cleanliness and results in shorter cleaning cycles and reduced use of water and chemicals
- Patent-pending sanitary design meets 3-A Sanitary Standard 78
- Fast and easy maintenance without tools
- · Easy retrofit for spray balls

TANK DIA. **45 ft.** (13.7 m)

- · Choice of two- or four-nozzle configurations and inlet connection size
- Ideal for cleaning food, dairy and beverage tanks, blenders, spray dry towers and pulp chests
- Can be steam sanitized



This unit meets the requirements of 3-A Sanitary Standard 78. Spray cleaning devices intended to remain in place.



TankJet 78D four-nozzle configuration sanitary tank cleaner

SPECIFICATIONS

TankJet 78 & 78D Sanitary Tank Cleaners								
Max. tank diameter:	45 ft. (13.7 m)							
Operating principle:	Fluid-driven turbine							
Flow rate:	65 to 165 gpm (246 to 625 lpm)							
Operating pressure:	25 to 100 psi (1.7 to 6.9 bar)							
Wash cycle time:	3 to 6 min							
Max. temperature:	200°F (93°C)							
Materials:	316L stainless steel, PTFE and EPDM All materials meet FDA Title 21 CFR							
Inlet connection:	1-1/2" or 2" slip-fit							
Optional accessories:	Strainers, recommended mesh size: 50 (297 micron) See page G2							

IDEAL FOR CLEANING:

- Milk, cheese, yogurt tanks
- · Spray drying towers
- Blenders
- · Brewery tanks
- Food processing vats and tanks

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• Wine vats

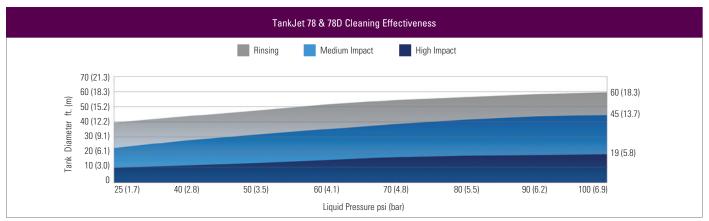
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TANK DIA. **45 ft.** (13.7 m)

PERFORMANCE DATA



Model Capacity Size	Capacity	Datian	Liquid Flow Capacity gpm (lpm)						
	Size	Size Rating	25 psi (1.7 bar)	40 psi (2.8 bar)	60 psi (4.1 bar)	80 psi (5.5 bar)	100 psi (6.9 bar)		
TJ78	375	3A	65 (246)	80 (303)	100 (379)	118 (447)	134 (507)		
TJ78D	300	3A	80 (303)	100 (379)	125 (473)	146 (553)	165 (625)		

DIMENSIONS AND WEIGHTS

TankJet 78 & 78E	TankJet 78 & 78D Sanitary Tank Cleaners			L in. (mm)	Min. Tank Opening in. (mm)	Net Weight Ibs. (kg)
		TJ78	1-1/2	14.25 (362)	- 5.75 (146)	15.0 (6.0)
	MIN. TANK OPENING	Single-hub	2	14.63 (372)	3.73 (140)	15.0 (6.8)
		TJ78D	1-1/2	14.25 (362)	7.02 (404)	40.0 (0.0)
	MIN. TANK OPENING	Dual-hub	2	14.63 (372)	7.63 (194)	19.0 (8.6)

ORDERING INFORMATION

TANKJET 78 & 78D SANITARY TANK CLEANER





TANKJET 65 TANK CLEANER FEATURES AND BENEFITS

ТАNК DIA. **40 ft.** (12.2 m)

- · Four solid stream nozzles, a slow and steady multi-axis rotation, and a tight 360° indexing pattern provide excellent dwell time on the tank's surface while covering the entire tank every 45 revolutions
- External gears and self-cleaning, flow-through design for easy maintenance
- · All stainless steel version offers high-temperature operability
- · Lightweight for easy portability



SPECIFICATIONS

TankJet 65 Tank Cleaner	Standard version	High-temperature version			
Max. tank diameter:	40 ft. (12.2 m)	40 ft. (12.2 m)			
Operating principle:	Fluid-driven turbine	Fluid-driven turbine			
Flow rate:	30 to 100 gpm (114 to 379 lpm)	65 to 150 gpm (246 to 568 lpm)			
Operating pressure:	50 to 150 psi (3.4 to 10.3 bar)	50 to 150 psi (3.4 to 10.3 bar)			
Max. temperature:	250°F (121°C)	500°F (260°C)			
Materials:	Stainless steel, PTFE, UHMW-PE and nylon	Stainless steel			
Rotation speed:	5 to 40 rpm	5 to 40 rpm			
Inlet connection:	1-1/2" NPT, BSPT (F) or 1" sanitary flange	1-1/2" NPT, BSPT (F) or 1" sanitary flange			
Optional accessories:	Strainers, recommended mesh size: 20 (840 micron) See page G2				

TankJet 65

For lances, mounting kits, adapters and more, see page G6

IDEAL FOR CLEANING:

- Brew kettles
- Chemical processing tanks
- · Dairy vessels
- Food processing vats

HIGH

360°

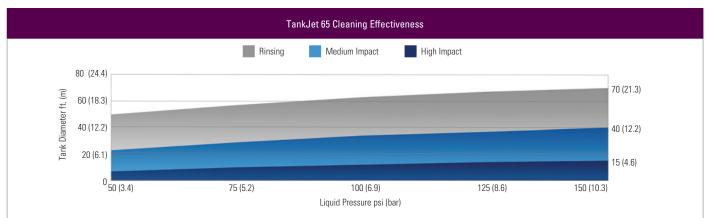
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- Spray dryers
- Tanker trucks

TANK DIA. 40 ft. (12.2 m)

PERFORMANCE DATA



Mode	el TJ65	Liquid Flow Capacity gpm (lpm)						
Orifice Size	High Temperature	50 psi (3.4 bar)	70 psi (4.8 bar)	90 psi (6.2 bar)	100 psi (6.9 bar)	110 psi (7.6 bar)	130 psi (9.0 bar)	150 psi (10.3 bar)
250		30 (114)	39 (148)	45 (170)	49 (185)	53 (201)	58 (220)	63 (238)
313		51 (193)	60 (227)	70 (265)	74 (280)	79 (299)	85 (322)	92 (348)
375		58 (220)	69 (261)	78 (295)	83 (314)	88 (333)	94 (356)	100 (379)
250	•	65 (246)	78 (295)	90 (341)	96 (363)	100 (379)	109 (413)	116 (439)
313	•	67 (254)	83 (314)	97 (367)	103 (390)	107 (405)	117 (443)	126 (477)
375	•	86 (326)	105 (397)	119 (450)	125 (473)	130 (492)	143 (541)	150 (568)

DIMENSIONS AND WEIGHTS

TankJet 65	Tank Cleaner	Inlet Conn.	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)
		Threaded	10.25 (260.4)	0.00 (400.4)	0.0 (000.0)	11.75 (5.3)
	MIN. TANK OPENING	Sanitary Flange	11.81 (300)	6.63 (168.4)	8.8 (222.3)	12.4 (5.6)

ORDERING INFORMATION

TANKJET 65 TANK CLEANER



*Leave blank for NPT connection. Insert B for BSPT connection or SF for sanitary flange.

**Leave blank for standard version.



TANKJET AA190 TANK CLEANER FEATURES AND BENEFITS

TANK DIA. **40 ft.** (12.2 m)

- Versatile, high-impact tank cleaner provides efficient, consistent, reliable cleaning with virtually no maintenance
- Lightweight units can be installed permanently or easily moved from tank to tank
- Unit is constructed using corrosion-resistant materials with the motor positioned outside the tank, away from harmful caustics, for trouble-free operation and long service life
- Component and configuration options allow easy customization to meet the needs of a variety of cleaning operations. Choices include:
 - Variable speed CE-approved air (AG), electric (E) or explosion-proof (E-EP) electric motors
 - Standard tank cleaner versions that operate at pressures up to 500 psi (34.5 bar)
 - High-pressure versions, for applications requiring higher impact force, that operate at pressures up to 1000 psi (69 bar)
 - 360° or 180° coverage
 - Extension lengths from 4 in. (100 mm) to 10 ft. (3.0 m)
 - Flange mounting options include: three-prong (standard), $ASME_{\circledast}$ raised face, and sanitary tri-clamp
- Long wear-life materials of construction with corrosion-resistant 316 stainless steel and PTFE fluoropolymer-resin seals
- ATEX-certified versions available

SPECIFICATIONS

TankJet AA190 Tank Cleaner	Standard version	High-pressure version	
Max. tank diameter:	25 ft. (7.6 m)	40 ft. (12.2 m)	
Operating principle:	Motor-driven	Motor-driven	
Flow rate:	3.1 to 44 gpm (11.8 to 167 lpm)	7 to 20 gpm (26 to 78 lpm)	
Operating pressure:	100 to 500 psi (6.9 to 34.5 bar)	up to 1000 psi (69 bar)	
Max. temperature:	200°F (93°C)	200°F (93°C)	
Materials:	Seals – PTFE fluoropolymer resin All other metallurgy – 316 stainless steel	Seals – PTFE fluoropolymer resin All other metallurgy – 316 stainless steel	
Inlet connection:	1" NPT or BSPT (F)	1" NPT or BSPT (F)	
Motor options:	Air, electric, explosion-proof electric	Air, electric, explosion-proof electric	
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron) See page G2		



IDEAL FOR CLEANING:

- Chemical reactors
- Food processing tanks and vats
- Paint tanks
- Pharmaceutical processing vessels

HIGH

IMPACT

SPRAY

COVERAGE

360°

180°

MOUNTING

OPTIONS

↑

<-→

XX

XX

Vertical

Horizontal

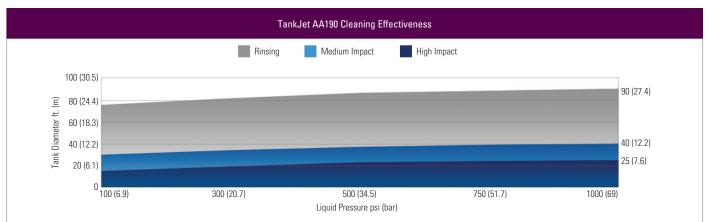
45° Up

45° Down

- Process tanks
- Tanker trucks

талк dia. **40 ft.** (12.2 m)

PERFORMANCE DATA



Model	AA190			Liquid Flow Cap	acity gpm (Ipm)* Liqui	d Inlet Pressure		
Nozzle	Capacity Size	100 psi (6.9 bar)	200 psi (13.8 bar)	300 psi (20.7 bar)	400 psi (27.6 bar)	500 psi (34.5 bar)	700 psi (48.3 bar)**	1000 psi (69 bar)**
	0010	3.1 (11.8)	4.4 (17.3)	5.4 (20)	6.3 (24)	6.9 (27)	8.2 (31)	9.8 (37)
	0015	4.7 (17.9)	6.6 (25)	8.1 (31)	9.4 (36)	10.5 (40)	12.4 (47)	14.9 (56)
	0020	6.2 (23)	8.8 (33)	10.8 (41)	12.4 (47)	13.9 (53)	16.4 (62)	19.6 (74)
	0025	7.7 (29)	10.9 (41)	13.3 (50)	15.4 (58)	17.2 (65)	20 (76)	_
	0030	9.1 (34)	12.9 (49)	15.8 (60)	18.2 (69)	20 (76)	-	_
1/4MEG	0035	10.5 (39)	14.8 (56)	18.1 (69)	21 (80)	23 (87)	-	_
	0040	11.8 (44)	16.7 (63)	20 (76)	24 (91)	26 (98)	-	_
	0050	14.2 (53)	20 (76)	25 (95)	28 (106)	32 (121)	-	_
	0060	16.4 (62)	23 (87)	28 (106)	33 (125)	37 (140)	-	-
	0070	18.3 (69)	26 (98)	32 (121)	37 (140)	41 (155)	-	_
	0080	19.9 (75)	28 (106)	34 (129)	40 (151)	44 (167)	-	_

*Note: Flow rates tabulated above include pressure drop through unit.

**High-pressure versions only. For additional performance data on high-pressure units, contact your local spray expert.

AIR MOTOR (AG) CYCLE TIME DATA

Air Pressure	Air Consumption	Approx. Speed (rpm)		(rpm)			Time for lete Cycle in.)
		Liquid Pressure psi (bar)					
psi (bar)	scfm (l/sec)	50 (3.45)	500 (34.5)	50 (3.45)	500 (34.5)		
6 (.41)	3.74 (106)	4.0	1.0	8.8	35		
8 (.55)	4.72 (134)	7.0	4.0	5.0	8.8		
10 (.69)	5.84 (165)	10.0	8.0	3.5	4.4		

ELECTRIC (E) & EXPLOSION-PROOF MOTOR (E-EP) CYCLE TIME DATA

	Motor Type	Frequency @ 115 VAC	Speed (rpm)	Current (amps)	Power (watts)	Approx. Time for One Complete Cycle (min.)
	Electric	50 Hz	3.1	.39	41	11
		60 Hz	3.8	.33	34	9
	Explosion- Proof	50 Hz	.8	.3	33	44
		60 Hz	1.0	.3	28	35



DIMENSIONS AND WEIGHTS

TankJet AA190	Tank Cleaner	A Extension Length* ft. (m)	B Overall Length in. (m)	Net Weight ^{**} Ibs. (kg)
AA190AG (360° Model) tank cleaner with air motor	AA190AG	3 (0.9)	54.25 (1.4)	14.0 (6.4)
	AA190AG	4 (1.2)	66.25 (1.7)	15.5 (7)
	AA190AG	6 (1.8)	90.25 (2.3)	18.5 (8.4)
AA190AG (360° Model) tank cleaner with electric motor	AA190E	3 (0.9)	48.88 (1.2)	14.0 (6.4)
	AA190E	4 (1.2)	60.88 (1.5)	15.5 (7)
	AA190E	6 (1.8)	84.88 (2.1)	18.5 (8.4)
AA190E-EP (360° Model) tank cleaner with electric	AA190E-EP	3 (0.9)	51.88 (1.3)	21.5 (9.8)
explosion-proof moto	AA190E-EP	4 (1.2)	63.88 (1.6)	23 (10.4)
	AA190E-EP	6 (1.8)	87.88 (2.2)	26 (11.8)
AA190DAG (180° Model) tank cleaner with air motor	AA190DAG	3 (0.9)	55 (1.4)	14.0 (6.4)
	AA190DAG	4 (1.2)	67 (1.7)	15.5 (7)
	AA190DAG	6 (1.8)	91 (2.3)	18.5 (8.4)

*Extension lengths available from 0.33 ft. (0.1 m) to 10 ft. (3.0 m)

**Add additional weight from the flange options' chart if not using the standard flange.



C10



DIMENSIONS AND WEIGHTS

TankJet AA190 Spray Head	Model	Spray Coverage	Min. Tank Opening in. (mm)	L in. (mm)	W (Dia.) in. (mm)
	Standard	360°	3.75 (95.3)	3.25 (82.6)	3.2 (81.3)
	Small Dia.*	360°	2.81 (71.5)	3.25 (82.6)	2.81 (71.4)
W MIN. TANK OPENING	Directional	180°	4.5 (114.3)	5 (127)	4.35 (110.5)

*The 3 in. sanitary flange (3SF) has a modified hub assembly that can fit through a 2.81 in. (71.5 mm) opening with nozzles oriented in vertical position.

FLANGE OPTIONS

Flange Type	Size	Sales Code	Net Weight Ibs. (kg)**
Three-Prong (std.)	_		_
ASME® 150#	3	3F	10.5 (4.8)
Raised Face Flange	4	4F	15.5 (7.0)
0	6	6F	24.5 (11.1)
Sanitary	3	3SF*	_
Tri-Clamp Flange	4	4SF	0.25 (0.1)
	6	6SF	3 (1.4)

**Add additional weight to tank cleaner if not using the standard flange.

ORDERING INFORMATION TANKJET AA190 TANK CLEANER



¹Add B after AA in the tank cleaner type and prior to nozzle type prefix for BSPT connections.

²Motor: Specify AG for air, E for electric and E-EP for electric explosion-proof.

³Add H for high-pressure, leave blank for standard version.

⁴Add 3F, 4F or 6F for raised face flange. Add 3SF, 4SF or 6SF for sanitary tri-clamp flange. Leave blank for standard three-prong flange.



For information on mounting kits and adapters, see page G6.

TANKJET YMD3 TANK CLEANER FEATURES AND BENEFITS

TANK DIA. **30 ft.** (9.1 m)

- · Dependable and durable motor-driven units provide consistent, high-impact cleaning to remove the most stubborn residues
- · Air/electric motors rotate solid stream nozzles in three directions to efficiently cover the entire tank
- Extension lengths available from 3.3 ft. (1 m) to 8.2 ft. (2.5 m)
- Reduces the need for dangerous and time-consuming manual tank cleaning
- · Wide range of nozzles available to fit specific applications

TankJet YMD3 Tank Cleaner				
Max. tank diameter:	30 ft. (9.1 m)			
Operating principle:	Motor-driven			
Flow rate:	8.6 to 37.5 gpm (32.6 to142 lpm)			
Operating pressure:	725 to 4350 psi (50 to 300 bar)			
Max. temperature:	176°F (80°C)			
Materials:	316 stainless steel, PTFE and fluororubber			
Inlet connection:	1/2" NPT and BSPT (F)			
Flange:	$ASME_{\scriptscriptstyle \otimes}\text{, JIS, and sanitary options available}$			
Motor options:	Air, electric			
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron) See page G2			

IDEAL FOR CLEANING:

- Chemical reactors
- Food processing tanks and vats
- Pharmaceutical processing vessels
- Process tanks



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← →

XX

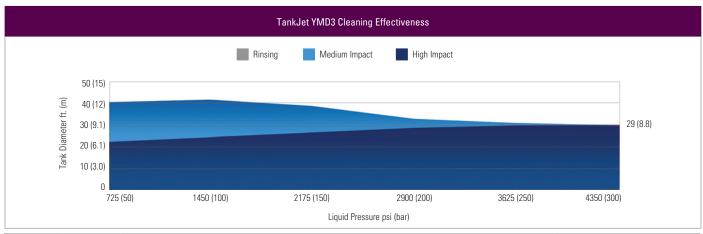
DIMENSIONS AND WEIGHTS

Model	Min. Tank Opening in. (mm)	L in (mm)	A Extension Length ft. (m)	B Overall Length in. (m)
YMD3-A (Air Motor)	3.8 (95)	6.7 (170)	3.3 to 8.2 (1 to 2.5) in	A + 16.8 (426)
YMD3-E (Electric Motor)	3.8 (95)	6.7 (170)	0.8 (0.25) increments	A + 14 (356)
		B	MIN. TANK OPEN	ING

SPECIFICATIONS

TANK DIA. **30 ft.** (9.1 m)

PERFORMANCE DATA



Model	YMD3		Total Flow of Equal 0 Liquid Inle		
Nozzle	Capacity 725 psi (50 bar)		1450 psi (100 bar)	2900 psi (200 bar)	4350 psi (300 bar)
1/01/10	0005	8.6 (32.6)	12 (45.5)	16.2 (61.2)	20.3 (77)
1/8MEG	0010	15.9 (60)	21.9 (82.8)	30.5 (115.5)	37.5 (142)

*Note: Flow rates tabulated above include pressure drop through unit.

AIR MOTOR CYCLE TIME DATA

Air	Air		. Speed m)	Approx. One Comp (m	lete Cycle
Pressure (Consumption		ressure bar)	Liquid P psi (
psi (bar)	scfm (l/sec)	725 (50)	4350 (300)	725 (50)	4350 (300)
6 (0.41)	2.3 (65)	3.6	4.7	10.3	7.9
8 (0.55)	3.2 (91)	9.0	9.0	4.1	4.1
10 (0.68)	4 (113)	11.5	11.6	3.2	3.2

ELECTRIC MOTOR* CYCLE TIME DATA

Frequency @ 115 VAC	Speed (rpm)	Current (amps)	Power (watts)	Approx. Time for One Complete Cycle (minutes)
50 Hz	17	23	25	2.5
60 Hz	20	21	25	2

For lances, mounting kits, adapters and more, see page G6

ORDERING INFORMATION

Call your local spray expert for application assistance or to place an order.



