



FOR TANK DIA. UP TO **45 ft.**
(13.7 m)

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



TANK DIA. UPTO 45 FT. (13.7 M)
INTRODUCTION



MINIMIZE THE USE OF CHEMICALS WITH EFFICIENT, DEPENDABLE CLEANING




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  | 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 UHMW-PE | C14 |
| TankJet 27500 & 27500-R  | 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 |

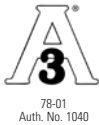


TANK DIA.
UP TO **45 ft.** (13.7 m)

TANKJET® 78 & 78D SANITARY TANK CLEANERS

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
- 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

HI
HIGH
IMPACT

**SPRAY
COVERAGE**

360°



**TJ78
MOUNTING
OPTIONS**

Vertical ↑ ↓

**TJ78D
MOUNTING
OPTIONS**

Vertical ↑ ↓

Horizontal ← →

45° Up ↖ ↗

45° Down ↘ ↙

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:

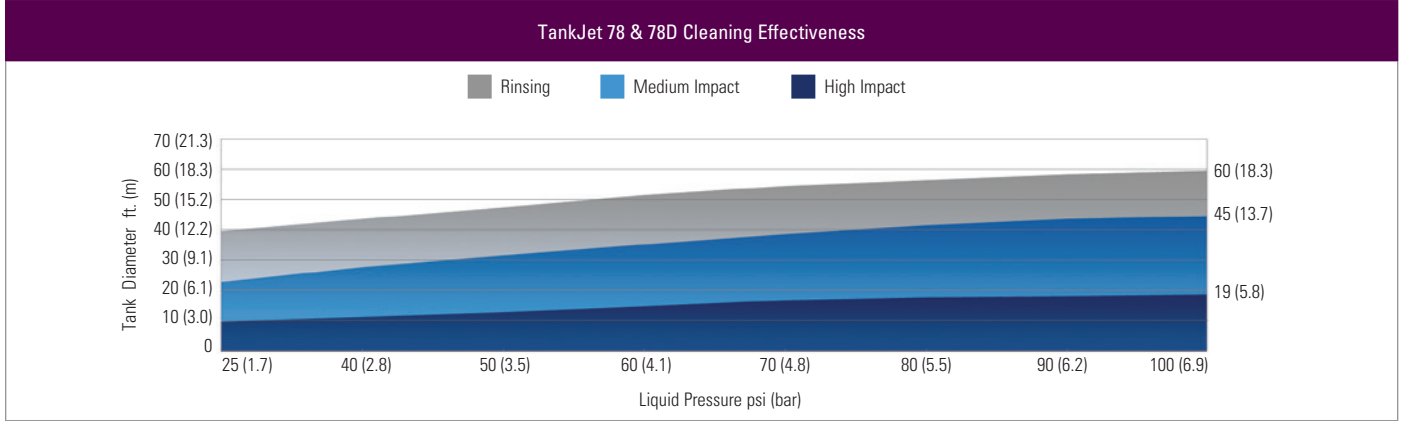
- Milk, cheese, yogurt tanks
- Spray drying towers
- Blenders
- Brewery tanks
- Food processing vats and tanks
- Wine vats

TRY BEFORE YOU BUY:

Ask About Our Free 15-Day Trial Program



PERFORMANCE DATA



| Model | Capacity Size | Rating | Liquid Flow Capacity gpm (lpm) | | | | |
|-------|---------------|--------|--------------------------------|------------------|------------------|------------------|-------------------|
| | | | 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 & 78D Sanitary Tank Cleaners | Model | Inlet Conn. in. | L in. (mm) | Min. Tank Opening in. (mm) | Net Weight lbs. (kg) |
|--|-----------------|-----------------|-------------|----------------------------|----------------------|
|   | TJ78 Single-hub | 1-1/2 | 14.25 (362) | 5.75 (146) | 15.0 (6.8) |
| | | 2 | 14.63 (372) | | |
|   | TJ78D Dual-hub | 1-1/2 | 14.25 (362) | 7.63 (194) | 19.0 (8.6) |
| | | 2 | 14.63 (372) | | |