TANKJET 75 & 75H TANK CLEANERS FEATURES AND BENEFITS

- Ideal for high-impact cleaning applications, providing thorough, cost-effective cleaning of tanks, totes and IBCs
- Hygienic (H) models feature polished surfaces and enclosed gears, ideal for food, pharmaceutical, and dairy applications
- · Fluid-driven with controlled nozzle rotation speed for optimal impact and cleaning efficiency
- Solid stream nozzles rotate in multiple axes on a 360° indexing pattern to provide complete coverage of the entire tank every 45 revolutions
- Simple, flow-through design is easy to maintain and can be rebuilt quickly and easily in about 5 minutes
- Two-nozzle and four-nozzle design provides excellent coverage and fast cleaning
- · Tank cleaner is constructed of long-wearing materials and can be mounted permanently or moved from tank to tank
- Choice of low pressure or standard operation
- See case study on page C20

For lances, mounting kits, adapters and more, see page G6

SPECIFICATIONS

TankJet 75 & 75H Tank Cleaners						
Max. tank diameter:	30 ft. (9.1m)					
Operating principle:	Fluid-driven turbine					
Flow rate:	15 to 33 gpm (57 to 125 lpm)					
Operating pressure:	75 to 300 psi (5.2 to 21 bar)					
Max. temperature:	250°F (121°C)					
Materials:	316 stainless steel, PTFE and UHMWE-PE					
Rotation speed:	7 to 17 rpm					
Inlet connection:	3/4" NPT or BSPT (F), 1" sanitary flange					
Accessories:	3/4" TWD strainer, recommended mesh size: 200 (80 micron). See page G2					



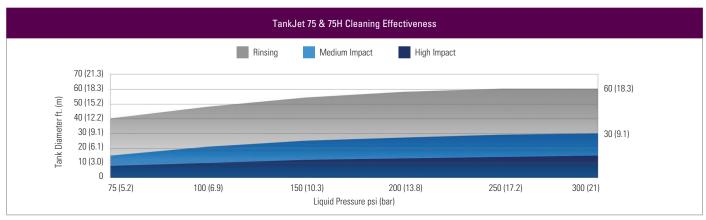
IDEAL FOR CLEANING:

- Chemical containers
- Dairy tanks and totes
- Food and beverage tanks
- Pharmaceutical tanks
- Process tanks



TANK DIA. **30 ft.** (9.1 m)

PERFORMANCE DATA



Model TJ75 & 75H		Liquid Flow Capacity, gpm (lpm)							
No. of Nozzles	Capacity Size	75 psi (5.2 bar)	100 psi (6.9 bar)	150 psi (10.3 bar)	200 psi (13.8 bar)	250 psi (17.2 bar)	300 psi (21 bar)		
2	234	-	_	17 (64)	20 (76)	22 (83)	24 (91)		
Z	234LP	12 (45)	14 (53)	17 (64)	_	-	-		
	172	_	_	23 (87)	29 (110)	31 (117)	33 (125)		
4	172LP	15.0 (56.9)	18.0 (68.0)	23 (87)	_	-	-		
	125	_	_	15.0 (57)	18 (68)	20 (76)	21 (80)		

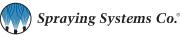
DIMENSIONS AND WEIGHTS

TankJet 75 & 75H Tank Cleaners		Model	No. of Nozzles	Inlet Conn.	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Net Weight Ibs. (kg)
W		75	2	Threaded	6.13 (156)	1.07 (E0)	2.0.(76)	2.6 (1.2)
Barrang Barrang Strate Barrang Strate Barrang Strate		/5	Z	Sanitary flange	7.13 (181)	1.97 (50)	3.0 (76)	2.9 (1.3)
		7511	0	Threaded	6.25 (159)	1.07 (50)	(25) 0.0	2.6 (1.2)
	MIN. TANK OPENING	75H	2	Sanitary flange	7.25 (184)	1.97 (50)	3.0 (76)	2.9 (1.3)
W		75	4	Threaded	6.13 (156)	1.07 (50)	4.2 (107)	3 (1.4)
unangan Suntuk C Santak T Bana Kata Santa Bana Kata Santa		75	4	Sanitary flange	7.13 (181)	1.97 (50)	4.2 (107)	3.3 (1.5)
		7511		Threaded	6.25 (159)	1.07 (50)	4.0.(107)	3 (1.4)
	MIN. TANK OPENING	75H	4	Sanitary flange	7.25 (184)	1.97 (50)	4.2 (107)	3.3 (1.5)

ORDERING INFORMATION TANKJET 75 TANK CLEANER



*Leave blank for NPT connection. Insert B for BSPT connection or SF for sanitary connection. **Add LP capacity size for low pressure version.



TANKJET 27500 AND 27500-R TANK CLEANING NOZZLE FEATURES AND BENEFITS

· With rotation driven by the reactionary force of the cleaning liquid, these nozzles provide excellent cleaning and rinsing and are especially well-suited for clean-in-place (CIP) systems

TANK DIA. **25 ft.** (7.6 m)

- Spray angles range from 180° to 360° and can be used to clean specific areas or the entire tank interior
- Made of corrosion- and chemical-resistant PTFE fluoropolymer resin, both models provide peak performance when used with debris-free liquid and deliver greater impact than static spray balls
- · 27500-R nozzles with removeable spray heads, 1/2 in. and 3/4 in. inlet connections, are also available in carbon-filled PTFE for improved thermal characteristics and higher mechanical strength. See page D4 and E4
- ATEX-certified versions available



SPECIFICATIONS

TankJet 27500 Tank Clean	TankJet 27500 Tank Cleaning Nozzles							
Max. tank diameter:	25 ft. (7.6 m)							
Operating principle:	Fluid-driven reactionary force							
Flow rate:	125 to 391 gpm (475 to 1480 lpm)							
Operating pressure:	10 to 50 psi (0.7 to 3.4 bar)							
Max. temperature:	200°F (93°C)							
Materials:	PTFE fluoropolymer resin							
Inlet connection:	3" NPT or BSPT (F)							
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron) See page G2							

IDEAL FOR CLEANING:

- Broke chests
- Chemical tanks
- Pharmaceutical tanks
- Process tanks
- PCB washers

For lances, mounting kits, adapters and more, see page G6

DIMENSIONS AND WEIGHT

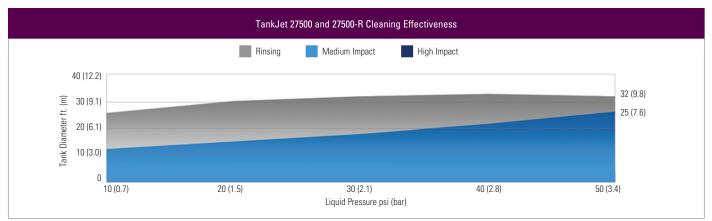
Model	Inlet Conn. in.	W in. (mm)	L in. (mm)	F (Flats) in. (mm)			
27500	3						
	F	W					

Additional sizes available: Page D4 - 3/4, 1 and 2 in. conn. Page E4 - 3/8 and 1/2 in. conn.



TANK DIA. **25 ft.** (7.6 m)

PERFORMANCE DATA



Model	27500	Orifice Dia.		Max. Tank Dia.				
Inlet Conn. Size	Capacity Size	in. (mm)	10 psi (0.7 bar)	20 psi (1.5 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)	ft. (m)
	250	0.390 (9.9)	125 (475)	177 (700)	217 (805)	250 (985)	280 (1065)	25 (7.6)
3	300	0.422 (10.7)	150 (570)	212 (840)	260 (965)	300 (1180)	335 (1280)	25 (7.6)
	350	0.484 (12.3)	175 (665)	247 (975)	303 (1130)	350 (1380)	391 (1480)	25 (7.6)

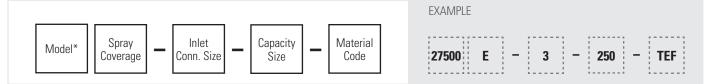
Suggested optimum operating range: 20 to 40 psi (1.5 to 2.8 bar).

ADDITIONAL SIZES AVAILABLE

Page D4 – 3/4, 1 and 2 in. conn. Page E4 – 3/8 and 1/2 in. conn.

ORDERING INFORMATION

TANKJET 27500 TANK CLEANING NOZZLES



*Add B prior to nozzle size for BSPT connections.



TANKJET 16 TANK CLEANING NOZZLE FEATURES AND BENEFITS

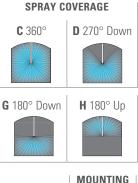
- Fluid-driven turbine rotates spray head at slow speeds to provide increased dwell time on tank surface compared to free spinning units
- Similar in design and appearance to static spray balls, these rotating units ensure full coverage and effective impingement of cleaning solution on tank walls
- The TankJet 16 produces solid stream sprays and easily passes through a 3 in. Schedule 40 pipe
- Suitable for clean-in-place (CIP) or portable installation
- · Spray head is easily removed for inspection and maintenance

For lances, mounting kits, adapters and more, see page G6

SPECIFICATIONS TankJet 16 Tank Cleaning Nozzle 24 ft. (7.3 m) Max. tank diameter: Operating principle: Fluid-driven turbine Flow rate: 36 to 76 gpm (136 to 288 lpm) Operating pressure: 50 to 200 psi (3.4 to 13.8 bar) Rotation speed: 3 to 15 rpm Max. temperature: 250°F (121°C) Materials: 316 stainless steel and PTFE Inlet connection: 1-1/2" NPT or BSPT (F) Optional accessories: Strainers, recommended mesh size: 20 (840 micron) See page G2



tank cleaning nozzle





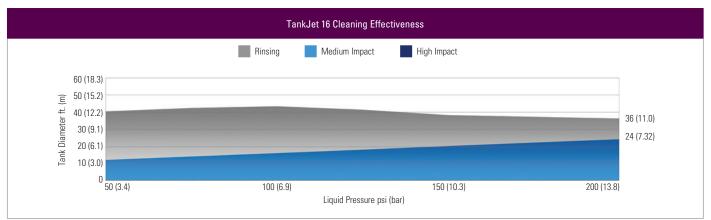
IDEAL FOR CLEANING:

- · Brewery tanks
- Pharmaceutical tanks
- Chemical mixers/ blenders
- Totes/IBCs
- Food processing tanks
- · Wine tanks



TANK DIA. **24** ft. (7.3 m)

PERFORMANCE DATA



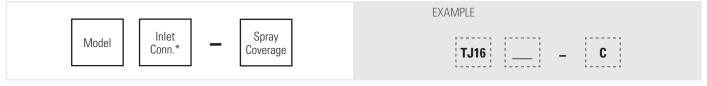
	0	Liquid Flow Capacity gpm (lpm)								
Model	Spray Coverage	50 psi (3.4 bar)	70 psi (4.8 bar)	90 psi (6.2 bar)	100 psi (6.9 bar)	120 psi (8.3 bar)	140 psi (9.7 bar)	160 psi (11.0 bar)	180 psi (12.4 bar)	200 psi (13.8 bar) 73 (276) 76 (288)
T 140	Н	36 (136)	43 (163)	49 (185)	52 (197)	57 (216)	61 (231)	65 (246)	69 (261)	73 (276)
TJ16	C, D, G	40 (151)	47 (178)	53 (201)	55 (208)	60 (227)	65 (246)	69 (261)	74 (280)	76 (288)

DIMENSIONS AND WEIGHTS

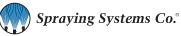
TankJet 16 Tank Cleaning Nozzle	Model	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Net Weight Ibs. (kg)
	TJ16, threaded	8.98 (228)	2.82 (77)	3 (76)	4.75 (2.1)
L MIN. TANK OPENING	TJ16, sanitary	10.54 (268)	2.82 (77)	3 (76)	5.4 (2.4)

ORDERING INFORMATION

TANKJET 16 TANK CLEANING NOZZLE



*Leave blank for NPT connection. Insert B for BSPT connection or SF for sanitary connection.



Food Ingredient Manufacturer Cuts Tank Cleaning Time by 75% and Offsets Equipment Cost in Less Than a Week

PROBLEM:

A leading producer of spices and seasonings needed to thoroughly clean the interior surfaces of its mixing tanks between batches. Manually cleaning the powder residue from the blenders with high pressure hoses and brushes took workers an hour or more and produced inconsistent results. The cleaning process was a significant labor expense since three batches per shift were being produced during three shifts per day. The production downtime also resulted in significant lost revenue.

Call your local spray expert to explore your tank cleaning options.





Spraying Systems Co.'s TankJet® 75 tank cleaner solved the customer's problem. Two TankJet 75 units, positioned in opposite corners of the blender, provide effective cleaning. Shadowing, caused by the ribbon blade and other internal obstructions, is overcome by the use of two tank cleaners to ensure all surfaces are thoroughly cleaned. Hot water is pumped to the tank cleaners at 75 psi (5.2 bar) with a flow rate of 15 gpm (57 lpm). The powerful impact of the water jets ensures repeatable results with every cleaning cycle.

RESULTS:

The automated-tank cleaning process has saved an estimated US\$25,000 in labor expense. In addition, TankJet units have reduced the time required for cleaning the mixers from one hour to 20 minutes. This reduction in downtime allows for the production of one additional batch of spices per shift. Together, these factors paid for the investment in tank cleaning equipment in less than one week. The customer reports savings of more than US\$22,000 annually and a payback period of just over three months per tank cleaner.

Ribbon blender being cleaned





TankJet 75 tank cleaners are installed in opposite corners of the blender to ensure thorough cleaning of all interior surfaces



FOR TANK DIA. UP TO **20 ft.** (6.0 m)

CHEMICAL PROCESSING TANKS MIXING TANKS • PHARMACEUTICAL VESSELS • DRUMS AND KEGS FOOD PROCESSING TANKS BREWERY TANKS



TANK DIA. UP TO 20 FT. (6 M)



SUPERIOR TANK CLEANING IN SANITARY AND CHEMICAL ENVIRONMENTS

EFFECTIVE SPRAY IN A VARIETY OF MATERIALS AND SPRAY COVERAGES

Offered in a variety of sanitary and chemical-resistant configurations, these nozzles are built to efficiently clean and rinse. With numerous spray coverage options and varying impact ratings, these compact TankJet nozzles are powerful and effective solutions for medium-sized tanks and vessels.



QUICK REFERENCE GUIDE

Model	Cleaning Power	Max. Tank Diameter ft. (m)	Operating Principle	Flow Rate Range gpm (lpm)	Operating Pressure psi (bar)	Spray Coverage	Max. Temperature °F (°C)	Materials	Page Number
TankJet® 27500 & 27500-R Ex	Medium impact	15 to 20 (4.3 to 6.0)	Fluid-driven reactionary force	9.0 to 224 (34 to 850)	10.0 to 50 (0.7 to 3.4)	180° up/down, 270° up/down, 360°	200 (93)	PTFE fluoropolymer resin	D4
TankJet 28500 & 28500-R	Medium impact	18 (5.5)	Fluid-driven reactionary force	9.0 to 78 (34 to 295)	10.0 to 50 (0.7 to 3.4)	180° up/down, 270° up/down, 360°	200 (93)	Body, saucer & spacer – PTFE fluoropolymer resin Locking pin – 316 stainless steel	D6
TankJet 12900	Rinsing	18 (5.5)	Fixed stationary	72 to 385 (280 to 1470)	20 to 50 (1.4 to 3.4)	360° and custom spray angles	212 (100)	Brass or 316 stainless steel	D8
TankJet AA090	High impact	16 (4.9)	Motor-driven	1.5 to 7.3 (5.7 to 28)	100 to 500 (6.9 to 34.5)	360°	200 (93)	Seals – Carbon-filled PTFE fluoropolymer resin All other metallurgy – 316 stainless steel	D10
TankJet D26984 & D40159 €x∕	Rinsing	10 to 16 (3.0 to 4.9)	Fluid-driven constant speed	3.2 to 19.8 (12.0 to 75)	30 to 90 (2.1 to 6.2)	65° down, 120° down, 180° up/down, 260° up/down, 360°	160 (70)	Stainless Steel – 303 or 316 stainless steel body with PTFE sleeve and washer PVDF – PVDF body with PTFE washer and PE sleeve	D14
TankJet D41800E	Rinsing	10 to 16 (3.0 to 4.9)	Fluid-driven constant speed	3.0 to 22.8 (11 to 86)	30 to 90 (2.1 to 6.2)	360°	265 (130)	303 or 316L stainless steel	D16
TankJet D41990	Rinsing	6.5 to 16 (2.0 to 4.9)	Fluid-driven reactionary force	2.4 to 37 (9.0 to 141)	15.0 to 60 (1.0 to 4.1)	180° up/down, 360°	265 (130)	316L stainless steel	D18
TankJet 9 B & C	Rinsing	12 to 16 (3.7 to 4.9)	Fluid-driven reactionary force	5.0 to 38 (18.9 to 144)	10.0 to 120 (0.7 to 8.3)	360	190 (88)	Bearings – Carbon-filled PTFE fluoropolymer All other metallurgy – 316 stainless steel	D20
TankJet 63225	Rinsing	13 (4.0)	Fixed stationary	22 to 51 (83 to 192)	15.0 to 40 (1.0 to 2.8)	360°	400 (204)	316L stainless steel	D22
TankJet 14 & 19	Medium impact	12 (3.7)	Fluid-driven turbine	10.0 to 30 (38 to 114)	50 to 200 (3.4 to 13.8)	180° up/down, 270° down, 360°	250 (121)	Stainless steel and PTFE	D26



TANKJET® 27500 AND 27500-R TANK CLEANING NOZZLES

TANKJET 27500 AND 27500-R TANK CLEANING NOZZLE FEATURES AND BENEFITS

TANK DIA. **20 ft.** (6.0 m)

- With rotation driven by the reactionary force of the cleaning liquid, these rotating nozzles provide excellent cleaning and rinsing and are especially well-suited to clean-in-place (CIP) systems
- Spray angles range from 180° to 360° and can be used to clean specific areas or the entire tank interior
- · Made of corrosion- and chemical-resistant PTFE fluoropolymer resin, both models offer peak performance when used with debris-free liquid and deliver greater impact than static spray balls
- The rotating spray heads on 27500-R nozzles can be easily removed from the body for inspection and maintenance
- 27500-R nozzles with 1/2 in. and 3/4 in. inlet connections are also available in carbon-filled PTFE for improved thermal characteristics and higher mechanical strength
- ATEX-certified versions available

SPECIFICATIONS

TankJet Tank Cleaning Nozzle	27500	27500-R			
Max. tank diameter:	15 to 20 ft. (4.3 to 6.0 m)	15 to 20 ft. (4.3 to 6.0 m)			
Operating principle:	Fluid-driven reactionary force	Fluid-driven reactionary force			
Flow rate:	9.0 to 224 gpm (34 to 850 lpm)	9.0 to 224 gpm (34 to 850 lpm)			
Operating pressure:	10.0 to 50 psi (0.7 to 3.4 bar)	10.0 to 50 psi (0.7 to 3.4 bar)			
Max. temperature:	200°F (93°C)	200°F (93°C)			
Materials:	PTFE fluoropolymer resin or CTEF	PTFE fluoropolymer resin or CTEF			
Inlet connection:	3/4" to 2" NPT or BSPT (F)	3/4" or 1" NPT or BSPT (F)			
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron) See page G2				

IDEAL FOR CLEANING:

- Broke chests
- Chemical tanks
- PCB washers
- Pharmaceutical tanks
- Process tanks



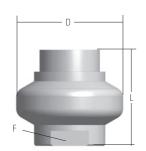
TankJet 27500 tank cleaning nozzle **SPRAY COVERAGE B** 180° Down **A** 180° Up **C** 270° Up D 270° Down **E** 360° **OPTIONS** Vertical Horizontal 45° Up TankJet 27500-R tank cleaning nozzle

> For lances, mounting kits, adapters and more, see page G6

DIMENSIONS AND WEIGHT

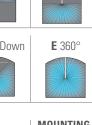
Model	Inlet Conn. in.	D (Dia.) in. (mm)	L in. (mm)	F (Flats) in. (mm)
27500, 27500-R	3/4	2.25 (57.2)	2.63 (66.6)	1.31 (33.3)
27500, 27500-R	27500, 27500-R 1		2.75 (69.8) 3 (76.2)	
27500	2	4.88 (123.8)	4.38 (111)	2.75 (69.8)

TankJet 27500





Additional sizes available: Page C16 - 3 in. conn. Page E4 - 3/8 and 1/2 in. conn.

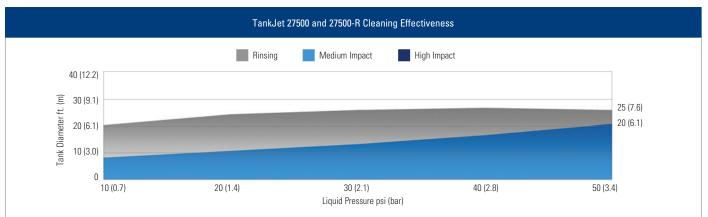






TANK DIA. **20 ft.** (6.0 m)

PERFORMANCE DATA



Mo	odel	Inlet	Conseits	Orifice Dia.		Liquid Flow Capacity gpm (lpm)			May Tank Dia	
27500	27500-R	Conn.	Capacity Size	in. (mm)	10 psi (0.7 bar)	20 psi (1.4 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)	Max. Tank Dia. ft. (m)
•	•		18	0.094 (2.4)	9.0 (34)	12.7 (48)	15.6 (59)	18 (68)	20 (76)	15 (4.3)
•	•	3/4	32	0.156 (4.0)	16.0 (61)	23 (89)	28 (103)	32 (126)	36 (136)	15 (4.3)
•	•		46	0.234 (6.0)	23 (87)	33 (130)	40 (148)	46 (182)	51 (196)	15 (4.3)
•	•		50	0.156 (4.0)	25 (95)	35 (140)	43 (161)	50 (197)	56 (215)	18 (5.5)
•	•	1	70	0.219 (5.6)	35 (133)	49 (195)	61 (225)	70 (275)	78 (300)	18 (5.5)
•	•		90	0.297 (7.5)	45 (172)	64 (250)	78 (290)	90 (355)	101 (385)	18 (5.5)
•			100	0.234 (6.0)	50 (191)	71 (280)	87 (320)	100 (395)	112 (425)	20 (6.0)
•			125	0.266 (6.7)	63 (240)	88 (350)	108 (400)	125 (495)	140 (530)	20 (6.0)
•		2	150	0.313 (7.9)	75 (285)	106 (420)	130 (480)	150 (590)	168 (640)	20 (6.0)
•			175	0.375 (9.5)	88 (335)	124 (490)	152 (560)	175 (690)	196 (745)	20 (6.0)
•			200	0.422 (10.7)	100 (380)	141 (560)	173 (645)	200 (790)	224 (850)	20 (6.0)

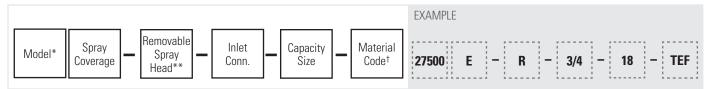
Suggested optimum operating range: 20 to 40 psi (1.5 to 2.8 bar).

ADDITIONAL SIZES AVAILABLE

Page C16 – 3 in. conn. Page E4 – 3/8 and 1/2 in. conn.

ORDERING INFORMATION

TANKJET 27500 AND 27500-R TANK CLEANING NOZZLES



*Add B prior to the nozzle type for BSPT connections.

**Leave blank for standard version.

[†]Indicate CTEF for carbon-filled PTFE on 3/4 in. inlet connections for 27500-R.



TANKJET® 28500 & 28500-R TANK CLEANING NOZZLES

TANKJET 28500 & 28500-R TANK CLEANING NOZZLE FEATURES AND BENEFITS

TANK DIA. **18 ft.** (5.5 m)

- Rotating nozzles for use with sanitary tubing resist harsh chemicals and provide excellent cleaning and more impact than static spray balls
- 28500-R nozzles conform to 3-A Sanitary Standard 78 for spray cleaning devices to remain in place (does not apply to horizontal mounting)
- Well-suited for clean-in-place systems; no motor source is needed as the reactionary force of the cleaning liquid rotates the spray head
- Threadless, tapered design promotes self-draining to prevent build-up on nozzle
- 28500-R rotating spray head is easily removable from the body for inspection and maintenance



This unit meets the requirements of 3-A Sanitary Standard 78. Spray cleaning devices intended to remain in place.

TankJet 28500-R tank cleaning nozzle **SPRAY COVERAGE A** 180° Up **B** 180° Down **C** 270° Down **D** 270° Up **E** 360°

SPECIFICATIONS

TankJet 28500 & 28500-R Tank Cleaning Nozzles							
Max. tank diameter:	18 ft. (5.5 m)						
Operating principle:	Fluid-driven reactionary force						
Flow rate:	9.0 to 78.3 gpm (34 to 296 lpm)						
Operating pressure:	10.0 to 50 psi (0.7 to 3.4 bar)						
Max. temperature:	200°F (93°C)						
Materials:	Body, saucer & spacer – PTFE fluoropolymer resin Locking pin – 316 stainless steel						
Inlet connection:	3/4", 1", 1-1/2", DN20, DN25 and DN40 sanitary tubing						
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron) See page G2						



IDEAL FOR CLEANING:

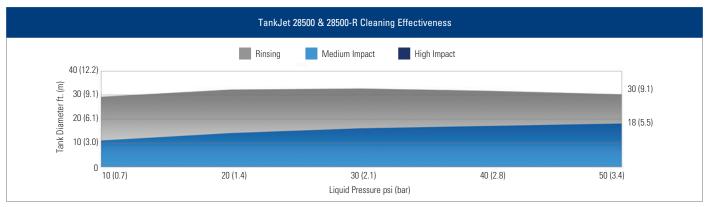
- Chemical tanks
- · Dairy vats

- Food processing tanks
- Pharmaceutical vessels

For lances, mounting kits, adapters and more, see page G6

TANK DIA. **18 ft.** (5.5 m)

PERFORMANCE DATA



Nozzle 28500		Orifice Dia.	Liquid Flow Capacity gpm (lpm)						
Nozzle Inlet	Capacity Size	in. (mm)	10 psi (0.7 bar)	20 psi (1.4 bar)	30 psi (2.1 bar)	40 psi (2.7 bar)	50 psi (3.4 bar)		
	18	0.089 (2.3)	9.0 (34)	12.7 (48)	15.6 (59)	18.0 (68)	20.0 (76)		
2/4 or DN20	23	0.110 (2.8)	11.5 (44)	16.3 (62)	19.9 (75)	23.0 (87)	26.0 (98)		
3/4 or DN20	32	0.154 (3.9)	16.0 (61)	22.6 (86)	27.7 (105)	32.0 (121)	35.8 (136)		
	46	0.257 (6.5)	23.0 (87)	32.5 (123)	39.8 (151)	46.0 (174)	51.4 (195)		
	33	0.152 (3.9)	16.5 (62)	23.0 (87)	29.0 (110)	33.0 (125)	37.0 (140)		
1 or DN25	50	0.209 (5.3)	25.0 (95)	35.4 (134)	43.3 (164)	50.0 (189)	55.9 (212)		
	70	0.266 (6.8)	35.0 (132)	49.5 (187)	60.6 (229)	70.0 (265)	78.3 (296)		
1.1/2 or DN40	52	0.201 (5.1)	27.0 (102)	37.0 (140)	46.0 (174)	53.0 (201)	59.0 (223)		
1-1/2 or DN40	70	0.266 (6.8)	35.0 (132)	49.5 (187)	60.6 (229)	70.0 (265)	78.3 (296)		

DIMENSIONS AND WEIGHTS

TankJet 28500 & 28500-R Tank Cleaning Nozzles	Model	Inlet Conn. Size/Type in.	Inlet Dia.	W in. (mm)	L in. (mm)	A in. (mm)
↓ <u></u> W		3/4	0.76 in.	3.31 (84.1)	2.63 (66.8)	0.38 (9.5)
A		DN20	22.2 mm	3.31 (04.1)	2.03 (00.0)	0.36 (9.3)
\uparrow	20500	1	1.02 in.	3.82 (97.0)	2.88 (73.2)	0.50 (12.7)
	28500	DN25	28.2 mm	3.82 (97.0)		0.30(12.7)
		1-1/2	1.52 in.	4.32 (109.7)	4.38 (111.3)	0.75 (19.1)
		DN40	40.2 mm			0.75(19.1)
28500		3/4	0.76 in.	0.05 (57.0)	2 00 (00 7)	4 40 (00 0)
L		DN20	22.2 mm	2.25 (57.2)	3.69 (93.7)	1.43 (36.3)
	20500 D	1	1.02 in.	0.75 (00.0)	4 10 (104 0)	1 50 (00.1)
	28500-R	DN25	28.2 mm	2.75 (69.9)	4.13 (104.9)	1.50 (38.1)
28500-R		1-1/2	1.52 in.	0.00.00.01	F 00 (100 7)	1 7E (AA E)
₩+		DN40	40.2 mm	3.63 (92.2)	5.38 (136.7)	1.75 (44.5)

Min. tank opening size is 2.5 to 4.5 in. (64 to 114 mm) depending on capacity size.

ORDERING INFORMATION

TANKJET 28500 AND 28500-R TANK CLEANING NOZZLES



* Leave blank for standard version



TANKJET 12900 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Stationary cluster nozzle offers extra-large flow capacity for robust and reliable tank cleaning
- Equipped with 13 FullJet[®] nozzles to provide high-capacity cleaning
- No moving parts; stationary nozzles prevent debris from blocking rotation so cleaning is simple and reliable
- Can be specially designed for a wide range of coverages, such as changing individual nozzles to plugs to meet specific coverage needs
- To rinse deeper tanks, Model 12900-2 is equipped with 12 FullJet[®] nozzles and a 1-1/2 in. bottom outlet connection which can be used with a pipe extension and a TankJet 6353 nozzle assembly
- Special materials available on request





R

RINSING

SPRAY COVERAGE

TankJet 12900-1 tank cleaning nozzle

SPECIFICATIONS

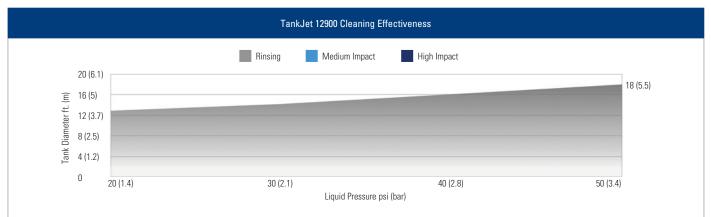
TankJet 12900 Tank Cleanin	TankJet 12900 Tank Cleaning Nozzle						
Max. tank diameter:	18 ft. (5.5 m)						
Operating principle:	Fixed stationary						
Flow rate:	72 to 385 gpm (280 to 1470 lpm)						
Operating pressure:	20 to 50 psi (1.4 to 3.4 bar)						
Max. temperature:	212°F (100°C)						
Materials:	Brass or 316 stainless steel (316SS)						
Inlet connection:	3" NPT or BSPT (F)						
Body outlet:	1/2", 3/4" and 1"						
Optional accessories:	Strainers, recommended mesh size: 16 to 100 (1190 to 150 micron). See page G2						

IDEAL FOR CLEANING:

- Chemical tanks
- Process tanks
- Pulp chests
- Tanker trucks

For lances, mounting kits, adapters and more, see page G6

PERFORMANCE DATA



Model 12900-1	FullJet®	Nozzle	Max. Free	Liquid Flow Capacity, gpm (lpm)				
Body Outlet	Nozzle Size	Capacity Size	Passage in. (mm)	20 psi (1.4 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)	
1/2	1/2HH	40	0.141 (3.6)	72 (280)	86 (320)	99 (390)	109 (415)	
3/4	3/4HH	7	0.203 (5.2)	148 (580)	180 (660)	205 (800)	225 (860)	
1	1HH	12	0.250 (6.4)	252 (1000)	306 (1130)	350 (1370)	385 (1470)	

Contact your local spray expert for 12900-2 flow rate data.

DIMENSIONS AND WEIGHTS

TankJet 12900 Tank Cleaning Nozzle	Model	Body Outlet	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)
		1/2	6.53 (166)	7.5 (191)	10 (254)	13.7 (6.2)
	12900-1	3/4	6.84 (174)	8.25 (210)	10 (254)	15.3 (6.9)
MIN. TANK OPENING		1	7.22 (183)	9 (229)	10 (254)	18.1 (8.2)

ORDERING INFORMATION

TANKJET 12900-1 TANK CLEANING NOZZLE



*Add B prior to the nozzle type for BSPT connections.

**Leave blank when ordering brass. Specify 316SS for Stainless Steel Type 316 (DIN 1.4571).



TANKJET AA090 TANK CLEANER FEATURES AND BENEFITS

- Versatile, high-impact tank cleaner provides efficient, consistent, reliable cleaning with virtually no maintenance
- Lightweight units can be installed permanently or easily moved from tank to tank
- Unit is constructed using corrosion-resistant materials with the motor positioned outside the tank away from harmful caustics for trouble-free operation and long service life
- Component and configuration options allow easy customization to meet the needs a variety of cleaning operations. Choices include:
 - Variable speed, CE-approved air (AG), electric (E), or explosion-proof (E-EP) electric motors
 - Shaft lengths from 1 ft. (0.3 m) up to 10 ft. (3 m)
 - Three nozzle capacity sizes
 - Optional adjustable flange for precise positioning of turret in tank
- Flange mounting options include: three-prong (standard), $ASME_{\odot}$ raised face, and sanitary tri-clamp

SPECIFICATIONS

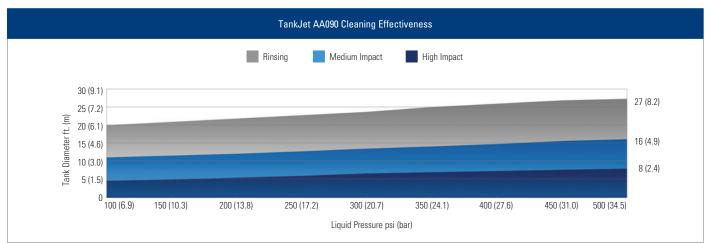
TankJet AA090 Tank Cleaner							
Max. tank diameter:	16 ft. (4.9 m)						
Operating principle:	Motor-driven						
Flow rate:	1.5 to 7.3 gpm (5.7 to 28 lpm)						
Operating pressure:	100 to 500 psi (6.9 to 34.5 bar)						
Max. temperature:	200°F (93°C)						
Materials:	316 stainless steel and carbon filled PTFE fluoropolymer resin seals						
Inlet connection:	1" NPT or BSPT (F)						
Motor options:	Air, electric, explosion-proof electric						
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron) See page G2						



For lances, mounting kits, adapters and more, see page G6

TANK DIA. **16 ft.** (4.9 m)

PERFORMANCE DATA



Model	Nozzle Size	Total Flow of Equal Capacity, gpm (lpm)* Liquid Inlet Pressure							
	NUZZIE SIZE	100 psi (6.9 bar)	200 psi (13.8 bar)	300 psi (20.7 bar)	400 psi (27.6 bar)	500 psi (34.5 bar)			
	W0005	1.5 (5.7)	2.0 (7.6)	2.4 (9.1)	2.8 (10.6)	3.2 (12.1)			
AA090	W0010	2.7 (10.2)	3.7 (14.0)	4.5 (17.0)	5.1 (19.3)	5.8 (22.0)			
	W0014	3.5 (13.2)	4.7 (17.8)	5.8 (22.0)	6.6 (25.0)	7.3 (28.0)			

*Note: Flow rates tabulated above include pressure drop through unit.

AIR MOTOR (AG) CYCLE TIME DATA

	Air	Spe	ed m)	Approx. Time for One Complete Cycle (min.)		
Air Pressure psi (bar)	Consumption scfm (l/sec)		ure, psi (bar)	bar)		
		100 (6.9)	500 (34.5)	100 (6.9)	500 (34.5)	
6 (0.41)	2.3 (65)	5.6	6.3	5.5	4.9	
8 (0.55)	3.2 (91)	8.7	9.2	3.6	3.4	
10 (0.68)	4 (113)	10.7	11.6	2.9	2.7	

ELECTRIC (E) & EXPLOSION-PROOF (E-EP) MOTORS CYCLE TIME DATA

Motor Type	AC Frequency	Speed (rpm)	Current (amps)	Power (watts)	Approx. Time for One Complete Cycle (min.)
Electric	50 Hz.	3.1	.39	41	11
Electric	60 Hz.	3.8	.33	34	9
Explosion-	50 Hz.	0.8	0.3	33	44
Proof	60 Hz.	1.0	0.3	28	35

DIMENSIONS AND WEIGHTS

TankJet AA090	Tank Cleaner	A Extension Length ft. (m)	B Overall Length in. (m)	Weight Ibs. (kg)*
AA090AG tank cleaner with air motor	AA090AG	1.5 (0.5)	35 (0.8)	12.5 (5.7)
	AA090AG	3 (0.9)	53 (1.3)	14 (6.4)
	AA090AG	4 (1.2)	65 (1.6)	15.5 (7)
	AA090AG	6 (1.8)	89 (2.2)	18.5 (8.4)
AA090E tank cleaner with electric motor	AA090E	1.5 (0.5)	29.6 (0.7)	12.5 (5.7)
	AA090E	3 (0.9)	47.6 (1.2)	14 (6.4)
	AA090E	4 (1.2)	59.6 (1.5)	15.5 (7)
	AA090E	6 (1.8)	83.6 (2.1)	18.5 (8.4)
AA090E-EP tank cleaner with electric explosion-proof	AA090E-EP	1.5 (0.5)	32.6 (0.8)	20 (9.1)
motor	AA090E-EP	3 (0.9)	50.6 (1.3)	21.5 (10)
	AA090E-EP	4 (1.2)	62.6 (1.6)	23 (10.5)
	AA090E-EP	6 (1.8)	86.6 (2.2)	26 (11.8)

*Add additional weight from the flange options' chart if not using the standard flange.

DIMENSIONS AND WEIGHTS

TankJet AA090 Spray Head	Min. Tank Opening	A	B	C
	in. (m)	in. (mm)	in. (mm)	in. (mm)
MIN. TANK OPENING	2.3 (59)	1.1 (29)	0.73 (18)	2.0 (51)

FLANGE OPTIONS

Flange Type	Size	Sales Code	Net Weight Ibs. (kg)*
Three-Prong (std.)	_	_	_
ASME® 150#	3	3F	10.5 (4.8)
Raised Face Flange	4	4F	15.5 (7.0)
0	6	6F	24.5 (11.1)
Sanitary	3	3SF*	_
Tri-Clamp Flange	4	4SF	0.25 (0.1)
	6	6SF	3.0 (1.4)

*Add additional weight to tank cleaner if not using the standard flange.

ORDERING INFORMATION

TANKJET AA090 TANK CLEANER



¹Add B after AA in the tank cleaner model for BSPT connections. ²Motor: Specify AG for air, E for electric. ³Add -EP for explosion-proof, leave blank for standard version.

⁴Add B prior to nozzle size for BSPT connections.



TANK DIA. **16 ft.** (4.9 m) **TANKJET® D40159 AND D26984 TANK CLEANING NOZZLES**

TANKJET D26984 AND D40159 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Driven by the flow of the cleaning liquid, three flat sprays mounted in a rotating spray head rotate at a near-constant speed of 2 to 30 rpm over a wide range of fluid pressures and deliver as much as four times the impact of conventional rotating nozzles
- Slow, controlled rotation provides extended dwell time on tank surface making these nozzles ideal for cleaning, sanitizing and foaming applications
- Sanitary tubing and wall mounting options available upon request
- · ATEX-certified versions available upon request

For lances, mounting kits, adapters and more, see page G6

SPECIFICATIONS

TJ D26984 and D40159 Tank Cleaning Nozzles	Stainless Steel	PVDF			
Max. tank diameter:	16 ft. (4.9 m)	16 ft. (4.9 m)			
Operating principle:	Fluid-driven constant speed	Fluid-driven constant speed			
Flow rate:	3.2 to 19.5 gpm (12.0 to 74 lpm)	3.2 to 19.5 gpm (12.0 to 74 lpm)			
Operating pressure:	30 to 90 psi (2.1 to 6.2 bar)	30 to 90 psi (2.1 to 6.2 bar)			
Max. temperature:	160°F (70°C)	160°F (70°C)			
Materials:	Stainless Steel – 303 or 316 stainless steel body with PTFE sleeve and washer	PVDF – PVDF body with PTFE washer and PE sleeve			
Inlet connection:	1/2" NPT or BSPT	3/8" and 1/2" NPT or BSPT			
Optional accessories:	Strainers, recommended mesh size: 200 (74 micron) See page G2				

IDEAL FOR CLEANING:

- Chemical processing tanks
- Food processing tanksMixing tanks
- Dry powder tanks
- Pharmaceutical



STRAINER OPTION



 MOUNTING OPTIONS

 Vertical

 Horizontal

 45° Down

See page G2 for specifications.

SPRAY COVERAGE

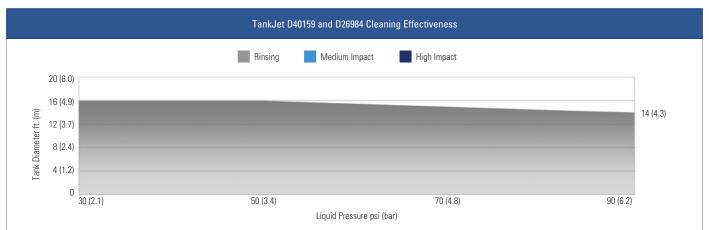
Nozzle Model	Capacity Size	360°	260° Down	260° Up**	180° Down	180° Up**	120° Down	65° Down
	3.2		•	•	•	٠	•	
D 40150	4.5		•	•	•	•	•	
D40159	9.9		•	•	•	•	•	•
	13.6		•	•	•	•	•	
D26984	All	•						

Note: D40159-SS, -316SS not available in 3.2 capacity.

**Add "A" to the D40159 part number for upward spray toward inlet.



PERFORMANCE DATA



Model		Inlet	Capacity		Liquid Flow Cap	acity gpm (lpm)	
D40159	D26984	Conn. Size in.	Size	30 psi (2.1 bar)	50 psi (3.4 bar)	70 psi (4.8 bar)	90 psi (6.2 bar)
	•	2/0	3.2	3.2 (12.1)	3.8 (14.5)	4.4 (16.9)	5 (19.1)
	•	3/8	4.5	3.8 (14.4)	4.7 (17.9)	5.5 (21)	6.3 (24)
•	•		3.2	3.2 (12.1)	3.8 (14.5)	4.4 (16.9)	5 (19.1)
•	•	1/0	4.5	3.8 (14.4)	4.7 (17.9)	5.5 (21)	6.3 (24)
•	•	1/2	9.9	8.4 (32)	10.6 (40)	12.5 (48)	14.4 (55)
•	•		13.6	11.3 (43)	14.5 (55)	17.3 (66)	19.8 (75)

DIMENSIONS AND WEIGHTS

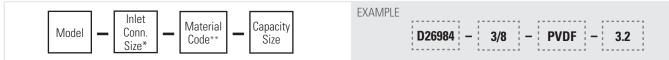
Tank Cleaning Nozzles	Model	Material	L in. (mm)	A in. (mm)	B in. (mm)	Min. Tank Opening in. (mm)	Net Weight Ibs. (kg)
	D40159	PVDF	5.75	1.94	1.92	2.25	0.43
	D26984	FVDF	(146)	(49)	(49)	(56)	(0.19)
	D40159	SS	5.75	2	1.6	2.25	1.62
B A	D26984	33	(146)	(50)	(41)	(56)	(0.73)

ORDERING INFORMATION

D40159 TANK CLEANING NOZZLE



D26984 TANK CLEANING NOZZLE



*Add B prior to the inlet connection for BSPT connections.

**Material: Specify PVDF for chemical-resistant material. Specify SS for Stainless Steel Type 303 (DIN 1.4305). Specify 316SS for Stainless Steel Type 316 (DIN 1.4571). †Add "A" to the D40159 part number for upward spray toward inlet.