ORDERING INFORMATION

TANKJET 78 & 78D SANITARY TANK CLEANER

EXAMPLE

| | | | |
|-------|-------------|---------------|--------|
| Model | Inlet Conn. | Capacity Size | Rating |
| TJ78 | 2 | 375 | 3A |

**TANKJET 65 TANK CLEANER
FEATURES AND BENEFITS**

- 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

TankJet 65 tank cleaner



HI
HIGH
IMPACT

**SPRAY
COVERAGE**
360°

**MOUNTING
OPTIONS**

| | | |
|----------|---|---|
| Vertical | ↑ | ↓ |
| 45° Up | ↖ | ↗ |
| 45° Down | ↙ | ↘ |

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 | |

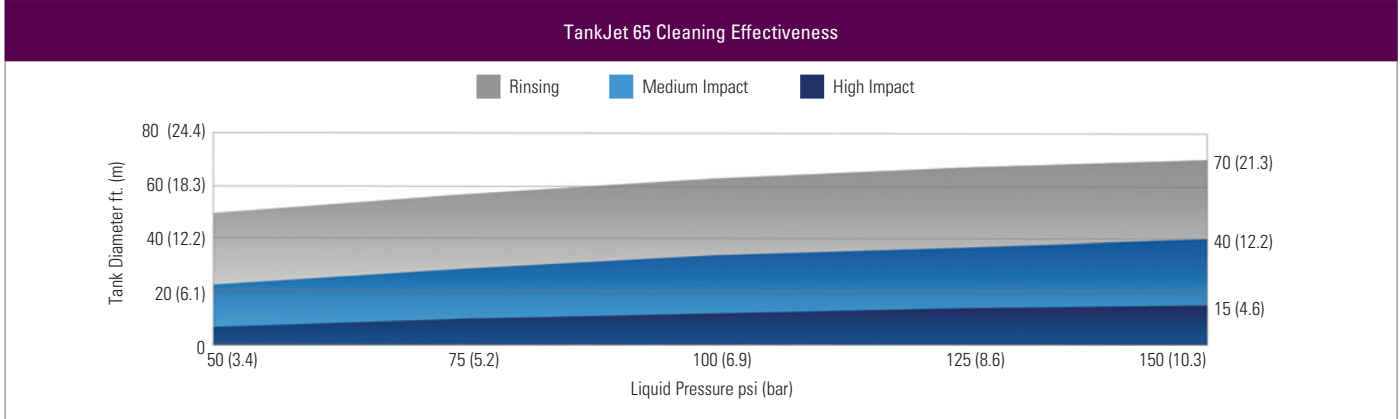
For lances, mounting kits, adapters and more, see page G6

IDEAL FOR CLEANING:

- Brew kettles
- Chemical processing tanks
- Dairy vessels
- Food processing vats
- Spray dryers
- Tanker trucks



PERFORMANCE DATA



| Model 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 lbs. (kg) |
|-------------------------|--|-----------------|---------------|--------------|----------------------------|------------------|
| | | Threaded | 10.25 (260.4) | 6.63 (168.4) | 8.8 (222.3) | 11.75 (5.3) |
| | | Sanitary Flange | 11.81 (300) | | | 12.4 (5.6) |

ORDERING INFORMATION

TANKJET 65 TANK CLEANER

Model

Inlet Conn.*

-

Orifice Size

-

High Temperature**

EXAMPLE

TJ65

—

-

375

-

HT

*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**

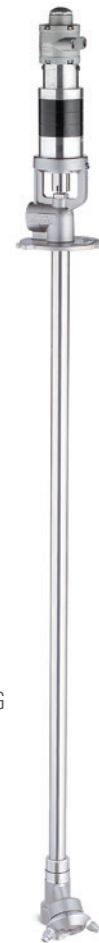
- Versatile, high-impact tank cleaner provides efficient, consistent, reliable cleaning with virtually no maintenance
- Lightweight units can be installed permanently or easily moved from tank to tank
- Unit is constructed using corrosion-resistant materials with the motor positioned outside the tank, 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® 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