TANKJET D41800E TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Compact, constant-speed nozzles provide up to four times the impact of conventional rotating nozzles
- Rotating head with three flat sprays is driven by the flow of the cleaning liquid
- Rotates at nearly constant speed over a wide range of fluid pressures
- Slow, controlled rotation provides more dwell time on tank surface, making it perfect for cleaning, sanitizing and foaming applications
- Patented self-flushing water bearing design eliminates internal bearings and races
- ATEX-certified versions available upon request
- Choice of threaded or sanitary pin
- TankJet D41800E-3A nozzles conform to 3-A sanitary standard 78 for spray cleaning devices to remain in place
- All stainless steel construction provides maximum chemical and wear resistance





This unit meets the requirements of 3-A Sanitary Standard 78. Spray cleaning devices intended to remain in place.

IDEAL FOR CLEANING:

- Chemical processing tanks
- Dry powder tanks
- Food processing tanks
- Mixing tanks
- Pharmaceutical tanks

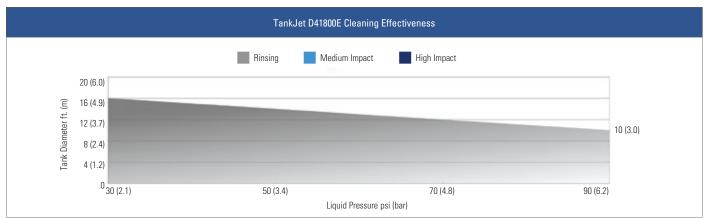
For lances, mounting kits, adapters and more, see page G6

SPECIFICATIONS

TankJet D41800E Tank Cleaning Nozzle					
Max. tank diameter:	16 ft. (4.9 m)				
Operating principle:	Fluid-driven constant speed				
Flow rate:	3.0 to 22.8 gpm (11.0 to 86 lpm)				
Operating pressure:	30 to 90 psi (2.1 to 6.2 bar)				
Max. temperature:	265°F (130°C)				
Materials:	303 stainless steel or 316L stainless steel				
Rotation speed:	2 to 30 rpm				
Inlet connection:	3/8" NPT or BSPT (F), DN19				
Optional accessories:	Strainers, recommended mesh size: 200 (74 micron) See page G2				

TANK DIA. **16 ft.** (4.9 m)

PERFORMANCE DATA



Madal	Inlet	Capacity	Liquid Flow Capacity gpm (lpm)				
Model	Conn. Size/Type	Size	30 psi (2.1 bar)	50 psi (3.4 bar)	70 psi (4.8 bar)	90 psi (6.2 bar)	
		3.2	3.0 (11)	3.7 (14)	4.4 (17)	5.0 (19)	
	2.0	4.5	4.1 (15)	5.2 (20)	6.2 (23)	7.1 (27)	
	3/8	9.9	8.6 (33)	10.9 (41)	13.0 (49)	14.9 (56)	
D 41000E		13.6	12.4 (47)	15.6 (59)	18.5 (70)	21.1 (80)	
D41800E		3.2	4.0 (15)	5.1 (19)	6.1 (23)	7.0 (26)	
	DN10	4.5	4.6 (17)	5.8 (22)	6.9 (26)	7.9 (30)	
	DN19	9.9	9.2 (35)	11.6 (44)	13.8 (52)	15.8 (60)	
		13.6	13.4 (51)	16.8 (64)	20.0 (76)	22.8 (86)	

DIMENSIONS AND WEIGHTS

D41800E Tank Cleaning Nozzle	Model	Inlet Conn.	L in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	Pin Length in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)
	D41800E	3/8"	3.1 (78)	1.2 (30)	0.84 (21.2)	_	_	1.25 (31)	0.28 (0.13)
	D41800E	DN19	3.8 (97)	1.2 (30)	0.85 (21.6)	0.76 (19.2)	1.5 (38)	1.6 (40)	0.29 (0.13)
	D41800E-3A	DN19	4.1 (104)	1.2 (30)	0.85 (21.6)	0.76 (19.2)	1.5 (38)	1.6 (40)	0.29 (0.13)

ORDERING INFORMATION

TANKJET D41800E TANK CLEANING NOZZLE



TANKJET D41800E-3A TANK CLEANING NOZZLE



*Add B prior to the inlet connection for BSPT connections.

** Materials: Specify SS for Stainless Steel Type 303 (DIN1.4305). Specify 316L for Stainless Steel Type 316L (DIN1.4404). *Leave blank for standard version.



TANKJET D41990 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Low-pressure, low-volume rinsing of small tanks and containers
- Fluid-driven reactionary force nozzle no motor source needed to drive spray head
- Micro-size nozzle fits into very small tank openings – as small as 1 in. (25 mm)
- All 316L stainless steel construction for long wear life and corrosion resistance
- Suitable for high-temperature applications up to 265°F (130°C)
- ATEX-certified versions available upon request



TankJet D41990 tank cleaning nozzle, see page E10

> TankJet D41990 tank cleaning nozzle

SPRAY COVERAGE									
A 180° Up	B 180° Down	E 360°							

Made in Germany Mrde in Germany

-3066170

SPRAYING SYSTEM

318



R

RINSING

SPECIFICATIONS

TankJet D41990A Tank Clea	TankJet D41990A Tank Cleaning Nozzle							
Max. tank diameter:	16 ft. (4.9 m)							
Operating principle:	Fluid-driven reactionary force							
Flow rate:	7.5 to 37 gpm (29 to 141 lpm)							
Operating pressure:	15.0 to 60 psi (1 to 4 bar)							
Max. temperature:	265°F (130°C)							
Materials:	316L stainless steel							
Inlet connection:	3/8", 1/2", 3/4" NPT or BSPT (F), CIP 182 or 192							
Optional accessories:	Strainers, recommended mesh size: 200 (74 micron) See page G2							

IDEAL FOR CLEANING:

- Chemical tanks
- Beverage tanks
- Canisters

- Food tanks
- Keg/drum
- Tote/container

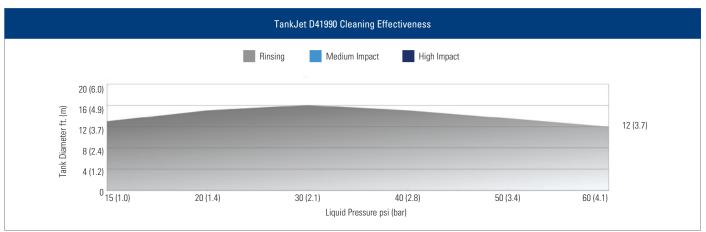
ADDITIONAL SIZES AVAILABLE

For D41990 up to 6.5 ft. see page E10

) Spraying Systems Co.[®]

TANK DIA. **16 ft.** (4.9 m)

PERFORMANCE DATA



Inlet Conn. Size/Type	Capacity	Capacity, gpm (lpm)								
	Size	15 psi (1.0 bar)	20 psi (1.4 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)	60 psi (4.1 bar)			
	13.6	7.5 (29)	8.8 (33)	10.5 (40)	12 (45)	13.1 (49)	14.2 (54)			
1/2"	15	9 (34)	10.5 (40)	12.6 (48)	14.4 (55)	15.8 (60)	17.2 (65.1)			
CIP192	21	12.8 (49)	15 (57)	18 (68)	21 (78)	23 (95)	25 (93)			
	24	13.6 (52)	16 (61)	19.4 (74)	22(85)	25 (93)	27 (101)			
3/4" CIP192	32	20 (76)	23 (88)	28 (105)	32 (120)	34 (130)	37 (141)			

DIMENSIONS AND WEIGHTS

TankJet D41990 Tank Cleaning Nozzle	Inlet Conn. Size*	L in (mm)	A in (mm)	B in (mm)	C in (mm)	Pin Length in (mm)	Min. Tank Opening in (mm)	Weight Ibs. (kg)
	1/2", 3/4"	4.4 (111)	1.3 (34)	1.2 (31)	_	_	1.5 (38)	0.8 (0.36)
	CIP192	4.4 (111)	1.3 (34)	1.2 (31)	0.76 (19.2)	3.9 (98)	3.87 (99)	0.8 (0.36)

*Additional sizes available: See page E10 - 3/8 in. and CIP182 conn.

ORDERING INFORMATION

TANKJET D41990 TANK CLEANING NOZZLE



Add B prior to the inlet connection size/type for BSPT connections.



TANKJET 9 TANK CLEANING NOZZLES FEATURES AND BENEFITS

- Multiple flat spray nozzles are mounted in a rotating spray head that is driven by the flow of the cleaning liquid
- Simple and reliable, with no ball bearings, tank cleaners operate effectively in any position, vertical or horizontal
- Well-suited to clean-in-place and sanitary applications, chemical distribution and passivation
- Offered in three versions for medium-size tanks:
 - TankJet 9-A features two flat side sprays, each covering 175°, see page E14
 - The TankJet 9-B and 9-C versions each have six flat sprays and provide coverage of the entire tank

TankJet 9-B tank cleaning nozzle TankJet 9-A tank cleaning nozzle, see page E14



Spraying Systems Co.

Tank Jet®

T]9-C

SERIAL NO: 3563







SPECIFICATIONS

Tank Cleaning Nozzle	TJ9-B	TJ9-C			
Max. tank diameter:	12 ft. (3.7 m)	16 ft. (4.9 m)			
Operating principle:	Fluid-driven reactionary force	Fluid-driven reactionary force			
Flow rate:	5 to 17 gpm (18.9 to 64 lpm)	12 to 38 gpm (45 to 144 lpm)			
Operating pressure:	10 to 120 psi (0.7 to 8.3 bar)	10 to 120 psi (0.7 to 8.3 bar)			
Max. temperature:	190°F (88°C)	190°F (88°C)			
Materials:	Bearings – Carbon-filled PTFE fluoropolymer All other metallurgy – 316 stainless steel	Bearings – Carbon-filled PTFE fluoropolymer All other metallurgy – 316 stainless steel			
Inlet connection:	1/2" NPT or BSPT (F)	3/4" NPT or BSPT (F)			
Optional accessories:	Strainers, recommended mesh size: 20 (840 micron) See page G2				

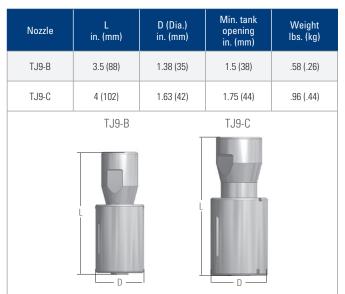
For lances, mounting kits, adapters and more, see page G6

IDEAL FOR CLEANING:

- Brewery tanks
- Chemical containers
- Drums and kegs
- Food processing tanks
- Pharmaceutical tanks
- Wine barrels and vats



DIMENSIONS AND WEIGHTS



Additional sizes available: See page E12 - 3/8 in. conn.



see pa

ing S

TankJet TJ9-B

TANK DIA. **16 ft.** (4.9 m)

PERFORMANCE DATA



ADDITIONAL SIZES AVAILABLE

TankJet 9-A see page E14

ORDERING INFORMATION

TANKJET 9-B AND 9-C TANK CLEANING NOZZLE



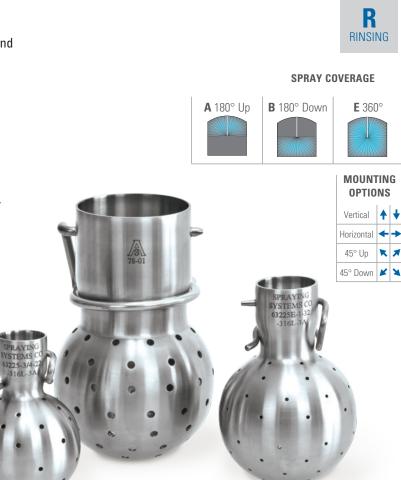
* Leave blank for NPT connection or insert B for BSPT connection.



TANKJET 63225 & 63225-3A SPRAY BALL FEATURES AND BENEFITS

TANK DIA. **13 ft.** (4 m)

- Stationary spray balls are ideal for sanitary rinsing and low-pressure washing, offering a low-cost way to handle easy-to-remove residues
- Wrap-around retaining clip is supplied with each spray ball
- Because there are no moving parts spray balls are well-suited to clean-in-place (CIP) installations
- 63225-3A sanitary spray balls have a polished 32Ra interior and exterior surface finish with a threadless, self-draining design that prevents buildup
- Choice of 180° or 360° spray coverage, with custom drilling available for both spray pattern and flow rate on model 63225-3A spray balls
- Can be installed in any position
- 316L stainless steel construction permits use with a wide array of chemicals



TankJet 63225-3A spray balls

SPECIFICATIONS

TankJet 63225 & 63225-3A Spray Balls							
Max. tank diameter:	13 ft. (4 m)						
Operating principle:	Stationary						
Flow rate:	22 to 51 gpm (83 to 192 lpm)						
Operating pressure:	15 to 40 psi (1.0 to 2.8 bar)						
Max. temperature:	400°F (204°C)						
Materials:	316L stainless steel						
Inlet tube size:	TankJet 63225: 3/4", 1" TankJet 63225-3A: 3/4", 1", 1-1/2"						
Optional accessories:	Strainers, recommended mesh size: 16 to 50 (1190 to 297 micron). See page G2						



This unit meets the requirements of 3-A Sanitary Standard 78. Spray cleaning devices intended to remain in place.

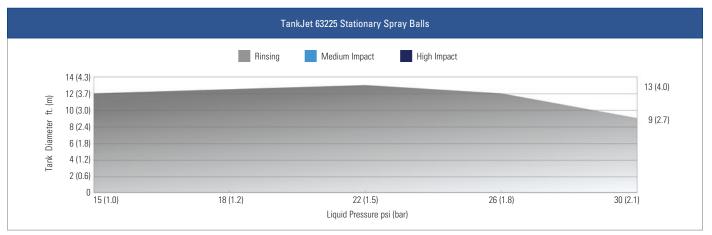
IDEAL FOR CLEANING:

- Chemical processing tanks
- Food processing vats and tanks
- Pharmaceutical vessels

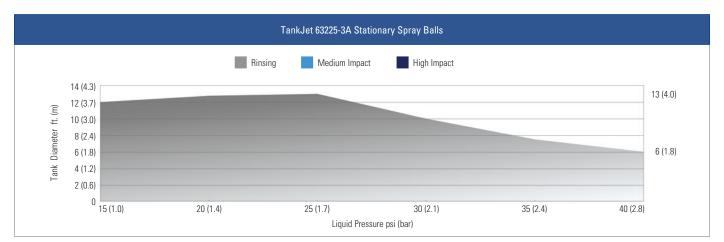
For lances, mounting kits, adapters and more, see page G6

TANK DIA. **13 ft.** (4 m)

PERFORMANCE DATA



Mode	l 63225	L	iquid Flow Capacity gpm (Ipm	1)	Mau Tark Dia
Inlet Tube Size in.	Capacity Size	15 psi (1.0 bar)	15 psi (1.0 bar) 22 psi (1.5 bar)		Max. Tank Dia. ft. (m)
3/4	22	22 (83)	27 (102)	31 (117)	10 (3.0)
1	32	32 (121)	39 (148)	45 (170)	13 (4.0)



Model 63225-3A			Liq	Liquid Flow Capacity gpm (lpm)				
Inlet Tube Size	Ball Diameter	Capacity Size	15 psi (1.0 bar)	25 psi (1.7 bar)	40 psi (2.8 bar)	Max. Tank Dia. ft. (m)		
3/4	1.5					10 (3.0)		
1	2	-				13 (4.0)		
1-1/2	2.5	40	01/115	40 (454)	F1 (100)	13 (4.0)		
1-1/2	2.5	40	31 (115)	40 (151)	51 (192)	13 (4.0)		
1-1/2	3					13 (4.0)		
1-1/2	4					13 (4.0)		



DIMENSIONS AND WEIGHTS

TankJet 63225 & 63225-3A Spray Balls	Tank Cleaner	A tube size in.	B (Dia.) in. (mm)	C Length in. (mm)	D in. (mm)	E in. (mm)	F (Pin dia) in. (mm)
F A - D - E - C	63225_*-3/4-22-316L	3/4	2 (51)	3.64 (93)	.51 (13)	1.25 (31.8)	.13 (3.3)
	63225_*-1-32-316L	1	2.5 (64)	4.40 (112)	.51 (13)	1.56 (39.6)	.13 (3.3)
	63225_*75-1.5-40-3A	3/4	1.5 (38.1)	2.53 (64.3)	.33 (9.5)	.25 (6.4)	.14 (3.6)
	63225_*-1-2-40-3A	1	2 (50.8)	3.31 (84.1)	.33 (9.5)	.33 (9.5)	.14 (3.6)
C F	63225_*-1.5-2.5-40-3A	1- 1/2	2.5 (63.5)	4.25 (108)	.25 (6.4)	.75 (19.1)	.20 (5.2)
63225-3A	63225_*-1.5-3-40-3A	1- 1/2	3 (76.2)	4.78 (121.4)	.25 (6.4)	.75 (19.1)	.20 (5.2)
	63225_*-1.5-4-40-3A	1- 1/2	4 (101.6)	5.75 (146)	.25 (6.4)	.75 (19.1)	.20 (5.2)

* Available in A, B or E spray coverage.

TANK DIA. **13 ft.** (4 m)

ORDERING INFORMATION

63225 TANK CLEANING SPRAY BALLS



63225-3A TANK CLEANING SPRAY BALLS





TANKJET® 14 AND 19 TANK CLEANING NOZZLES

TANKJET 14 AND 19 TANK CLEANING NOZZLE FEATURES AND BENEFITS

ТАNК DIA. **12 ft.** (3.7 m)

- · Slim design is ideal for cleaning tanks with small openings
- · Sleek design helps prevent residue buildup and simplifies maintenance
- · Carefully drilled solid stream orifices are strategically placed to provide four different spray coverages
- Fluid-driven unit rotates at a slow speed of 3 to 15 rpm for increased dwell time on tank surface compared to free spinning units
- · Suitable for CIP or portable installations and easily passes through a 2 in. sch 40 pipe
- A 6 in. extension is available for TJ19 for kegs, drums, & barrels
- See case study on page E16





TankJet 14 tank cleaner

Tank Cleaning Nozzles	TankJet 14	TankJet 19			
Max. tank diameter:	12 ft. (3.7 m)	12 ft. (3.7 m)			
Operating principle:	Fluid-driven turbine	Fluid-driven turbine			
Flow rate:	13.0 to 34 gpm (49 to 129 lpm)	10.0 to 30 gpm (38 to 114 lpm)			
Operating pressure:	50 to 200 psi (3.4 to 13.8 bar)	50 to 200 psi (3.4 to 13.8 bar)			
Max. temperature:	250°F (121°C)	250°F (121°C)			
Materials:	Stainless steel and PTFE	Stainless steel and PTFE			
Rotation speed:	3.0 to 15.0 rpm	3.0 to 15.0 rpm			
Inlet connection:	3/4" NPT or BSPT (F), 1" sanitary flange	3/4" NPT or BSPT (F), 1" sanitary flange			
Optional accessories:	ptional accessories: Strainers, recommended mesh size: 20 (840 micr See page G2				





45°

TJ-1 MOUNT OPTIO	ΓIN	-	TJ-19 MOUNTING OPTIONS		
Vertical	♠	¥	Vertical	♠	¥
45° Up	K	*	Horizontal	+	+
45° Down	×	×	45° Up	K	ѫ
			45° Down	×	×

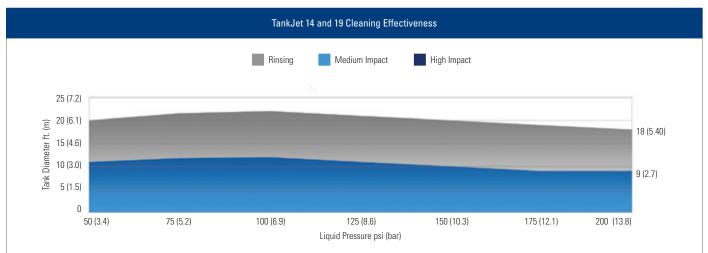
IDEAL FOR CLEANING:

- Chemical mixers/blenders
- Drums and kegs
- Food processing tanks
- Pharmaceutical tanks
- Tablet coating machines

SPECIFICATIONS

талк DIA. **12 ft.** (3.7 m)

PERFORMANCE DATA



	Spray				Liquid Fl	ow Capacity g	om (lpm)			
Model	Coverage	50 psi (3.4 bar)	70 psi (4.8 bar)	90 psi (6.2 bar)	100 psi (6.9 bar)	120 psi (8.3 bar)	140 psi (9.7 bar)	160 psi (11.0 bar)	180 psi (12.4 bar)	200 psi (13.8 bar)
	D	13.0 (49)	16.0 (61)	18.0 (68)	19.5 (74)	21 (79)	23 (87)	25 (93)	27 (100)	28 (106)
TJ14	G, H	16.0 (61)	18.5 (70)	21 (79)	23 (87)	24 (91)	26 (98)	28 (106)	30 (114)	32 (121)
	С	17.0 (64)	19.5 (74)	22 (83)	25 (93)	26 (98)	28 (104)	30 (112)	32 (121)	34 (129)
	G	12 (45)	14 (53)	16.5 (62)	17.5 (66)	19 (72)	21 (79)	23 (85)	24 (91)	26 (98)
TJ19	D	16 (61)	18 (68)	20 (76)	21 (79)	23 (85)	24 (91)	26 (98)	28 (104)	29 (108)
	С	17 (64)	19 (72)	21 (79)	22 (83)	24 (91)	26 (97)	27.5 (104)	29 (110)	30 (114)

For lances, mounting kits, adapters and more, see page G6



DIMENSIONS AND WEIGHTS

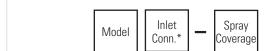
TANK DIA. **12 ft.** (3.7 m)

TankJet Cleaning Nozzle	Model	Inlet Conn.	L in. (mm)	A in. (mm)	D (Dia.) in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)
	T 11.4	Threaded	6.56 (167)	1.95 (49)	1.97 (50)	2 (51)	2.25 (1)
MIN. TANK OPENING	TJ14	Sanitary flange	7.56 (192)	1.95 (49)	1.97 (50)	2 (51)	2.5 (1.1)
D		Threaded	6.65 (169)	0.84 (21)	1.97 (50)	2 (51)	2 (.9)
	TJ19	Sanitary flange	12.65 (321)	0.84 (21)	1.97 (50)	2 (51)	2.3 (1.0)
	TJ19-6	Threaded	6.65 (169)	0.01/01	4.07/50	0/54)	2 (.9)
A —		Sanitary flange	13.65 (347)	0.84 (21)	1.97 (50)	2 (51)	

* 7/8 in. (22 mm) probe available for smaller keg or drum bungholes

ORDERING INFORMATION

TANKJET 14 AND 19 TANK CLEANING NOZZLES





* Leave blank for NPT connection. Insert B for BSPT connection or SF for sanitary flange.





FOR TANK DIA. UP TO **10** ft. (3 m)

SMALL PROCESSING TANKS • TOTES BEVERAGE TANKS • MIXING TANKS PIPES AND DUCTS • PULP CHESTS DRUMS AND KEGS • CHEMICAL TANK CYLINDERS



TANK DIA. UP TO 10 FT. (3 M)



PRODUCE EFFECTIVE SPRAY THROUGH A VARIETY OF MATERIALS AND SPRAY COVERAGES

RELIABLE, COMPACT DESIGNS PROVIDE COMPREHENSIVE CLEANING AND RINSING

Built for longevity, these compact nozzles are designed to thoroughly clean and rinse a wide variety of vessels. Their versatility and easy maintenance make them ideal for installation with multiple nozzles.

E2



QUICK REFERENCE GUIDE

Nozzle	Cleaning Power	Max. Tank Diameter ft. (m)	Operating Principle	Flow Rate Range gpm (lpm)	Operating Pressure psi (bar)	Spray Coverage	Max. Temperature °F (°C)	Materials	Page Number
TankJet 27500 & 27500-R (x)	Medium impact	10 (3.0)	Fluid-driven reactionary force	4.0 to 8.9 (15.3 to 34)	10 to 50 (0.7 to 3.5)	180° up/down, 270° up/down, 360°	200 (93)	PTFE fluoropolymer resin	E4
TankJet 6353 & 6353-MFP	Rinsing	10 (3)	Stationary	8.9 to 80 (35 to 301)	20 to 50 (1.4 to 3.5)	360°	212 (100)	Brass, 303 or 316 stainless steel	E6
TankJet 18250A	Rinsing	8 (2.4)	Fluid-driven reactionary force	10.5 to 55 (48 to 205)	10 to 60 (0.7 to 4.1)	360°	350 (177)	Bearing retainers – Kolsterised stainless steel Sleeves – 50% stainless steel PTFE All other metallurgy – 316 stainless steel with Ryton® (polyphenylene sulfide)	E8
TankJet D41990A & D41990E (Ex)	Rinsing	6.5 (2.0)	Fluid-driven reactionary force	2.4 to 10.6 (9.0 to 40)	15.0 to 60 (1.0 to 4.0)	180° up/down, 360°	265 (130)	316L stainless steel	E10
TankJet D41892 ⓒ	Rinsing	6.5 (2)	Fluid-driven reactionary force	4.0 to 7.5 (15.9 to 29)	20 to 70 (1.4 to 4.8)	360°	160 (70)	POM or PVDF	E12
TankJet 9-A	Rinsing	6 (1.8)	Fluid-driven reactionary force	1.3 to 5.0 (4.9 to 18.9)	10 to 120 (0.7 to 8.3)	2 x 175	190 (88)	Bearings – Carbon-filled PTFE fluoropolymer All other metallurgy – 316 stainless steel	E14



TANKJET 27500 AND 27500-R TANK CLEANING NOZZLE **FEATURES AND BENEFITS**

- · With rotation driven by the reactionary force of the cleaning liquid, these rotating nozzles provide excellent cleaning and rinsing and are especially well-suited to clean-in-place (CIP) systems
- Spray angles range from 180° to 360° and can be used to clean specific areas or the entire tank interior
- Made of corrosion- and chemical-resistant PTFE fluoropolymer resin, both models provide peak performance when used with debris-free liquid and deliver greater impact than static spray balls
- The rotating spray heads on 27500-R nozzles can be easily removed from the body for inspection and maintenance
- 27500-R nozzles with removeable spray heads, 1/2 in. and 3/4 in. inlet connections, are also available in carbon-filled PTFE for improved thermal characteristics and higher mechanical strength.
- ATEX-certified versions available

SPECIFICATIONS

UP TO

TankJet 27500 and 27500-R Tank Cleaning Nozzles					
Max. tank diameter:	10 ft. (3.0 m)				
Operating principle:	Fluid-driven reactionary force				
Flow rate:	2.6 to 8.9 gpm (9.8 to 34 lpm)				
Operating pressure:	10 to 50 psi (0.7 to 3.4 bar)				
Max. temperature:	200°F (93°C)				
Materials:	PTFE fluoropolymer resin or CTEF				
Inlet connection:	3/8" or 1/2" NPT or BSPT (F)				
Optional accessories:	Strainers, recommended mesh size: 100 (150 micron) See page G2				

IDEAL FOR CLEANING:

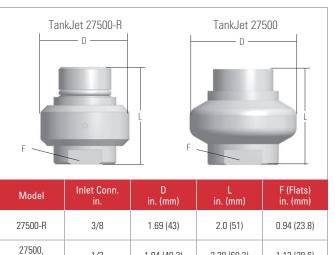
- · Broke chests
- Chemical tanks
- · Pharmaceutical tanks
- Process tanks





TankJet 27500-R tank cleaning nozzle

DIMENSIONS AND WEIGHT

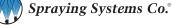


Additional sizes available: Page C16 - 3 in. conn.

27500-R

Page D4 – 3/4, 1 and 2 in. conn.

1/2



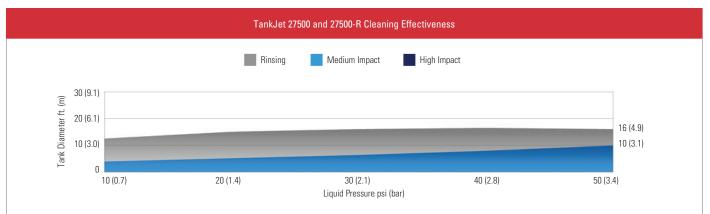
1.94 (49.2)

2.38 (60.3)

1.13 (28.6)

TANK DIA. **10 ft.** (3.0 m)

PERFORMANCE DATA



Model Inlet Conn.		Capacity	Orifice	Liquid Flow Capacity gpm (lpm)*					Max. Tank Dia.				
27500	27500-R	Size in.	Size				Dia. in. (mm)	10 psi (0.7 bar)	20 psi (1.4 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)	ft. (m)
	•	2.0	5	0.052 (1.3)	2.6 (9.8)	3.8 (14.4)	4.7 (17.8)	5.4 (20.4)	6.3 (23.8)	10 (3.0)			
	•	3/8	7	3/32 (2.4)	3.7 (14.0)	5.3 (20)	6.2 (23.5)	7.4 (28)	8.2 (31)	10 (3.0)			
•	•*	1/2	8	3/32 (2.4)	4.0 (15.3)	5.7 (22)	6.9 (26)	8.0 (30)	8.9 (34)	10 (3.0)			

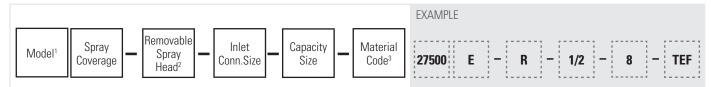
*Suggested optimum operating range: 20 to 40 psi (1.5 to 2.8 bar).

ADDITIONAL SIZES AVAILABLE

Page C16 – 3 in. conn. Page D4 – 3/4, 1 and 2 in. conn.

ORDERING INFORMATION

TANKJET 27500 AND 27500-R TANK CLEANING NOZZLES



¹Add B prior to the model for BSPT connections.

²Leave blank for standard version.

³ Indicate CTEF for carbon-filled PTFE on 1/2 in. inlet connections for 27500-R.

For lances, mounting kits, adapters and more, see page G6



TANKJET 6353 & 6353-MFP TANK CLEANING NOZZLE FEATURES AND BENEFITS

TankJet 6353-MFP tank cleaning nozzle

- TankJet 6353-MFP provides increased cleaning action by using 3/8" Maximum Free Passage (MFP) FullJet[®] nozzles; MFP design helps reduce clogging
- Simple and reliable with no moving parts
- Individual nozzles can be replaced with plugs to provide specific cleaning coverages
- · Nozzles are easily removed for cleaning and inspection
- Can be installed in any position
- Special designs available for a wide range of coverages
- · Special materials available on request



SPRAY COVERAGE 360° S60° S700 S700 Vertical ↓ Horizontal ↓ S°Up \$

45° Down 🗡 🌂

R

RINSING

SPECIFICATIONS

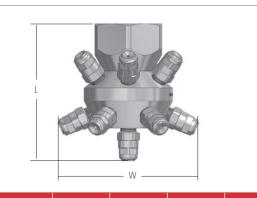
TankJet 6353 Tank Cleaning Nozzles	Standard version	MFP version		
Max. tank diameter:	10 ft. (3 m)	10 ft. (3 m)		
Operating principle:	Stationary	Stationary		
Flow rate:	8.9 to 60 gpm (35 to 230 lpm)	25 to 80 gpm (93 to 301 lpm)		
Operating pressure:	20 to 50 psi (1.4 to 3.4 bar)	20 to 50 psi (1.4 to 3.4 bar)		
Max. temperature:	212°F (100°C)	212°F (100°C)		
Materials:	Brass, 303, or 316 stainless steel	Brass, 303 or 316 stainless steel		
Inlet connection:	1-1/2" NPT or BSPT (F)	1-1/2" NPT or BSPT (F)		
Optional accessories:	Strainers, recommended mesh size: 16 to 100 (1190 to 150 micron). See page G2			

IDEAL FOR CLEANING:

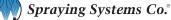
 Chemical processing tanks • Pulp chests

Process tanks

DIMENSIONS AND WEIGHTS

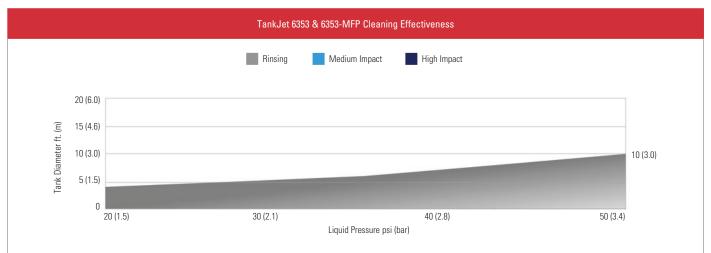


Nozzle	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)	
6353-1/4GG-5	4-1/2 (114)	4-1/2 (114)	6 (152)	3.7 (1.6)	
6353-1/4GG-10	4-1/2 (114)	4-1/2 (114)	0(102)		
6353-3/8GG-22	4-1/2 (114)	5 (127)	6 (152)	4.5 (2.0)	
6353-3/8HHMFP-6014					
6353-3/8HHMFP-6022	4-1/2 (114)	4-1/2 (114)	6 (152)	3.7 (1.6)	
6353-3/8HHMFP-6032					





PERFORMANCE DATA



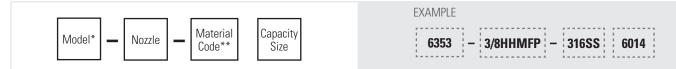
Model	FullJet®	Capacity	Max. Free	Liquid Flow Capacity gpm (lpm)					
	Nozzle	Size	Passage in. (mm)	20 psi (1.5 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)		
	1/4GG	5	0.050 (1.3)	8.9 (35)	10.8 (40)	12.3 (48)	13.6 (52)		
	1/4GG	10	0.063 (1.6)	17.9 (70)	22 (80)	25 (97)	27 (104)		
6252	3/8GG	22	0.109 (2.8)	39 (155)	48 (177)	55 (215)	60 (230)		
6353	3/8HHMFP	6014	0.125 (3.2)	25 (93)	29 (108)	31 (118)	33 (123)		
	3/8HHMFP	6022	0.156 (4.0)	38 (143)	44 (167)	49 (187)	54 (204)		
	3/8HHMFP	6032	0.188 (4.8)	55 (206)	65 (246)	73 (276)	80 (301)		

ORDERING INFORMATION

6353 TANK CLEANING NOZZLE



6353-MFP TANK CLEANING NOZZLE



*Add B prior to the model number for BSPT connections.

**Leave blank when ordering brass. Specify SS for 303 stainless steel, and 316SS for Stainless Steel Type 316 (DIN 1.4571).

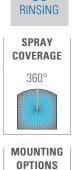
For lances, mounting kits, adapters and more, see page G6



TANKJET 18250A TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Three flat sprays mounted in a rotating spray head are driven by the flow of the cleaning liquid
- Precisely positioned orifices provide complete coverage of all interior surfaces
- Constructed for long-wear life using corrosion-resistant materials that also tolerate high-temperature operation
- Using single-pass or particulate-free cleaning liquid optimizes cleaning performance

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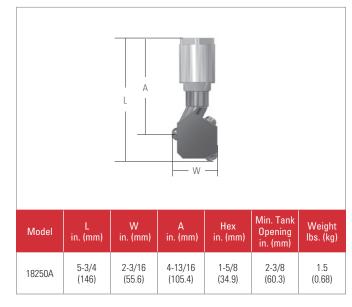


Vertical

R

TankJet 18250A tank cleaning nozzle

DIMENSIONS AND WEIGHTS

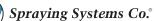


SPECIFICATIONS

TankJet 18250A Tank Cleaning Nozzle					
Max. tank diameter:	8 ft. (2.4 m)				
Operating principle:	Fluid-driven reactionary force				
Flow rate:	10.5 to 55 gpm (48 to 205 lpm)				
Operating pressure:	10 to 60 psi (0.7 to 4.1 bar)				
Max. temperature:	350°F (177°C)				
Materials:	Bearing retainers – Kolsterised stainless steel Sleeves – 50% stainless steel PTFE All other metallurgy – 316 stainless steel with Ryton® (polyphenylene sulfide)				
Inlet connection:	3/4" NPT or BSPT (F)				
Optional accessories:	Strainers, recommended mesh size: 200 (74 micron) See page G2				

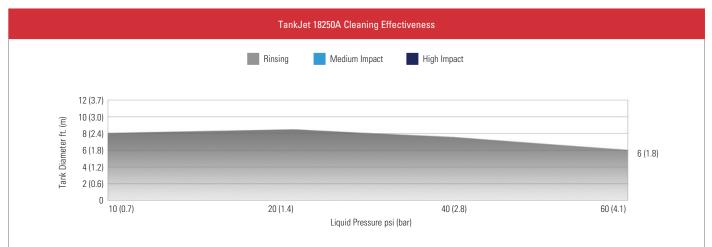
IDEAL FOR CLEANING:

- Barrels
- Food vats
- Chemical tanks
- Processing vessels



TANK DIA. **8 ft.** (2.4 m)

PERFORMANCE DATA



Model 18250A		Liquid Flow Capacity gpm (lpm)							
Bearings and Races Material	Capacity Size	10 psi (0.7 bar)	(0.7 bar) 20 psi (1.4 bar) 30 psi (2.1 bar)		40 psi (2.8 bar)	50 psi (3.4 bar)	60 psi (4.1 bar)		
316SS	21	10.5 (48)	14.8 (59)	18.2 (68)	21 (76)	23 (83)	26 (96)		
316SS	45	23 (103)	32 (126)	39 (145)	45 (162)	50 (178)	55 (205)		

ORDERING INFORMATION

TANKJET 18250A TANK CLEANING NOZZLE



*Add B prior to the model for BSPT connections.

For lances, mounting kits, adapters and more, see page G6



E9

TANKJET D41990 TANK CLEANING NOZZLE FEATURES AND BENEFITS

TANK DIA. **6.5 ft.** (2 m)

- Low pressure, low volume rinsing of small tanks and containers
- Fluid-driven reactionary force nozzle no motor source needed to drive spray head
- Micro-size nozzle fits into very small tank openings – as small as 1 in. (25 mm)
- All 316L stainless steel construction for long wear life and corrosion resistance
- Suitable for high temperature applications up to 265°F (130°C)
- ATEX-certified versions available upon request



TankJet D41990

tank cleaning nozzle

For lances, mounting kits, adapters and more, see page G6

B 180° Up B 180° Down E 360° Image: Comparison of the second second



MOUNTING OPTIONS						
Vertical	♠	ŧ				
Horizontal	+	+				
45° Up	K	*				
45° Down	×	×				



TankJet D41990 tank cleaning nozzle, see page D18

SPECIFICATIONS

TankJet D41990 Tank Cleaning Nozzle					
Max. tank diameter:	6.5 ft. (2.0 m)				
Operating principle:	Fluid-driven reactionary force				
Flow rate:	2.4 to 10.6 gpm (9.0 to 40 lpm)				
Operating pressure:	15 to 60 psi (1.0 to 4.0 bar)				
Max. temperature:	265°F (130°C)				
Materials:	316L stainless steel				
Inlet connection:	3/8", 1/2", 3/4" NPT or BSPT (F), CIP 182 or 192				
Optional accessories:	Strainers, recommended mesh size: 200 (74 micron) See page G2				

IDEAL FOR CLEANING:

- Chemical tanks
- Beverage tanks
- Canisters
- Food tanks
- Kegs/drums
- Totes/containers

ADDITIONAL SIZES AVAILABLE

For D41990 up to 16 ft. see page D18







PERFORMANCE DATA



Nozzle Inlet		Liquid Flow Capacity gpm (lpm)					
	Capacity Size	15 psi (1.0 bar)	20 psi (1.4 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)	60 psi (4.1 bar)
	3.2	2.4 (9.0)	2.7 (10.1)	3.1 (11.6)	3.4 (12.8)	3.6 (13.7)	3.9 (14.6)
2.0	4.5	3.3 (12.5)	3.7 (14.1)	4.3 (16.3)	4.8 (18.1)	5.1 (19.4)	5.5 (21)
3/8	6	4.4 (16.5)	4.9 (18.7)	5.7 (22)	6.4 (24)	6.9 (26)	7.3 (29)
	9	5.2 (19.5)	6.1 (23)	7.5 (29)	8.7 (33)	9.6 (26)	10.6 (40)

DIMENSIONS AND WEIGHTS

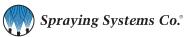
TankJet D41990 Tank Cleaning Nozzle	Inlet Conn. Size/Type	L in (mm)	A in (mm)	B in (mm)	C in (mm)	Pin Length in (mm)	Min. Tank Opening in (mm)	Weight Ibs. (kg)
	3/8" Threaded	2.4 (60)	0.71 (18)	0.79 (20)	_	_	1 (25)	0.12 (0.05)
	CIP182	3.0 (77)	0.71 (18)	0.85 (21.5)	0.72 (18.2)	1.54 (39)	1.63 (41.4)	0.12 (0.05)

Additional sizes available: Page D18 - 1/2 in., 3/4 in. and CIP192 conn.

ORDERING INFORMATION TANKJET D41990 TANK CLEANING NOZZLE



*Add B prior to inlet connection for BSPT connections.



TANKJET D41892 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Three flat sprays provide 360° coverage to rinse the entire tank
- The flow of the cleaning liquid drives spray head rotation
- Lightweight, durable and corrosion resistant
- CIP connection and ATEX-certified versions available upon request







R

RINSING

SPRAY

TankJet D41892 tank cleaning nozzle

DIMENSIONS AND WEIGHTS



SPECIFICATIONS

Nozzle	TankJet D41892
Max. tank diameter:	6.5 ft (2.0 m)
Operating principle:	Fluid-driven reactionary force
Flow rate:	4.0 to 7.5 gpm (15.9 to 29 lpm)
Operating pressure:	20 to 70 psi (1.4 to 4.8 bar)
Max. temperature:	160°F (70°C)
Materials:	Polyacetal (POM)
Inlet connection:	3/8", 1/2" NPT or BSPT (F)
Optional accessories:	Strainers, recommended mesh size: 200 (74 micron) See page G2

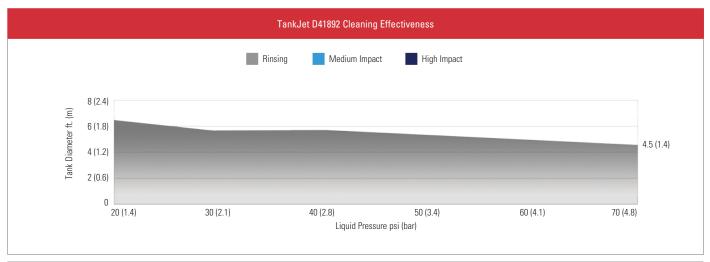
Mixing tanks

IDEAL FOR CLEANING:

- Chemical containers
- Food containers



PERFORMANCE DATA



Inlet	Capacity						
Conn. Size in.	Size	20 psi (1.4 bar)	30 psi (2.1 bar)	40 psi (2.8 bar)	50 psi (3.4 bar)	60 psi (4.1 bar)	70 psi (4.8 bar)
3/8	0	4.0	4.9	5.7	6.4	7.0	7.5
1/2	b	(15.9)	(18.3)	(20.5)	(22.5)	(26)	(29)

ORDERING INFORMATION

TANKJET D41892 TANK CLEANING NOZZLE



*Add B prior to inlet connection for BSPT connections.