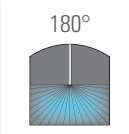
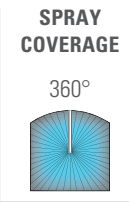
| TankJet AA190 Tank Cleaner | Standard version | High-pressure version |
|----------------------------|--|--|
| Max. tank diameter: | 25 ft. (7.6 m) | 40 ft. (12.2 m) |
| Operating principle: | Motor-driven | Motor-driven |
| Flow rate: | 3.1 to 44 gpm (11.8 to 167 lpm) | 7 to 20 gpm (26 to 78 lpm) |
| 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 | |



TankJet AA190E tank cleaner with electric motor



TankJet AA190DAG tank cleaner with air motor



MOUNTING OPTIONS

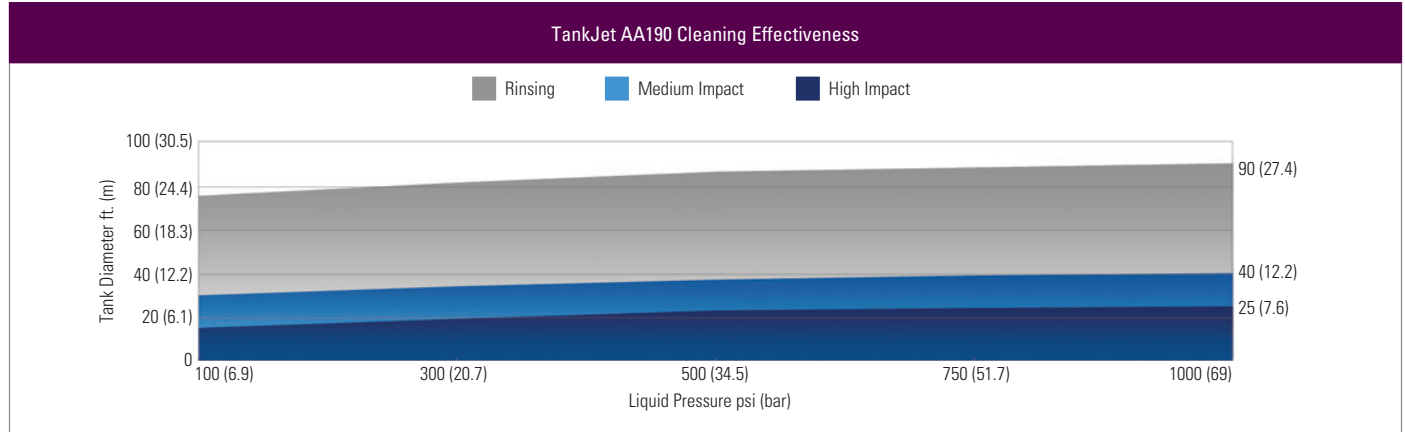
| | | |
|------------|---|---|
| Vertical | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up | ↖ | ↗ |
| 45° Down | ↘ | ↙ |

IDEAL FOR CLEANING:

- Chemical reactors
- Food processing tanks and vats
- Paint tanks
- Pharmaceutical processing vessels
- Process tanks
- Tanker trucks



PERFORMANCE DATA



| Model AA190 | | Liquid Flow Capacity gpm (lpm)* Liquid 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)** |
| 1/4MEG | 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) | - | - |
| | 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) | Approx. Time for One Complete Cycle (min.) | | |
|--------------|-----------------|---------------------|--|-----------|------------|
| | | | 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**

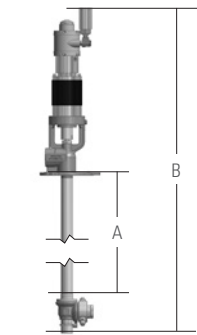
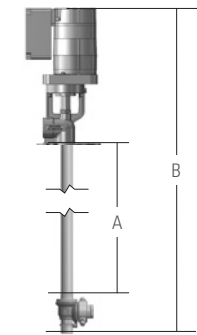
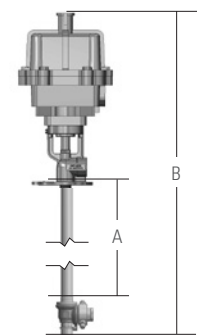
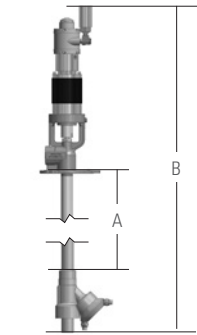
| Motor Type | Frequency @ 115 VAC | Speed (rpm) | Current (amps) | Power (watts) | Approx. Time for One Complete Cycle (min.) |
|-----------------|---------------------|-------------|----------------|---------------|--|
| Electric | 50 Hz | 3.1 | .39 | 41 | 11 |
| | 60 Hz | 3.8 | .33 | 34 | 9 |
| Explosion-Proof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



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

TANKJET® AA190 TANK CLEANER

DIMENSIONS AND WEIGHTS


| TankJet AA190 | Tank Cleaner | A Extension Length* ft. (m) | B Overall Length in. (m) | Net Weight** lbs. (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 explosion-proof moto  | AA190E-EP | 3 (0.9) | 51.88 (1.3) | 21.5 (9.8) |
| | 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.



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) |
|  |  | 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 lbs. (kg)** |
|-------------------------------|------|------------|------------------------|
| Three-Prong (std.) | — | — | — |
| ASME® 150# Raised Face Flange | 3 | 3F | 10.5 (4.8) |
| | 4 | 4F | 15.5 (7.0) |
| | 6 | 6F | 24.5 (11.1) |
| Sanitary Tri-Clamp Flange | 3 | 3SF* | — |
| | 4 | 4SF | 0.25 (0.1) |
| | 6 | 6SF | 3 (1.4) |

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

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

ORDERING INFORMATION

TANKJET AA190 TANK CLEANER

| TANK CLEANER | | | | | | NOZZLE | | | EXAMPLE | | | | | | | | | |
|--------------------|--------------------|-------------------|--------------------------|------------------|---|--------|---|---------------|---------|----|---|----|---|---|---|--------|---|------|
| Model ¹ | Motor ² | Type ³ | Flange Type ⁴ | Extension Length | + | Nozzle | - | Capacity Size | AA190 | AG | H | 3F | - | 3 | + | 1/4MEG | - | 0010 |

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.



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

TANKJET® YMD3 TANK CLEANER

TANKJET YMD3 TANK CLEANER FEATURES AND BENEFITS

- 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

SPECIFICATIONS

| 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 to 142 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®, 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