TANKJET 9 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Multiple flat spray nozzles are mounted in a rotating spray head that is driven by the flow of the cleaning liquid
- Simple and reliable, with no ball bearings, tank cleaners operate effectively in any position, vertical or horizontal
- Well-suited to clean-in-place and sanitary applications, chemical distribution and passivation
- Offered in three versions for medium-size tanks:
 - TankJet 9-A features two flat side sprays, each covering 175°
 - The TankJet 9-B and 9-C versions each have six flat sprays and provide coverage of the entire tank

TankJet 9-B tank cleaning nozzle, see page D20



TankJet 9-A Tank Cleaning Nozzle					
Max. tank diameter:	6 ft. (1.8 m)				
Operating principle:	Fluid-driven reactionary force				
Flow rate:	1.3 to 5 gpm (4.9 to 18.9 lpm)				
Operating pressure:	10 to 120 psi (0.7 to 8.3 bar)				
Max. temperature:	190°F (88°C)				
Materials:	Bearings – Carbon filled PTFE fluoropolymer All other metallurgy – 316 stainless steel				
Inlet connection:	3/8" NPT or BSPT (F)				
Optional accessories:	Strainers, recommended mesh size: 20 (840 micron) See page G2				

Spraying Systems Co. TankJet® TJ9-A

TankJet 9-A tank cleaning nozzle





R

RINSING

SPRAY

COVERAGE

TJ9-A



T19-B

TankJet 9-C tank cleaning nozzle, see page D20

IDEAL FOR CLEANING:

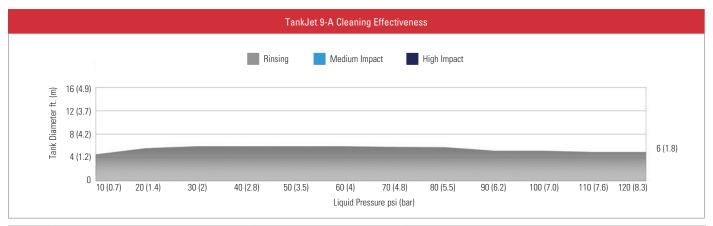
- Brewery tanks
- Chemical containers
- Drums and kegs
- Food processing tanks
- Pharmaceutical tanks
- Wine barrels and vats

For lances, mounting kits, adapters and more, see page G6



TANK DIA. **6 ft.** (4.9 m)

PERFORMANCE DATA



		Model		Liquid Flow Capacity gpm (lpm)									
M	lodel	Туре	Model Type 10 psi (0.7 bar)	30 psi (2.1 bar)	50 psi (3.4 bar)	70 psi (4.8 bar)	90 psi (6.2 bar)	100 psi (7.0 bar)	110 psi (7.6 bar)	120 psi (8.3 bar)			
-	TJ9	А	1.3 (4.9)	2.5 (9.5)	3.0 (11.4)	4.0 (15.1)	4.5 (17)	4.7 (17.8)	4.9 (18.5)	5.0 (18.9)			

ADDITIONAL SIZES AVAILABLE

TankJet 9-B & 9-C see page D20

DIMENSIONS AND WEIGHTS

TankJet 9 Tank Cleaning Nozzle	L	W	Min. tank opening	Weight
	in. (mm)	in. (mm)	in. (mm)	Ibs. (kg)
	2.31 (59)	1.06 (27)	1.25 (32)	0.34 (0.15)

Additional sizes available: Page D20 – 1/2 and 3/4 in. conn.

ORDERING INFORMATION TANKJET 9-A TANK CLEANING NOZZLE



* Leave blank for NPT connection or insert B for BSPT connection.



Cereal Manufacturer Improves Worker Safety and Increases Production Time with New Cleaning Equipment

PROBLEM:

A leading producer of breakfast cereals needed to thoroughly clean the oven used for drying cereal. High pressure spray bars were used to clean the dryer belt between batches. However, the cleaning was inadequate so a worker using a high pressure spray gun was also assigned to this task. The cleaning process required more than two hours. Despite the cleaning effort, crumbs sometimes remained and caused quality problems with subsequent batches of cereal. In addition, the manual cleaning process created safety concerns because the worker had to stand on a ladder the entire time.

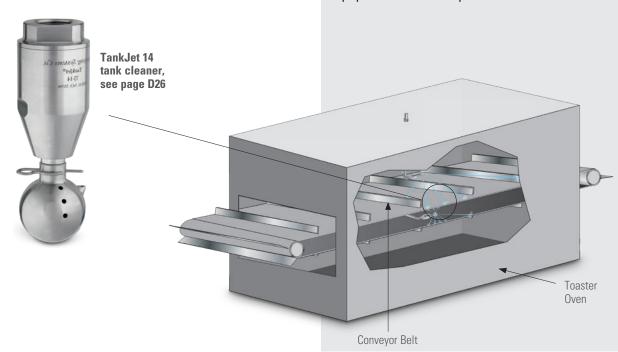
Call your local spray expert to explore your tank cleaning options.

SOLUTION:

Spraying Systems Co.'s TankJet[®] 14 tank cleaner solved the manufacturer's problem. Two TankJet 14 units, one positioned above and one positioned inside the dryer belt, provide effective cleaning of the oven's interior surfaces. Spraying at 175 psi (12 bar), the rotating action of the nozzles sweep the cereal crumbs from the mesh belt and also clean the dryer walls and ceiling.

RESULTS:

The automated equipment has improved the cleaning process and eliminated the product quality and safety issues previously experienced. Workers have been assigned to other tasks. Based on labor savings alone, the TankJet units paid for themselves in less than two months. Use of the tank cleaners has also reduced cleaning time by 15%. When the increased production time is considered, the investment in the new equipment was recouped in less than a month.







FOR TANK DIA. UP TO 5ft.

WINE BARRELS • PIPES & DUCTS SMALL PROCESSING TANKS • TUBES CYLINDERS • DRUMS & KEGS PHARMACEUTICAL VESSELS FOOD VATS



TANK DIA. UP TO 5 FT. (1.5 M) I N T R O D U C T I O N



QUICKLY CLEAN AND RINSE BARRELS AND TANKS

EFFICIENT WASHING AND CLEANING OF BEVERAGE CONTAINERS AND SMALLER VESSELS.

Rely on this series of nozzles when containers require a quick turnaround. Their long wear life and compact design make these TankJet nozzles ideal for beverage containers and smaller vessels.



QUICK REFERENCE GUIDE

Nozzle	Cleaning Power	Max. Tank Diameter ft. (m)	Operating Principle	Flow Rate Range gpm (Ipm)	Operating Pressure psi (bar)	Spray Coverage	Max. Temperature °F (°C)	Materials	Page Number
TankJet® M60	High impact	5 (1.5)	Air motor-driven	1.1 to 10.1 (4.2 to 38)	100 to 1000 (6.9 to 69)	360°	180 (82)	316 stainless steel, carbon graphite PTFE, filled PEEK, EPDM, and PTFE	F4
TankJet D26564	Rinsing	5 (1.5)	Fluid-driven reactionary force	2.4 to 5.4 (9.0 to 20.5)	14.5 to 72.5 (1.0 to 5.0)	180° up/down	194 (90)	PVDF	F6
TankJet 21400A	Rinsing	5 (1.5)	Fluid-driven reactionary force	5.0 to 22 (23 to 82)	10 to 60 (0.7 to 4.1)	360°	350 (177)	Bearing Retainers – stainless steel Sleeves – 50% stainless steel PTFE All other metallurgy – 316 stainless steel with Ryton® (polyphenylene sulfide)	F7
TankJet VSM	Rinsing	5 (1.5)	Stationary	2.7 to 72 (10.4 to 269)	10 to 150 (0.7 to 10.3)	240° down	200 (93)	Nylon	F8
TankJet 30473	Rinsing	3 (0.9)	Fluid-driven reactionary force	2.1 to 4.5 (7.8 to 18.0)	10 to 50 (0.7 to 3.4)	180° up/down, 360°	200 (93)	PTFE	F9
TankJet 23240-2 23240-3	Rinsing	3 (0.9)	Fluid-driven reactionary force	3.5 to 22 (14.0 to 79)	20 to 200 (1.4 to 13.8)	360°, side spray	350 (177)	316 stainless steel, hardened stainless steel and 50% stainless steel-filled PTFE	F10



TANKJET M60 TANK CLEANER FEATURES AND BENEFITS

ft. (1.5 m)

TANK DIA.

UP TO

- · Powerful cleaning using low flow rates
- · Removes tough residues quickly and effectively; solid stream sprays rotate in multiple axes for complete and thorough coverage
- Mobile can easily be moved from one barrel or drum to the next
- · Fast cycle time; less than 5 minutes. One full cycle completed every 16 revolutions
- Compact fits in openings as small as 1-3/4 in. (44.5 mm) and easily inserted into standard bung hole openings
- · Compatible with a variety of pumps including pressure washers
- Material construction in contact with fluid: stainless steel, carbon graphite PTFE-filled PEEK, EPDM, and PTFE
- · Non-lubricated, air motor driven for continuous and reliable operation
- · Easy to operate and rebuild
- See case study on page F12

SPECIFICATIONS

TankJet M60 Tank Cleaner

Max. tank diameter:	5 ft. (1.5 m)
Operating principle:	Air motor-driven
Flow rate:	1.1 to 10.1 gpm (4.2 to 38 lpm)
Operating pressure:	100 to 1000 psi (6.9 to 69 bar)
Max. temperature:	180°F (82°C)
Materials:	316 stainless steel, carbon graphite PTFE-filled PEEK, EPDM, and PTFE
Liquid connection:	3/8" NPT or BSPT (F)
Air line connection:	1/4" NPT or BSFT (F)
Optional accessories:	Strainers, recommended mesh size: 100 (150 microns) See page G2

IDEAL FOR CLEANING:

- · Wine barrels
- Drums and kegs
- · Food and beverage barrels
- · Chemical and storage barrels
- · Small tanks and containers



DIMENSIONS AND WEIGHTS



PERFORMANCE DATA

	Orifice Size	Liquid Flow Capacity gpm (lpm)								
Model		100 psi (6.9 bar)	200 psi (13.8 bar)	300 psi (20.7 bar)	400 psi (27.6 bar)	500 psi (34.5 bar)	700 psi (48.3 bar)	1000 psi (68.9 bar)		
	046	1.1 (4.2)	1.6 (6.1)	1.9 (7.1)	2.2 (8.7)	2.5 (9.4)	2.9 (11.2)	3.5 (13.3)		
	055	1.6 (6.0)	2.3 (8.8)	2.8 (10.2)	3.2 (12.5)	3.6 (13.4)	4.2 (16.1)	5.0 (19.0)		
TJM60AG	060	1.9 (7.2)	2.7 (10.5)	3.3 (12.1)	3.8 (14.8)	4.2 (16.0)	5.0 (19.1)	6.0 (22)		
	066	2.3 (8.7)	3.2 (12.7)	4.0 (14.6)	4.6 (17.9)	5.1 (19.4)	6.1 (23)	7.2 (27)		
	078	3.2 (12.1)	4.5 (17.7)	5.5 (20)	6.4 (25)	7.2 (27)	8.5 (32)	10.1 (38)		

NON-LUBRICATED AIR MOTOR (AG) CYCLE TIME DATA

Air Pressure psi (bar)	Air Consumption scfm (Ipm)	Approx. Speed (rpm) 1000 psi/180°F (69 bar/82°C)	Approx. Time for One Complete Cycle (min.)
10.0 (0.7)	3.9 (108)	3.5	4.5
12.0 (0.85)	4.7 (136)	4.5	3.5
15.0 (1.0)	5.9 (162)	6.0	2.7
20 (1.4)	7.8 (224)	9.5	1.7

*Cycle time refers to the time it takes to complete one full cycle. One full cycle is completed every 16 revolutions.

ORDERING INFORMATION

TANKJET M60 TANK CLEANER



*Add B for BSPT connections after the model type.



TANKJET D26564 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- · Compact design ideal for tanks or containers with small openings
- · Ideal for rinsing small tanks and containers, the fast rotating nozzle provides thorough coverage over the vessel surface
- No motor source is required as the force of the liquid provides the spray head rotation
- · Corrosion and chemical resistant materials of construction

SPECIFICATIONS

TankJet D26564 Tank Cleaning Nozzle					
Max. tank diameter:	5 ft. (1.5 m)				
Operating principle:	Fluid-driven reactionary force				
Flow rate:	2.4 to 5.4 gpm (9.0 to 20.5 lpm)				
Operating pressure:	14.5 to 72.5 psi (1.0 to 5.0 bar)				
Max. temperature:	194°F (90°C)				
Materials:	PVDF				
Inlet connection:	1/2" and 3/8" NPT or BSPT				
Optional accessories:	Strainers, recommended mesh size: 200 (74 microns) See page G2				

IDEAL FOR CLEANING:

Small containers



DIMENSIONS AND WEIGHTS

Model	Inlet Conn. Size in.	L in. (mm)	W in. (mm)	D in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)
DOCECA	1/2	0.0 (70)	1.1 (27)	1.4.(05)	1 5 (07)	01(04)
D26564	3/8	2.8 (70)	0.94 (24)	1.4 (35)	1.5 (37)	0.1 (.04)
		L				

PERFORMANCE DATA

Model	Capacity, gpm (lpm)				
Woder	14.5 psi (1.0 bar)	50.8 psi (3.5 bar)	72.5 psi (5.0 bar)		
D26564	2.4 (9.0)	4.5 (17)	5.4 (20.5)		

ORDERING INFORMATION

TANKJET D26564



*Add B prior to the inlet connection for BSPT connections. **Material code for PVDF is KY4



TANK DIA. **5 ft.** (1.5 m)

TANKJET 21400A TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Three flat sprays mounted in a rotating spray head are driven by the flow of the cleaning liquid
- Precisely positioned orifices provide complete orbital coverage of all interior surfaces
- · Constructed for long wear life and to tolerate high-temperature operation using corrosion-resistant materials
- · Using single-pass or particulate-free cleaning liquid optimizes cleaning performance

TankJet 21400A Tank Cleaning Nozzle					
Max. tank diameter:	5 ft. (1.5 m)				
Operating principle:	Fluid-driven reactionary force				
Flow rate:	5 to 22 gpm (23 to 82 lpm)				
Operating pressure:	10 to 60 psi (0.7 to 4.1 bar)				
Max. temperature:	350°F (177°C)				
Materials:	Bearing Retainers – stainless steel Sleeves – 50% stainless steel PTFE All other metallurgy – 316 stainless steel with Ryton® (polyphenylene sulfide)				
Inlet connection:	3/4" NPT or BSPT (F)				
Optional accessories:	Strainers, recommended mesh size: 200 (74 microns) See page G2				

SPECIFICATIONS

IDEAL FOR CLEANING	3
--------------------	---

- Barrels
- Food vats
- Chemical tanks
- Processing vessels
- **PERFORMANCE DATA**



DIMENSIONS AND WEIGHTS

Model	L in. (mm)	W in. (mm)	A in. (mm)	Hex. in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)	
21400A	5.28 (134)	1.75 (44.5)	4.39 (111.5)	1.625 (34.9)	2.0 (50.8)	1.5 (0.68)	

Model 21400A	Capacity, gpm (lpm)						
Capacity Size	10 psi (0.7 bar) 20 psi (1.4 bar) 30 psi (2.1 bar) 40 psi (2.8 bar) 50 psi (3.4 bar) 60 psi						
10	5.0 (23)	7.1 (28)	8.7 (32)	10.0 (36)	11.2 (39)	12.2 (46)	
18	9.0 (41)	12.7 (50)	15.6 (58)	18.0 (65)	20 (71)	22 (82)	

ORDERING INFORMATION

TANKJET 21400A TANK CLEANING NOZZLE



*Add B prior to the nozzle type for BSPT connections.

**Material: Specify 316SS for Stainless Steel Type 316 (DIN 1.4571).



TANKJET VSM TANK CLEANING NOZZLE FEATURES AND BENEFITS

- · Lightweight stationary nozzles are ideal for low pressure rinsing of small vessels
- 240° spray coverage via 40 spray orifices

TANK DIA. **5 ft.** (1.5 m)

· Nozzles offer excellent chemical resistance and, with no moving parts, are suitable for clean-in-place (CIP) applications

For lances, mounting kits, adapters and more, see page G6

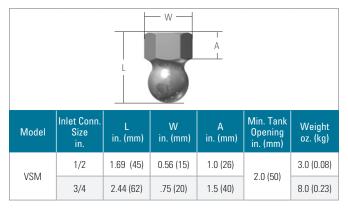
RINSING **SPRAY** TankJet VSM COVERAGE tank cleaning nozzle 240° Down **IDEAL FOR CLEANING:** • Chemical • Pharmaceutical Vertical

- containers vats
- MOUNTING **OPTIONS** | ♠ | ♦ Horizontal **←→** 45° Up XX

45° Down 🗡 🌂

R

DIMENSIONS AND WEIGHTS



SPECIFICATIONS

TankJet VSM Tank Cleaning Nozzle				
Max. tank diameter:	5 ft. (1.5 m)			
Operating principle:	Fixed stationary			
Flow rate:	2.7 to 72 gpm (10.4 to 269 lpm)			
Operating pressure:	10 to 150 psi (0.7 to 10.3 bar)			
Max. temperature:	200°F (93°C)			
Materials:	Nylon			
Inlet connection:	1/2" or 3/4" NPT or BSPT (F)			
Optional accessories:	Strainers, recommended mesh size: 50 (297 micron) See page G2			

PERFORMANCE DATA

Madal	Inlet Capacity Max. Free			Liquid Flow Capacity gpm (lpm)							
Iviodei	Model Conn. Size		Passage in. (mm)	10 psi (0.7 bar)	20 psi (1.4 bar)	40 psi (2.8 bar)	60 psi (4.1 bar)	80 psi (5.5 bar)	100 psi (6.9 bar)	130 psi (9.0 bar)	150 psi (10.3 bar)
	1/2	28	0.031 (0.8)	2.7 (10.4)	3.9 (15.3)	5.5 (22)	6.7 (25)	7.8 (28)	8.7 (33)	9.9 (38)	10.6 (40)
	1/2	44	0.039 (1.0)	4.3 (16.3)	6.1 (24)	8.6 (34)	10.6 (39)	12.2 (44)	13.7 (52)	15.6 (59)	16.7 (62)
	1/2	90	0.059 (1.5)	8.8 (33)	12.5 (49)	17.7 (70)	22 (81)	25 (90)	28 (107)	32 (121)	34 (127)
VSM	3/4		0.035 (1.3)	0.0 (33)	12.3 (43)	17.7 (70)	22 (01)	23 (30)	20(107)	32 (121)	34 (127)
VSIVI	1/2	140	0.077 (1.95)	13.7 (52)	19.4 (77)	28 (108)	34 (125)	39 (140)	43 (166)	50 (188)	53 (198)
	3/4	0.077 (1.95)	13.7 (32)	19.4 (77)	20 (100)	34 (123)	39 (140)	43 (100)	(001) UC	55 (196)	
	1/2 190	0.091 (2.3)	10 6 (71)	26 (104)	37 (147)	46 (170)	E2 (100)	E0 (22E)	67 (254)	72 /260)	
	3/4	190	U.U91 (Z.3)	18.6 (71)	20 (104)	37 (147)	40 (170)	53 (190)	59 (225)	67 (254)	72 (269)

ORDERING INFORMATION

TANKJET VSM TANK CLEANING NOZZLE



*Add B prior to the model type for BSPT connections.



TANK DIA. **3 ft.** (0.9 m)

TANKJET 30473 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- · Ideal for rinsing small containers, nozzles fit into tank openings as small as 1 in. (25 mm)
- The force of the cleaning liquid passing through lightweight miniature nozzle provides rotation - no motor required
- · Rotating spray head can be easily removed from the body for inspection and maintenance
- · Long-wearing material resists aggressive cleaning liquids

SPECIFICATIONS

TankJet 30473 Tank Cleaning Nozzle					
Max. tank diameter:	3 ft. (0.9 m)				
Operating principle:	Fluid-driven reactionary force				
Flow rate:	2.1 to 4.5 gpm (7.8 to 18.0 lpm)				
Operating pressure:	10 to 50 psi (0.7 to 3.4 bar)				
Max. temperature:	200°F (93°C)				
Materials:	1/4" inlet – PTFE 3/8" and $1/2"$ butt weld (BW) inlet $-$ 316L stainless steel stem with PTFE saucer				
Inlet connection:	1/4" and 3/8" NPT or BSPT (M) 1/2" butt weld				
Optional accessories:	Strainers, recommended mesh size: 200 (74 micron) See page G2				

• Ducts

IDEAL FOR CLEANING:

Chemical containers

• Cylinders

• Pipes

PERFORMANCE DATA

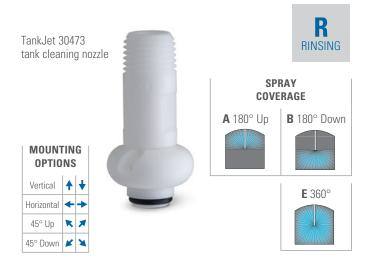
Madal	Capacity, gpm (lpm)					
Model	10 psi (0.7 bar) 20 psi (1.4 bar) 30 psi (2.1 bar) 40 psi (2.8 bar) 50				50 psi (3.4 bar)	
30473	2.1 (7.8)	2.9 (11.3)	3.5 (13.0)	4.0 (15.0)	4.5 (18.0)	

ORDERING INFORMATION

TANKJET 30473 TANK CLEANING NOZZLE

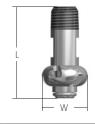


*Add B prior to the inlet connection for BSPT connections. Specify BW for butt weld.



DIMENSIONS AND WEIGHTS

Nozzle	Inlet Conn. in.	L in. (mm)	W in. (mm)	Min. Tank Opening in. (mm)	Weight oz. (kg)
30473	1/4	1.75 (44.4)	.87 (22)		0.5 (0.02)
30473	3/8	1.90 (48.3)	.87 (22)	1 (25)	1.7 (0.05)
30473	1/2, butt weld (BW)	1.90 (48.3)	.87 (22)		1.0 (0.03)





TANKJET 23240 TANK CLEANING NOZZLE FEATURES AND BENEFITS

- Compact, fluid-driven, rotating nozzles efficiently rinse vessels
- Two flat sprays produce the self-rotating force and side sprays; an optional third spray at the end of the nozzle, provides nearly full spherical coverage
- Long-wearing materials extend service life and enable operation at high temperatures
- · Available in electro-polish finish or stainless steel
- Wall mount options available

SPECIFICATIONS

TANK DIA.

TankJet 23240 Tank Cleaning Nozzle				
Max. tank diameter:	3 ft. (0.9 m)			
Operating principle:	Fluid-driven reactionary force			
Flow rate:	3.5 to 22 gpm (14.0 to 79 lpm)			
Operating pressure:	20 to 200 psi (1.4 to 13.8 bar)			
Max. temperature:	350°F (177°C)			
Materials:	316 stainless steel, hardened stainless steel and 50% stainless steel filled PTFE (316SS)			
Inlet connection:	1/2" NPT or BSPT (F)			
Optional accessories:	Strainers, recommended mesh size: 200 (74 microns) See page G2			

IDEAL FOR CLEANING:

- Barrels
- Cylinders
- Ducts
- Kegs
- Pipes
- Tube







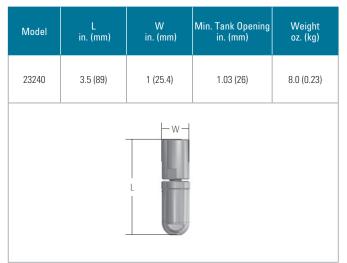
Vertical

R

TankJet 23240-3 tank cleaning nozzle

TankJet 23240-2 tank cleaning nozzle

DIMENSIONS AND WEIGHTS



11.2 (39)

17.9 (63)

12.7 (45)

15.7 (55)

22 (79)

Liquid Flow Capacity gpm (lpm) Coverage Capacity Model Туре Size 20 psi (1.4 bar) 40 psi (2.8 bar) 60 psi (4.1 bar) 80 psi (5.5 bar) 100 psi (6.9 bar) 120 psi (8.3 bar) 150 psi (10.3 bar) 200 psi (13.8 bar) 3.5 (14.0) 5.0 (19.7) 6.1 (23) 7.1 (25) 7.9 (28) 8.7 (32) 9.7 (36) 5 2 8 5.7 (22) 8.0 (32) 9.8 (36) 11.3 (41) 12.6 (45) 13.9 (52) 15.5 (58) 23240 5.7 4.0 (15.9) 5.7 (22) 7.0 (26) 8.1 (29) 9.0 (32) 9.9 (37) 11.0 (41) 3 4.9 (19.5) 8.6 (32) 7 7.0 (28) 9.9 (36) 11.1 (39) 12.1 (45) 13.6 (50) 10 7.1 (28) 10.0 (39) 12.2 (46) 14.1 (51) 15.8 (56) 17.3 (64) 19.4 (72)

PERFORMANCE DATA

ORDERING INFORMATION

TANKJET 23240 TANK CLEANING NOZZLE



*Add B prior to the Model type for BSPT connections.

**All bearings and races specify 316SS for Stainless Steel Type 316 (DIN 1.4571).



Transit Agency Saves More Than \$22,000 Annually with Mobile Unit for Drum Cleaning

PROBLEM:

A large metropolitan transit agency used an outside service firm to collect empty 55-gallon drums for recycling that contained oil, transmission fluid or other automotive fluid residue. The service firm charged a substantial fee for cleaning the drums, which was required prior to re-use or disposal. The transit agency has approximately 80 drums in use and the ongoing cleaning fees strained the operating budget.

Call your local spray expert to explore your tank cleaning options.

SOLUTION:

TankJet[®] M60 mobile tank cleaners are now used to clean the agency's 55-gallon drums. The tank cleaner is installed on a mobile cart that can be moved easily from drum to drum. Equipped with nozzles that provide rotating solid stream sprays in multiple axes, the tank cleaner provides quick and efficient cleaning. Drums are cleaned in less than four minutes. A heated pressure washer powers the TankJet M60 mobile tank cleaner.

RESULTS:

The transit agency is now using TankJet M60 mobile tank cleaners in multiple locations and has eliminated the substantial fees charged by the outside service firm. The agency reports savings of more than US\$22,000 annually and a payback period of just over three months per tank cleaner.

TankJet M60 mobile tank cleaner, see page F4

🚺 Spraying Systems Co.®



ACCESSORIES

	PAGE
Strainers	G2
Tank Cleaning Lances	G5
Adjustable Flanges	G6
Adapters and Mounting Kits	G7
TankJet [®] B & BX Injectors	G10
TankJet B Injector	G11
TankJet BX Injector	G13



STRAINER FEATURES AND BENEFITS

- Reduce clogging in tank cleaners and tank cleaning nozzles
- · Remove contaminants from liquid to ensure continuous movement of rotating spray heads
- Extend wear life of nozzles, valves and pumps
- Wide range of options: heavy duty, heavy duty high pressure, self cleaning and a wide range of mesh sizes

T-Style Strainer

T-strainers feature a removable bottom cap or plug for complete withdrawal of the screen assembly during cleaning. On some models, the bottom pipe plug can be replaced with a drain cock for guick-flush cleaning. Models with a clear nylon bowl allow easy visual inspection of the internal screen. Selfclean designs allow filtered liquid to pass through, while liquid particles are returned back to the liquid supply through a return outlet.

STRAINER OPTIONS

TWD

- 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2" female conn.
- Removable bottom plug for easy screen cleaning
- Bottom plug can be replaced with drain cock for flush cleaning
- Max. pressure: 300 psi (20 bar)
- Materials: Aluminum, brass, stainless steel
- Mesh: 16, 30, 50, 80, 100, 40 x 200 Dutch weave
- Use TWC for connections of 3" and up.
- TWC handles large flow rates with minimal pressure drops. Call your local specialist for application assistance.



Model 8310A:

- Designed for high pressure operation
- · Removable bottom plug for easy flush cleaning of screen
- 1/4", 3/8", 1/2" female conn.
- Max. pressure: 5000 psi at 150°F (345 bar at 66°C)
- Material: Stainless steel
- Mesh: 16, 30, 50, 100



AA124/AA430

- 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2" female conn. (Inlet connections vary depending on strainer type)
- Larger size screen area requires less frequent cleaning
- · Self-cleaning styles and versions with mounting lugs available
- AA124 and AA430 versions are the same except for materials and inlet connections



Strainer Type	Strainer Part No.	Material*	Max. Pressure	Mesh Sizes
124	AA124-AL	Aluminum head/ nylon bowl	150 psi (10 bar)	16, 30, 50, 80, 100
124ML with mounting holes**	AA124ML-AL	Aluminum head/ nylon bowl	150 psi (10 bar)	16, 30, 50, 80, 100
124A self-cleaning version	AA124ASC-NYB	Aluminum head/ nylon bowl	110 psi (8 bar)	16, 30, 50, 80, 100
430ML with mounting holes**	AA430ML	Polypropylene head/nylon bowl	110 psi (8 bar)	16, 30, 50, 80, 100, 120, 200†
430 self-cleaning version	AA430SC	Polypropylene head/nylon bowl	75 psi (5 bar)	16, 30, 50, 80, 100, 120, 200†
*Max. temperature fo	r plastic 100°F (38	°C); max. temperatu	re for metal 1	80°F (82°C).

**For mounting on machinery or angle iron. *120 only for 1-1/4" and 1-1/2" sizes; 200 only for 3/4" and 1" sizes.

Inlet Outlet Connection Connection Bowl Strainer Basket Drain Cock

G2

MESH RECOMMENDATIONS

Nozzle Type	Mesh Recommendation		
Motor Driven Tank Cleaner	100 min.		
Fluid Driven (Turbine)	30 to 50		
Fluid Driven (Reactionary Force and Constant Speed)	200 min.		
Fixed Stationary	Refer to Mesh to Micron Conversion Chart		

MESH TO MICRON CONVERSION CHART

Mesh	Micron	Inches (mm)
16	1191	0.0469 (1.2)
20	840	0.0331 (.84)
30	590	0.0232 (.58)
50	297	0.0117 (.29)
60	250	0.0098 (.24)
80	177	0.0070 (.17)
100	149	0.0059 (.14)
200	74	0.0035 (.08)

DIMENSIONS AND WEIGHTS

Strainer	Model	Inlet Conn. in.	L in. (mm)	W in. (mm)	B in. (mm)	Net Weight oz. (kg)
		1/4	3.922 (99.6)	2.500 (63.5)	3.235 (82.2)	24.9 (0.71)
w		3/8	4.905 (124.6)	3.250 (82.6)	3.965 (100.7)	28.2 (0.80)
		1/2	4.905 (124.6)	3.250 (82.6)	3.965 (100.7)	28.2 (0.80)
		3/4	7.535 (191.4)	4.500 (114.3)	6.225 (158.1)	80.4 (2.28)
8.8. CO.	TWD	1	7.535 (191.4)	4.500 (114.3)	6.225 (158.1)	76.7 (2.17)
		1-1/4	10.320 (262.1)	6.000 (152.4)	8.380 (212.9)	190.2 (5.39)
		1-1/2	10.320 (262.1)	6.000 (152.4)	8.380 (212.9)	183.5 (5.20)
		2	12.365 (314.1)	8.000 (203.2)	9.805 (249)	357.8 (10.14)
		2-1/2	12.365 (314.1)	8.000 (203.2)	9.805 (249)	334.1 (9.47)
		1/4	6.090 (154.7)	2.750 (69.9)	5.340 (135.6)	76.9 (2.18)
	8310A	3/8	6.090 (154.7)	2.750 (69.9)	5.340 (135.6)	75.8 (2.15)
		1/2	6.090 (154.7)	2.750 (69.9)	5.340 (135.6)	74.8 (2.12)
	AA124	1-1/4	9.400 (238.8)	5.344 (135.7)	8.020 (203.7)	77.2 (2.19)
		1-1/2	9.400 (238.8)	5.344 (135.7)	8.020 (203.7)	76.9 (2.18)
		2	12.000 (304.8)	7.438 (188.9)	10.000 (254)	215.2 (6.10)
		2-1/2	12.000 (304.8)	7.438 (188.9)	10.000 (254)	204.9 (5.81)
		1-1/4	8.750 (222.3)	5.343 (135.7)	7.355 (186.8)	53.3 (1.51)
	AA124SC	1-1/2	8.750 (222.3)	5.343 (135.7)	7.355 (186.8)	52.2 (1.48)
Based on the largest/heaviest version of ea	ch type.					



DIMENSIONS AND WEIGHTS

Strainer	Model	Inlet Conn. (in.)	L in. (mm)	W in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	Net Weight oz. (kg)
		3/4	7.953 (202)	4.188 (106.4)	1 (25.4)	5.891 (149.6)	7.453 (189.3)	31.0 (0.88)
		1	7.953 (202)	4.188 (106.4)	1 (25.4)	5.891 (149.6)	7.453 (189.3)	30.3 (0.86)
		1-1/4	9.688 (246.1)	5.344 (135.7)	1.5 (38.1)	7.234 (183.7)	9.156 (232.6)	41.6 (1.18)
	AA124ML	1-1/2	9.688 (246.1)	5.344 (135.7)	1.5 (38.1)	7.234 (183.7)	9.156 (232.6)	39.2 (1.11)
		2	14.480 (367.8)	7.438 (188.9)	2.375 (60.3)	11.234 (285.3)	13.855 (351.9)	107.9 (3.06)
		2-1/2	14.480 (367.8)	7.375 (188.9)	2.375 (60.3)	11.234 (285.3)	13.855 (351.9)	103.0 (3.06)
	AA124ACC	3/4	8.325 (211.5)	4.188 (106.4)	_	7.170 (182.1)	_	52.5 (1.49)
	AA124ASC	1	8.325 (211.5)	4.188 (106.4)	_	7.170 (182.1)	_	50.4 (1.43)

Based on the largest/heaviest version of each type.

ΝЛ	Λ.	тс		1 1	
IVI	4		.	IA	L

CODE

Aluminum	AL
Brass	В
Ductile Iron	No code
Nylon	NYB
Polypropylene	РР
Polypropylene head/clear nylon bowl	NYC
303 stainless steel	SS
316 stainless steel	316SS

ORDERING INFORMATION

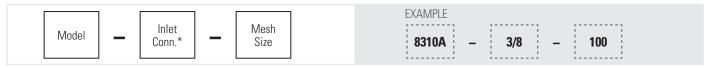
TWD AND TWC STRAINERS



AA124/AA430 SELF-CLEANING STRAINER



8310A STRAINER



*BSPT connections require the addition of a "B" prior to the inlet connection.

**Leave blank for standard version



TANK CLEANING LANCES A

TANK CLEANING LANCES FEATURES AND BENEFITS

METALLIC/ WELDED SOLUTIONS

- Custom CIP lances/wands, dip tubes, tube manifolds, spray rings and more designed and fabricated to your exact requirements
- Materials of construction: 316L stainless steel, Hastelloy®, AL6XN® and other exotics
- Welders and weld/fabrication procedures BPVC Sect. IX compliant as required by the ASME® BPE

NON-METALLIC SOLUTIONS

- Non-metallic materials available upon request, including: Polypropylene, PVDF, PTFE and more
- Plastics and elastomers available with FDA or USP Class VI certificates
- GMP manufacturing procedures and fabrication

Model	Tank Cleaning Lances
Nozzles:	All TankJet® nozzles and spray balls
Connection:	Select NPT or BSPT connections, cam lock connections, raised face flanges or tri-clamp fittings
Pipe/tube size and length:	Custom
Materials:	Specify material for each component – stainless steel, PTFE, PVDF, brass, polypropylene

SPECIFICATIONS



ORDERING INFORMATION

Call your local spray expert for application assistance or to place an order.



ADJUSTABLE FLANGES FOR TANK CLEANERS FEATURES AND BENEFITS

- Maximize cleaning effectiveness by positioning nozzle turret to clean around obstructions or targeting skim lines or other areas requiring extra impact
 - Standard adjustable flanges allow positioning the nozzles at various depths along the length of the extension
 - Adjustable ball swivel flanges allow adjustment of the spray head by as much as 60°
- Choice of connections: tri-clamp fitting, three-prong flange, 150# flange connection



22250 Three-Prong Adjustable Flange

DIMENSIONS AND WEIGHTS

• Can be used with TankJet AA090 and AA190 tank cleaners



46395 Raised Face Adjustable FlangeChoice of 2", 3" or 4" 150# raised face flanges

FLANGE OPTIONS



39205 Adjustable Sanitary Flange

• Choice of 2-1/2", 3", 4" or 6" tri-clamp fittings



43047 Ball Swivel Adjustable Flange

• Choose 4" or 6" 150# adjustable ball swivel flanges. 4" sanitary version also available

Flange Type	Model	Flange Size	Length in. (mm)	Outside Diameter in. (mm)	Weight Ibs (kg)
	39205	2-1/2		3 (76)	2 (.9)
Adjustable Sanitary Flange for Tanks	39205	3	4 75 (101)	3.6 (91)	2.1 (.95)
with Tri-Clamp Fitting	39205	4	4.75 (121)	4.7 (119)	2.5 (1.1)
	39205	6		6.6 (168)	5.3 (2.4)
Adjustable Three-Prong Flange	22250	-	4.06 (103)	5 (127)	2.8 (1.3)
	46395	2	4.81 (122)	6 (152)	12 (5.4)
Adjustable Flange for Tanks with 150# Connections	46395	3	4.94 (125)	7.5 (191)	12.9 (5.9)
	46395	4	5 (127)	9 (229)	17.7 (8.0)
	43047	4	0.75 (470)	9 (229)	20 (9.1)
Ball Swivel Adjustable Flange	43047	6	6.75 (172)	11 (279)	30 (13.6)

ORDERING INFORMATION

ADJUSTABLE FLANGES FOR TANK CLEANERS



*Leave blank when ordering a Three-Prong Flange.



G6

ADAPTERS AND MOUNTING KITS FEATURES AND BENEFITS

- Adapters and kits come in many sizes and configurations to ensure the proper fit for various tanks and vessels
- A wide array of materials are available that can handle applications ranging from chemical to sanitary

ADAPTERS AND MOUNTING KIT OPTIONS



Manway Adapter

- Includes vent for vapor release, shield to prevent liquid from spraying into vent and removable plug that allows cone to be filled with liquid if additional weight is desired
- Tapered manway adapter enables drop-in-place installation of the TankJet 360 with tanker truck openings between 17" and 21" (432 and 533 mm); 304 stainless steel construction



Adapter for TankJet AA090 and AA190 Tank Cleaners

- Has a 6.25" OD, Celcon[®] construction with 304 stainless steel screws
- Chemically-resistant adapter enables any air or electric TankJet AA090 or AA190 tank cleaner to be used in tanks with inlet sizes ranging from 2" to 4"



Mounting Kit

- Includes everything you need flange, lock washers, bolts and gasket
- Simplify mounting the standard TankJet AA090 or AA190 three-prong flange to a 4" 150# flange. Kit includes a 4" 316 stainless steel raised face flange, stainless steel lock washers, bolts and PTFE gasket

DIMENSIONS AND WEIGHTS

ltem	Model	Length in. (mm)	Outside Diameter in. (mm)	Weight Ibs (kg)
Tapered Manway with 1-1/2" NPT (M) Both Ends	46573	46 (1,168)	22 (559)	75 (34)
Adapter	45260	3.19	6.25 (159)	1 (.45)
Mounting Kit	39204	.94 (24)	9 (229)	15 (6.8)

ORDERING INFORMATION

ADAPTERS

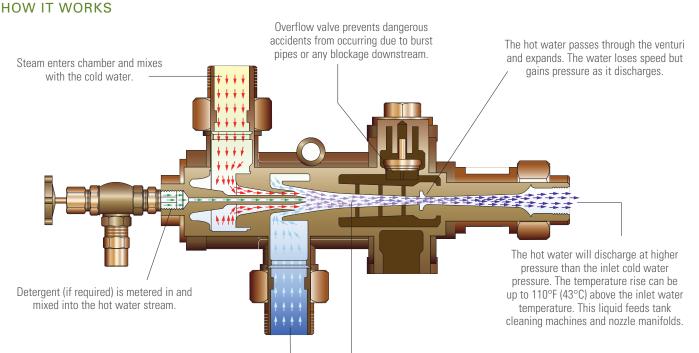




TANKJET B & BX INJECTORS FEATURES AND BENEFITS

- Ideal feed device for tank cleaning machines and custom-designed nozzle manifolds
- Non-intrusive: suitable for use with cold, low-pressure city water and existing plant steam
- Produces a high-pressure, high-temperature liquid discharge stream
- Increased pressure provides higher impact for cleaning tough residues

- Higher temperature speeds cleaning by quickly breaking down soil
- Eliminates the need for expensive pumps and heat exchangers
- · Built-in overflow valve ensures safe operation
- Provides chemical injection via a liquid control valve that siphons chemicals or detergents to maximize cleaning efficiency



The cold water instantly condenses the hot steam and creates a vacuum. The cold water absorbs the heat and velocity from the steam and a high-speed stream of hot water is produced.

IDEAL FOR CLEANING:

- Personal care tanks
- Food vats
- Pharmaceutical vessels
- PTFE, latex, acrylic, polymer, paint and other chemical reactors

Note: Spraying Systems Co.