TankJet YMD3
tank cleaner
with air motor

TankJet YMD3
tank cleaner

HI
HIGH
IMPACT

**SPRAY
COVERAGE**

360°

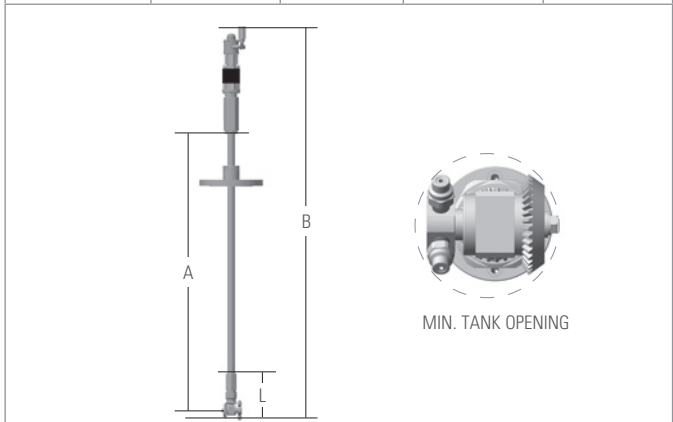


**MOUNTING
OPTIONS**

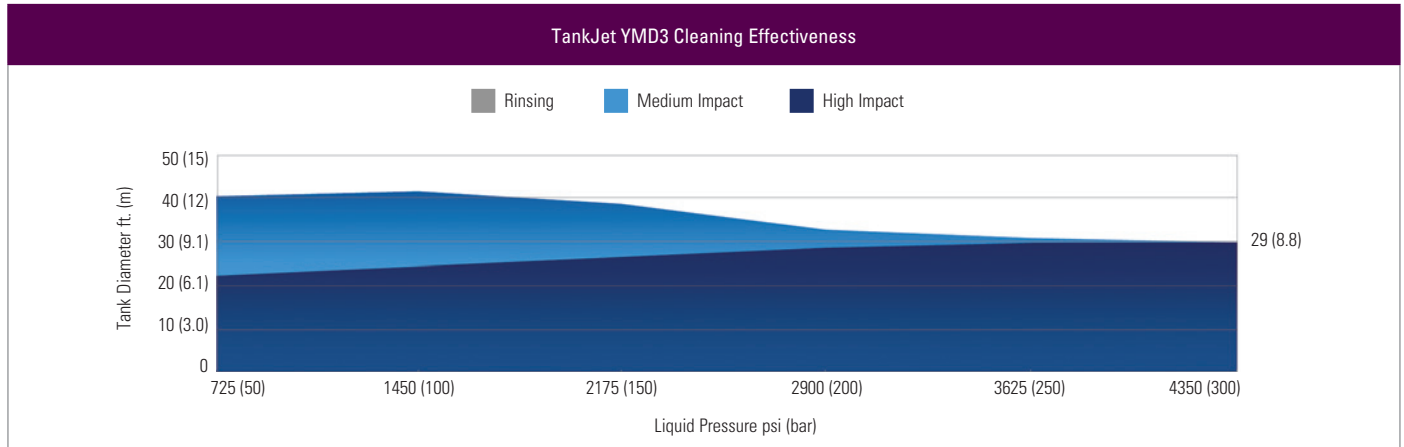
| | | |
|------------|---|---|
| Vertical | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up | ↖ | ↗ |
| 45° Down | ↙ | ↘ |

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 0.8 (0.25) increments | A + 16.8 (426) |
| YMD3-E (Electric Motor) | 3.8 (95) | 6.7 (170) | | A + 14 (356) |



PERFORMANCE DATA



| Model YMD3 | | Total Flow of Equal Capacity, gpm (lpm)* Liquid Inlet Pressure | | | |
|------------|---------------|---|--------------------|--------------------|--------------------|
| Nozzle | Capacity Size | 725 psi (50 bar) | 1450 psi (100 bar) | 2900 psi (200 bar) | 4350 psi (300 bar) |
| 1/8MEG | 0005 | 8.6 (32.6) | 12 (45.5) | 16.2 (61.2) | 20.3 (77) |
| | 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 Pressure | Air Consumption | Approx. Speed (rpm) | | Approx. Time for One Complete Cycle (min.) | |
|--------------|-----------------|---------------------------|------------|--|------------|
| | | Liquid Pressure psi (bar) | | Liquid Pressure psi (bar) | |
| 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 |