TANKJET B INJECTOR

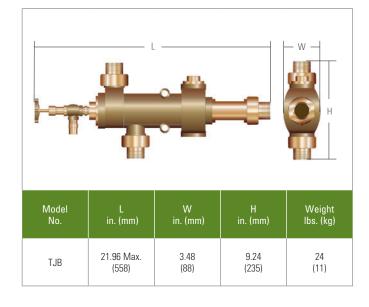
For liquid discharge capacities up to 34 gpm (129 lpm)



SPECIFICATIONS

Model	TankJet BX Injector		
Inlet steam pressure range:	50 to 150 psi (3.4 to 10.3 bar)		
Steam capacity range:	160 to 2000 lbs/hr (73 to 907 kgs/hr)		
Liquid discharge capacities	0 to 34 gpm (129 lpm)		
Max. liquid discharge operating pressure:	120 to 340 psi (8.3 to 23.4 bar)		
Liquid discharge flow rate:	4 to 34 gpm (15 to 128.7 lpm)		
Max. liquid discharge temperature:	180°F (82°C)		
Materials:	Brass with 303SS detergent tube with EP O-ring		
Inlet connection:	Steam: 1-1/4" NPT or BSPT (M); Water: 1-1/4" NPT or BSPT (M); Detergent: 1/2" NPT or BSPT (M)		
Outlet connection:	Discharge: 3/4" NPT or BSPT (F); Overflow: 1" NPT (F) or BSPT (M)		

DIMENSIONS AND WEIGHTS



PERFORMANCE DATA

			Inlet Steam Pressure psi (bar)						
	Steam	50 (3.4)	75 (5.2)	100 (6.9)	125 (8.6)	150 (10.3)			
Model	Injector No.	Capacity		Maximum Liquid Discharge Pressure psi (bar)					
		lbs/hr (kg/hr)	120 (8.3)	170 (11.7)	220 (15.2)	280 (19.3)	340 (23.4)		
				Liquid Discharge Capacity gpm (I/min)					
TJB-4	4	160 to 400 (73 to 182)	4 (15.1)	4.5 (17.0)	5.5 (21)	6 (23)	6.5 (25)		
TJB-7	7	280 to 700 (127 to 318)	7 (26)	8 (30)	9 (34)	10.5 (40)	12 (45)		
TJB-9	9	360 to 900 (163 to 408)	9 (34)	12 (45)	13 (49)	15 (57)	16.5 (62)		
TJB-15	15	700 to 1500 (318 to 680)	15 (57)	20 (76)	24 (91)	27 (102)	29 (110)		
TJB-20	20	800 to 2000 (363 to 907)	20 (76)	25 (95)	29 (110)	32 (121)	34 (129)		



TANK CLEANING NOZZLES COMMONLY USED WITH TANKJET B INJECTOR

TankJet Tank Cleaning Nozzle	Nozzle Type/Size	Compatible Injector Type	Injector Steam Inlet Pressure Range psi (bar)	Tank Cleaning Nozzles Operating Pressure Range psi (bar)	Tank Cleaning Nozzles Flow Rate Range gpm (l/min)
	0	TJB-15	60 to 150 (4.1 to 10.3)	50 to 150 (3.4 to 10.3)	17 to 29 (64 to 110)
	L	e Compatible Injector Type Pressure Range psi (bar) Operating Pressure Range psi (bar) IJB-15 60 to 150 (4.1 to 10.3) 50 to 150 (3.4 to 10.3) 50 IJB-20 50 to 150 (3.4 to 10.3) 70 to 200 (4.8 to 13.8) 50 IJB-20 50 to 150 (3.4 to 10.3) 50 to 170 (3.4 to 11.7) 50 IJB-20 50 to 125 (3.4 to 8.6) 80 to 200 (5.5 to 13.8) 50 IJB-20 50 to 140 (3.4 to 9.7) 60 to 200 (4.1 to 13.8) 50 IJB-20 50 to 100 (3.4 to 6.2) 110 to 200 (7.6 to 13.8) 50 IJB-20 50 to 150 (3.4 to 10.3) 50 to 190 (3.4 to 13.8) 50 IJB-20 50 to 100 (3.4 to 7.6) 80 to 200 (5.5 to 13.8) 50 IJB-20 50 to 150 (3.4 to 10.3) 50 to 200 (3.4 to 13.8) 50 IJB-20 50 to 100 (3.4 to 7.6) 80 to 200 (5.5 to 13.8) 50 IJB-20 50 to 100 (3.4 to 6.9) 90 to 200 (6.2 to 13.8) 50 IJB-20 50 to 120 (3.4 to 8.3) 80 to 200 (5.5 to 13.8) 50 IJB-20 50 to 100 (3.4 to 6.9) 90 to 200 (6.2 to 13.8) 50	20 to 34 (76 to 129)		
THA	0.11	TJB-15	55 to 150 (3.8 to 10.3)	50 to 170 (3.4 to 11.7)	16 to 29 (61 to 110)
TJ14	<u></u> , н	TJB-20	Pressure Range psi (bar) Operating Pressure Range psi (bar) TJB-15 60 to 150 (4.1 to 10.3) 50 to 150 (3.4 to 10.3) TJB-20 50 to 150 (3.4 to 10.3) 70 to 200 (4.8 to 13.8) TJB-20 50 to 150 (3.4 to 10.3) 50 to 170 (3.4 to 11.7) TJB-20 50 to 125 (3.4 to 8.6) 80 to 200 (5.5 to 13.8) TJB-20 50 to 140 (3.4 to 9.7) 60 to 200 (4.1 to 13.8) TJB-20 50 to 90 (3.4 to 6.2) 110 to 200 (7.6 to 13.8) TJB-20 50 to 150 (4.1 to 10.3) 50 to 190 (3.4 to 13.1) TJB-20 50 to 110 (3.4 to 7.6) 80 to 200 (5.5 to 13.8) TJB-15 50 to 100 (3.4 to 10.3) 50 to 200 (3.4 to 13.1) TJB-20 50 to 110 (3.4 to 7.6) 80 to 200 (5.5 to 13.8) TJB-15 50 to 100 (3.4 to 6.9) 90 to 200 (6.2 to 13.8) TJB-20 50 to 100 (3.4 to 6.9) 90 to 200 (6.2 to 13.8) TJB-3 50 to 120 (3.4 to 8.3) 80 to 200 (5.5 to 13.8) TJB-9 60 to 150 (4.1 to 10.3) 50 to 100 (3.4 to 6.9) TJB-3 50 to 100 (3.4 to 6.9) 90 to 200 (6.2 to 13.8) TJB-3 50 to 100 (3.4 to 6.9) <td>20 to 32 (76 to 121)</td>	20 to 32 (76 to 121)	
_	NOZZIE Type/Size Compatible Injector Type Pressure Range psi (bar) C TJB-15 60 to 150 (4.1 to 10.3) C TJB-20 50 to 150 (3.4 to 10.3) G, H TJB-15 55 to 150 (3.8 to 10.3) G, H TJB-15 50 to 125 (3.4 to 8.6) D TJB-15 50 to 125 (3.4 to 8.6) D TJB-15 50 to 140 (3.4 to 9.7) D TJB-15 50 to 100 (3.4 to 6.2) TJB-20 50 to 100 (3.4 to 6.2) 50 to 100 (3.4 to 6.2) C TJB-20 50 to 110 (3.4 to 7.6) TJB-20 50 to 100 (3.4 to 6.9) 7JB-20 D TJB-20 50 to 100 (3.4 to 6.9) TJB-20 50 to 100 (3.4 to 6.9) 7JB-20 G TJB-15 50 to 100 (3.4 to 6.9) TJB-20 50 to 150 (4.1 to 10.3) 7JB-20 G TJB-15 50 to 100 (3.4 to 6.9) TJB-20 50 to 100 (3.4 to 6.9) 7JB-20 H TJB-20 50 to 100 (3.4 to 6.9) TJB-20 50 to 100 (3.4 to 6.9) 7JB-20	60 to 200 (4.1 to 13.8)	15 to 28 (57 to 106)		
	D	Compatible Injector Type Pressure Range psi (bar) Operating P Range psi (bar) TJB-15 60 to 150 (4.1 to 10.3) 50 to 150 (3.4 to 10.3) TJB-20 50 to 150 (3.4 to 10.3) 70 to 200 (4.3 70 to 200 (5.3 70 to 100 (3.4 to 6.2) 100 to 200 (4.3 70 to 200 (5.3 70 to 100 (3.4 to 7.6) TJB-15 50 to 150 (4.1 to 10.3) 50 to 100 (3.4 to 7.6) 80 to 200 (5.3 70 to 200 (3.3 70 to 200	110 to 200 (7.6 to 13.8)	20 to 28 (76 to 106)	
	C	TJB-15	60 to 150 (4.1 to 10.3)	50 to 190 (3.4 to 13.1)	17 to 29 (64 to 110)
	L L	TJB-20	50 to 110 (3.4 to 7.6)	80 to 200 (5.5 to 13.8)	20 to 30 (76 to 114)
_	D	TJB-15	50 to 150 (3.4 to 10.3)	50 to 200 (3.4 to 13.8)	15 to 29 (57 to 110)
		TJB-20	50 to 100 (3.4 to 6.9)	90 to 200 (6.2 to 13.8)	20 to 29 (76 to 110)
TJ19		TJB-9	75 to 150 (5.2 to 10.3)	50 to 90 (3.4 to 6.2)	12 to 16.5 (45 to 62)
1218	G	TJB-15	50 to 120 (3.4 to 8.3)	80 to 200 (5.5 to 13.8)	15 to 26 (57 to 98)
		TJB-20	50 to 85 (3.4 to 5.9)	130 to 200 (9.0 to 13.8)	20 to 26 (76 to 98)
_		TJB-9	psi (bar) Range psi (bar) 60 to 150 (4.1 to 10.3) 50 to 150 (3.4 to 10.3) 50 to 150 (3.4 to 10.3) 70 to 200 (4.8 to 13.3) 55 to 150 (3.8 to 10.3) 50 to 170 (3.4 to 11.3) 50 to 125 (3.4 to 8.6) 80 to 200 (5.5 to 13.3) 50 to 140 (3.4 to 9.7) 60 to 200 (4.1 to 13.3) 50 to 190 (3.4 to 6.2) 110 to 200 (7.6 to 13.3) 50 to 150 (4.1 to 10.3) 50 to 190 (3.4 to 13.3) 50 to 110 (3.4 to 7.6) 80 to 200 (5.5 to 13.3) 50 to 150 (4.1 to 10.3) 50 to 200 (3.4 to 13.3) 50 to 100 (3.4 to 6.9) 90 to 200 (6.2 to 13.3) 50 to 120 (3.4 to 10.3) 50 to 90 (3.4 to 6.2) 50 to 120 (3.4 to 5.9) 130 to 200 (9.0 to 13.4 to 6.2) 50 to 120 (3.4 to 5.9) 130 to 200 (9.0 to 13.4 to 6.2) 50 to 120 (3.4 to 6.9) 90 to 200 (6.2 to 13.3) 50 to 100 (3.4 to 6.9) 90 to 200 (6.2 to 13.4 to 6.2) 50 to 100 (3.4 to 6.9) 90 to 200 (10.3 to 13.4 to 6.2) 50 to 100 (3.4 to 6.9) 90 to 200 (10.3 to 13.4 to 6.2) 50 to 100 (3.4 to 6.9) 90 to 200 (10.3 to 13.4 to 6.2) 50 to 100 (3.4 to 6.9) 90 to 200 (10.3 to 13.4 to 6.2) <	50 to 100 (3.4 to 6.9)	10 to 16.5 (38 to 62)
	Н	TJB-15	50 to 100 (3.4 to 6.9)	90 to 200 (6.2 to 13.8)	15 to 24 (57 to 91)
		TJB-20	50 to 70 (3.4 to 4.8)	150 to 200 (10.3 to 13.8)	20 to 24 (76 to 91)
	172	TJB-15	110 to 150 (7.6 to 10.3)	150 to 210 (10.3 to 14.5)	25 to 29 (95 to 110)
		TJB-20	75 to 150 (5.2 to 10.3)	150 to 280 (10.3 to 19.3)	25 to 35 (95 to 132)
-	172LP	TJB-9	75 to 150 (5.2 to 10.3)	50 to 90 (3.4 to 6.2)	12 to 16.5 (45 to 62)
TJ75-1861		TJB-15	50 to 85 (3.4 to 5.9)	80 to 150 (5.5 to 10.3)	15 to 21 (57 to 79)
-	125	TJB-15	55 to 95 (3.8 to 6.6)	150 to 300 (10.3 to 20.7)	16 to 23 (61 to 87)
-		TJB-7	100 to 150 (6.9 to 10.3)	50 to 100 (3.4 to 6.9)	9 to 12 (34 to 45)
	125LF	TJB-9	50 to 125 (3.4 to 8.6)	50 to 140 (3.4 to 9.7)	9 to 15 (34 to 57)

ORDERING INFORMATION

TANKJET B INJECTOR



*Add B for BSPT connections. If NPT connection, leave blank.

TANKJET BX INJECTOR

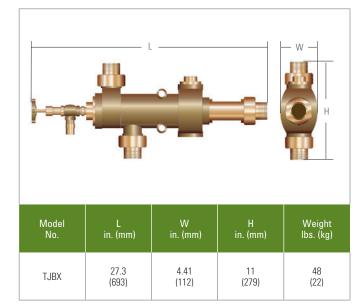
For liquid discharge capacities up to 110 gpm (416 lpm)



SPECIFICATIONS

Model	TankJet BX Injector
Inlet steam pressure range:	50 to 150 psi (3.4 to 10.3 bar)
Steam capacity range:	1000 to 6000 lbs/hr (454 to 2722 kgs/hr)
Max. liquid discharge operating pressure:	120 to 340 psi (8.3 to 23.4 bar)
Liquid discharge flow rate:	30 to 110 gpm (114 to 416 lpm)
Max. liquid discharge temperature:	180°F (82°C)
Materials:	Brass with 303SS detergent tube with EP O-ring
Inlet connection:	Steam: 1-1/2" NPT or BSPT (M); Water: 1-1/2" NPT or BSPT (M); Detergent: 1/2" NPT or BSPT (M)
Outlet connection:	Discharge: 1-1/2" NPT or BSPT (M); Overflow: 2" NPT (F) or BSPT (M)

DIMENSIONS AND WEIGHTS



PERFORMANCE DATA

Model Injector		Inlet Steam Pressure psi (bar)					
			50 (3.4)	75 (5.2)	100 (6.9)	125 (8.6)	150 (10.3)
	Steam Capacity Ibs/hr (kg/hr)	Maximum Liquid Discharge Pressure psi (bar)					
			120 (8.3)	170 (11.7)	220 (15.2)	280 (19.3)	340 (23.4)
			Liquid Discharge Capacity gpm (lpm)				
	30	1000 to 3000 (454 to 1361)	30 (114)	35 (132)	45 (170)	50 (189)	55 (208)
TJBX	50	1700 to 4500 (771 to 2041)	50 (189)	60 (227)	70 (265)	75 (284)	80 (303)
	70	2500 to 6000 (1134 to 2722)	70 (265)	80 (303)	90 (341)	100 (379)	110 (416)



TANK CLEANING NOZZLES COMMONLY USED WITH TANKJET BX INJECTOR

TankJet Tank Cleaning Nozzles	Nozzle Type/Size in (mm)	Compatible Injector Type	Injector Steam Inlet Pressure psi (bar)	Nozzles Operating Pressure psi (bar)	Nozzles Flow Rate gpm (lpm)
TJ16	C, D, G	TJBX30	100 to 150 (6.9 to 10.3)	60 to 100 (4.1 to 6.9)	45 to 55 (170 to 208)
		TJBX50	50 to 150 (3.4 to 10.3)	80 to 200 (5.5 to 13.8)	50 to 80 (189 to 303)
	Н	TJBX30	75 to 150 (5.2 to 10.3)	50 to 110 (3.4 to 7.6)	35 to 55 (132 to 208)
		TJBX50	50 to 125 (3.4 to 8.6)	95 to 200 (6.6 to 13.8)	50 to 75 (3.4 to 5.2)
		TJBX30	50 to 150 (3.4 to 10.3)	50 to 120 (3.4 to 8.3)	30 to 55 (114 to 208)
TJ65	1/4 (6.4)	TJBX50	50 to 75 (3.4 to 5.2)	105 to 140 (7.2 to 9.7)	50 to 60 (189 to 227)
	5/16 (7.9)	TJBX50	75 to 150 (5.2 to 10.3)	70 to 115 (4.8 to 7.9)	60 to 80 (227 to 303)
		TJBX70	50 to 100 (3.4 to 6.9)	90 to 150 (6.2 to 10.3)	70 to 90 (265 to 341)
		TJBX50	75 to 150 (5.2 to 10.3)	55 to 95 (3.8 to 6.6)	60 to 80 (227 to 303)
	3/8 (9.5)	TJBX70	50 to 125 (3.4 to 8.6)	75 to 150 (5.2 to 10.3)	70 to 100 (265 to 379)
	1/4 (6.4)	TJBX70	50 to 150 (3.4 to 10.3)	58 to 135 (4.0 to 9.3)	70 to 110 (265 to 416)
TJ65-HT	5/16 (7.9)	TJBX70	50 to 150 (3.4 to 10.3)	55 to 115 (3.8 to 7.9)	70 to 110 (265 to 416)
	3/8 (9.5)	TJBX70	100 to 150 (6.9 to 10.3)	55 to 75 (3.8 to 5.2)	90 to 110 (341 to 416)
	- /- />	TJBX50	50 to 150 (3.4 to 10.3)	50 to 130 (3.4 to 9.0)	50 to 80 (189 to 303)
	3/8 (9.5)	TJBX70	50 to 90 (3.4 to 6.2)	102 to 150 (7.0 to 10.3)	70 to 85 (265 to 322)
TJ80-2		TJBX50	90 to 150 (6.2 to 10.3)	65 to 105 (4.5 to 7.2)	65 to 80 (246 to 303)
	7/16 (11.1)	TJBX70	50 to 115 (3.4 to 7.9)	80 to 150 (5.5 to 10.3)	70 to 95 (265 to 360)
	5/16 (7.9)	TJBX50	75 to 150 (5.2 to 10.3)	60 to 125 (4.1 to 8.6)	60 to 80 (227 to 303)
TJ80-3		TJBX70	50 to 100 (3.4 to 6.9)	95 to 150 (6.6 to 10.3)	70 to 90 (265 to 341)
1000 0	3/8 (9.5)	TJBX70	115 to 150 (7.9 to 10.3)	68 to 110 (4.7 to 7.6)	95 to 110 (360 to 416)
		TJBX30	50 to 150 (3.4 to 10.3)	40 to 150 (2.8 to 10.3)	30 to 55 (114 to 208)
	1/4 (6.4)	TJBX50	50 to 150 (3.4 to 10.3)	120 to 340 (8.3 to 23.4)	50 to 80 (189 to 303)
		TJBX30	75 to 150 (5.2 to 10.3)	40 to 110 (2.8 to 7.6)	35 to 55 (132 to 208)
	9/32 (7.1)	TJBX50	50 to 150 (3.4 to 10.3)	80 to 220 (5.5 to 15.2)	50 to 80 (189 to 303)
	-,(,	TJBX70	50 to 125 (3.4 to 8.6)	170 to 350 (11.7 to 24.1)	70 to 100 (265 to 379)
		TJBX30	115 to 150 (7.9 to 10.3)	40 to 55 (2.8 to 3.8)	40 to 75 (151 to 284)
TJ360-2	5/16 (7.9)	TJBX50	50 to 150 (3.4 to 10.3)	60 to 155 (4.1 to 10.7)	50 to 80 (189 to 303)
		TJBX70	50 to 150 (3.4 to 10.3)	120 to 290 (8.3 to 20.0)	70 to 110 (265 to 416)
	3/8 (9.5)	TJBX50	60 to 150 (4.1 to 10.3)	40 to 90 (2.8 to 6.2)	55 to 80 (208 to 303)
		TJBX70	50 to 150 (3.4 to 10.3)	70 to 165 (4.8 to 11.4)	70 to 110 (265 to 416)
	7/16 (11.1)	TJBX70	50 to 150 (3.4 to 10.3)	45 to 105 (3.1 to 7.2)	70 to 110 (265 to 416)
	1/2 (12.7)	TJBX70	75 to 150 (5.2 to 10.3)	40 to 75 (2.8 to 5.2)	80 to 110 (303 to 416)
	9/16 (14.3)	TJBX70	90 to 150 (6.2 to 10.3)	40 to 55 (2.8 to 3.8)	90 to 110 (341 to 416)
	1/4 (6.4)	TJBX30	90 to 150 (6.2 to 10.3)	40 to 72 (2.8 to 5.0)	40 to 55 (151 to 208)
TJ360-3		TJBX50	50 to 150 (3.4 to 10.3)	60 to 155 (4.1 to 10.7)	50 to 80 (189 to 303)
		TJBX70	50 to 150 (3.4 to 10.3)	120 to 290 (8.3 to 20.0)	70 to 110 (265 to 416)
		TJBX50	50 to 150 (3.4 to 10.3)	40 to 110 (2.8 to 7.6)	50 to 80 (189 to 303)
	9/32 (7.1)	TJBX70	50 to 150 (3.4 to 10.3)	80 to 205 (5.5 to 14.1)	70 to 110 (265 to 416)
	5/16 (7.9) -	TJBX50	65 to 150 (4.5 to 10.3)	40 to 80 (2.8 to 5.5)	55 to 80 (208 to 303)
		TJBX70	50 to 150 (3.4 to 10.3)	60 to 150 (4.1 to 10.3)	70 to 110 (265 to 416)
	3/8 (9.5)	TJBX70	50 to 150 (3.4 to 10.3)	40 to 90 (2.8 to 6.2)	70 to 110 (265 to 416)
	7/16 (11.1)	TJBX70	100 to 150 (6.9 to 10.3)	40 to 60 (2.8 to 4.1)	90 to 110 (341 to 416)

ORDERING INFORMATION

TANKJET BX INJECTOR



*Add B for BSPT connections. If NPT connection, leave blank.



SPRAYING SYSTEMS CO.'S TRADEMARK USAGE

The following is a current list of Spraying Systems Co.'s trademarks registered in the United States. Some marks are registered in other countries as well.

FullJet® TankJet®

REGISTRERED TRADEMARK CREDITS

The following trademarks are registered to other entities in the US and may be registered in other countries as well.

AL6XN®	ASME _®	Hastelloy®	Viton®
ANSI®	Celcon®	Ryton®	



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