TankJet 75-4
four-nozzle tank cleaner



TankJet 75H-2
two-nozzle
tank cleaner

STRAINER OPTION



See page G2 for specifications

HI
HIGH
IMPACT

**SPRAY
COVERAGE**

360°



**MOUNTING
OPTIONS**

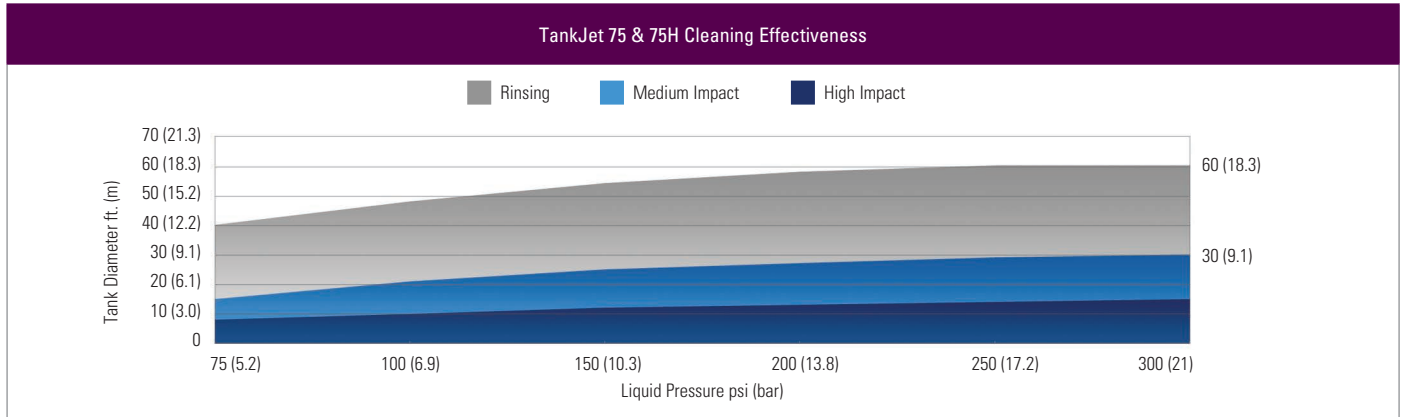
| | | |
|----------|---|---|
| Vertical | ↑ | ↓ |
| 45° Up | ↖ | ↗ |
| 45° Down | ↙ | ↘ |

IDEAL FOR CLEANING:

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



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) |
| | 234LP | 12 (45) | 14 (53) | 17 (64) | – | – | – |
| 4 | 172 | – | – | 23 (87) | 29 (110) | 31 (117) | 33 (125) |
| | 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 lbs. (kg) |
|--------------------------------|-------|----------------|-----------------|------------|------------|----------------------------|----------------------|
| | 75 | 2 | Threaded | 6.13 (156) | 1.97 (50) | 3.0 (76) | 2.6 (1.2) |
| | | | Sanitary flange | 7.13 (181) | | | 2.9 (1.3) |
| | 75H | 2 | Threaded | 6.25 (159) | 1.97 (50) | 3.0 (76) | 2.6 (1.2) |
| | | | Sanitary flange | 7.25 (184) | | | 2.9 (1.3) |
| | 75 | 4 | Threaded | 6.13 (156) | 1.97 (50) | 4.2 (107) | 3 (1.4) |
| | | | Sanitary flange | 7.13 (181) | | | 3.3 (1.5) |
| | 75H | 4 | Threaded | 6.25 (159) | 1.97 (50) | 4.2 (107) | 3 (1.4) |
| | | | Sanitary flange | 7.25 (184) | | | 3.3 (1.5) |

ORDERING INFORMATION

TANKJET 75 TANK CLEANER

Model

Inlet Conn.*

–

No. of Nozzles

–

Orifice Size**

EXAMPLE

TJ75H

–

–

4

–

172

*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
- 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

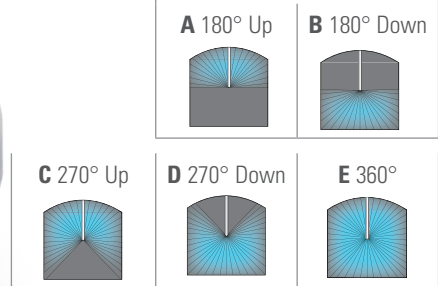


TankJet 27500-R
tank cleaning nozzle,
see page D4 and E4

TankJet 27500
tank cleaning nozzle



SPRAY COVERAGE



**MOUNTING
OPTIONS**

| | | |
|------------|---|---|
| Vertical | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up | ↖ | ↗ |
| 45° Down | ↘ | ↙ |

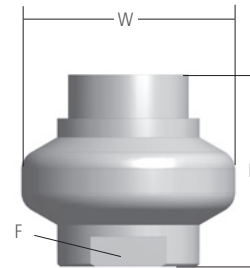
SPECIFICATIONS

| 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 |

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 | 6.88 (174.6) | 5.88 (149.2) | 3.88 (98.4) |



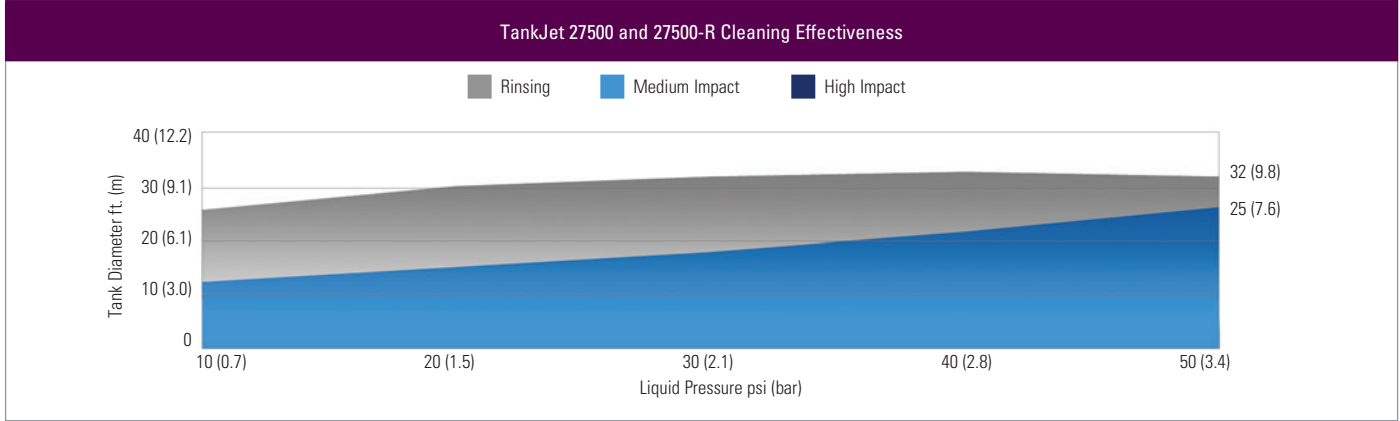
Additional sizes available:
Page D4 – 3/4, 1 and 2 in. conn.
Page E4 – 3/8 and 1/2 in. conn.

IDEAL FOR CLEANING:

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



PERFORMANCE DATA



| Model 27500 | | Orifice Dia. in. (mm) | Liquid Flow Capacity gpm (lpm) | | | | | Max. Tank Dia. ft. (m) |
|------------------|---------------|--------------------------|--------------------------------|------------------|------------------|------------------|------------------|---------------------------|
| Inlet Conn. Size | Capacity Size | | 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) | |
| 3 | 250 | 0.390 (9.9) | 125 (475) | 177 (700) | 217 (805) | 250 (985) | 280 (1065) | 25 (7.6) |
| | 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) |

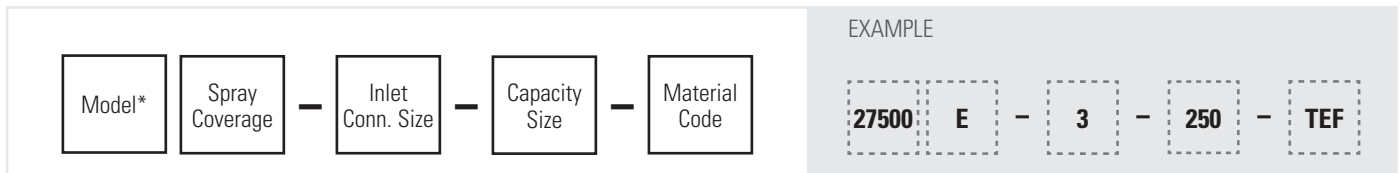
Suggested optimum operating range: 20 to 40 psi (1.5 to 2.8 bar).

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

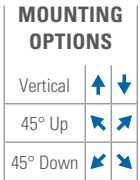
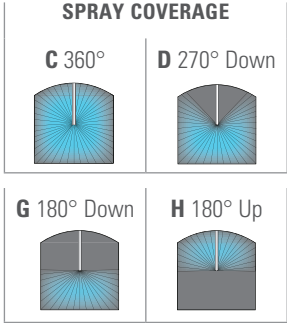
For lances, mounting kits, adapters and more, see page G6



TankJet 16 tank cleaning nozzle

SPECIFICATIONS

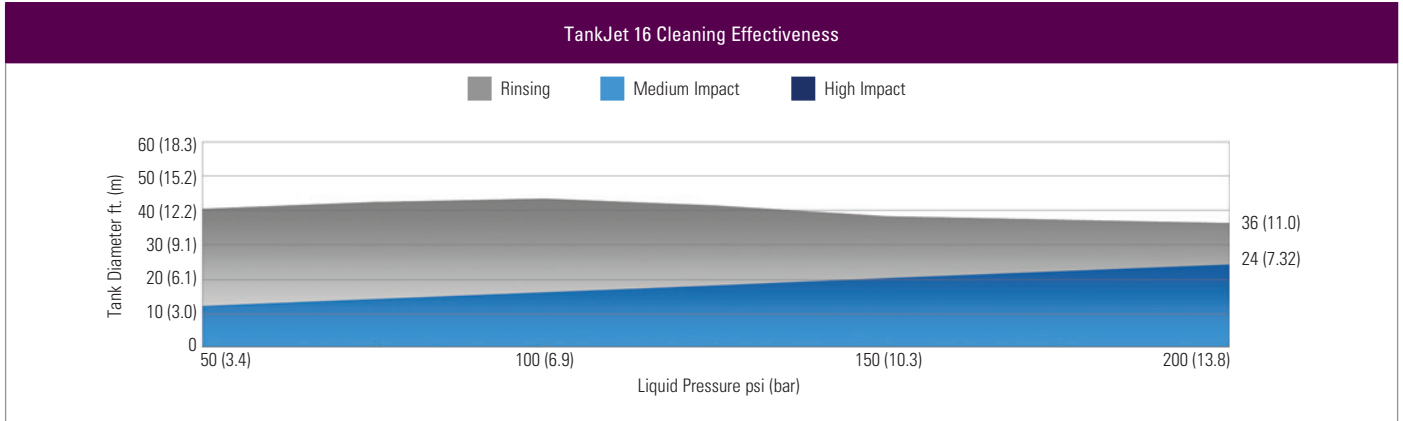
| TankJet 16 Tank Cleaning Nozzle | |
|---------------------------------|--|
| Max. tank diameter: | 24 ft. (7.3 m) |
| Operating principle: | Fluid-driven turbine |
| Flow rate: | 36 to 76 gpm (136 to 288 lpm) |
| Operating pressure: | 50 to 200 psi (3.4 to 13.8 bar) |
| Rotation speed: | 3 to 15 rpm |
| 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 |



IDEAL FOR CLEANING:

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

PERFORMANCE DATA



| Model | Spray Coverage | Liquid Flow Capacity gpm (lpm) | | | | | | | | |
|-------|----------------|--------------------------------|------------------|------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| | | 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) |
| TJ16 | H | 36 (136) | 43 (163) | 49 (185) | 52 (197) | 57 (216) | 61 (231) | 65 (246) | 69 (261) | 73 (276) |
| | 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 lbs. (kg) |
|---------------------------------|----------------|-------------|------------|----------------------------|----------------------|
| | TJ16, threaded | 8.98 (228) | 2.82 (77) | 3 (76) | 4.75 (2.1) |
| | TJ16, sanitary | 10.54 (268) | 2.82 (77) | 3 (76) | 5.4 (2.4) |

ORDERING INFORMATION

TANKJET 16 TANK CLEANING NOZZLE

| | | | | |
|-------|--------------|---|----------------|----------|
| Model | Inlet Conn.* | - | Spray Coverage | EXAMPLE |
| TJ16 | | - | C | TJ16 - C |

*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.



TankJet 75 tank cleaner, see page C14

SOLUTION:

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



Results



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

