

FOR TANK DIA. UP TO 10ft.

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



# 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.



#### QUICK REFERENCE GUIDE

ľ	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 27500 & 27500-R	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
<b>I</b>	TankJet 041990A & D41990E	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

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

#### **SPECIFICATIONS**

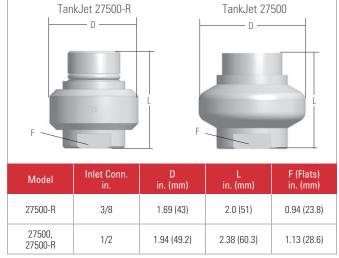
TankJet 27500 and 27500-R	TankJet 27500 and 27500-R Tank Cleaning Nozzles							
Max. tank diameter:	10 ft. (3.0 m)							
Operating principle:	Fluid-driven reactionary force							
Flow rate:	2.6 to 8.9 gpm (9.8 to 34 lpm)							
Operating pressure:	10 to 50 psi (0.7 to 3.4 bar)							
Max. temperature:	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
- Pharmaceutical tanks
- PCB washers
- Process tanks

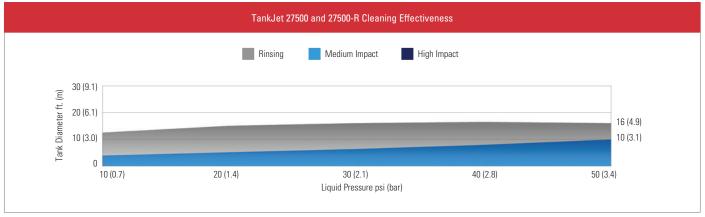
#### Chemical tanks

#### **DIMENSIONS AND WEIGHT**



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

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



	Model		Inlet Conn.	Capacity	Orifice		Liquid Flow Capacity gpm (lpm)*						
2	7500	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)		
		•	3/8	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)		

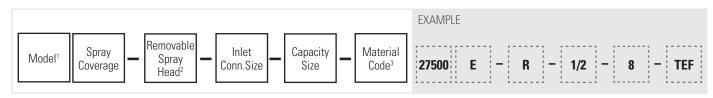
<sup>\*</sup>Suggested optimum operating range: 20 to 40 psi (1.5 to 2.8 bar).

#### **ADDITIONAL SIZES AVAILABLE**

 $\begin{tabular}{ll} Page C16-3 in. conn. \\ Page D4-3/4, 1 and 2 in. conn. \\ \end{tabular}$ 

#### **ORDERING INFORMATION**

#### TANKJET 27500 AND 27500-R TANK CLEANING NOZZLES



<sup>&</sup>lt;sup>1</sup>Add B prior to the model for BSPT connections.

<sup>&</sup>lt;sup>2</sup>Leave blank for standard version.

 $<sup>^{\</sup>rm 3}$  Indicate CTEF for carbon-filled PTFE on 1/2 in. inlet connections for 27500-R.

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

 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

\$07915 AXT = 641-0 OD = 121-21



TankJet 6353-MFP tank cleaning nozzle

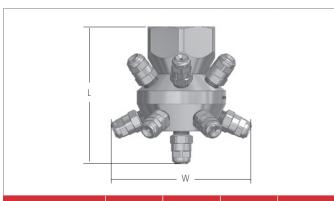
#### **SPECIFICATIONS**

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

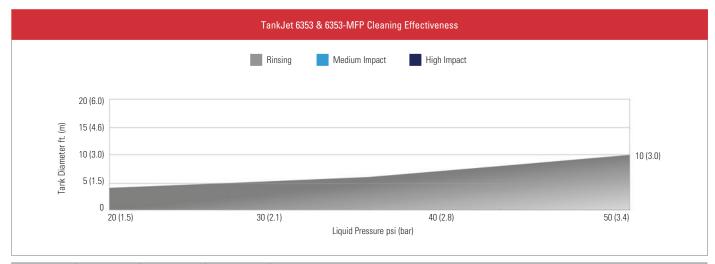
#### **DIMENSIONS AND WEIGHTS**



TankJet 6353

tank cleaning nozzle

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 (132)	3.7 (1.0)
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				



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)		
0000	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



<sup>\*</sup>Add B prior to the model number for BSPT connections.

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

# 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

#### **SPECIFICATIONS**

TankJet 18250A Tank Clean	ing 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







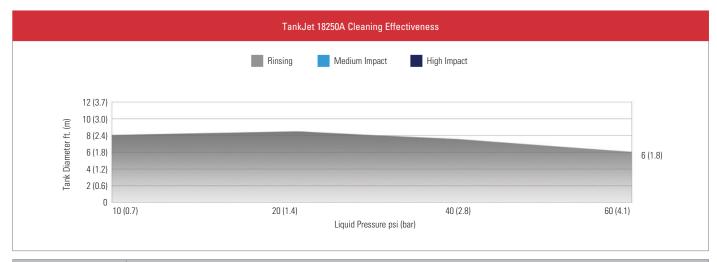


TankJet 18250A tank cleaning nozzle

#### **DIMENSIONS AND WEIGHTS**



Model	L in. (mm)	W in. (mm)	A in. (mm)	Hex in. (mm)	Min. Tank Opening in. (mm)	Weight Ibs. (kg)
18250A	5-3/4	2-3/16	4-13/16	1-5/8	2-3/8	1.5
	(146)	(55.6)	(105.4)	(34.9)	(60.3)	(0.68)



Model	18250A	Liquid Flow Capacity gpm (Ipm)							
Bearings and Races Material	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 (4.1 bar)		
316SS	21	10.5 (48)	14.8 (59)	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



<sup>\*</sup>Add B prior to the model for BSPT connections.

# 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



equest **Ex** 

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



TankJet D41990 tank cleaning nozzle



MOUNTING

**OPTIONS** 

Vertical

Horizontal

45° Up

45° Down 🖊 🔌

**4** 

XX





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						

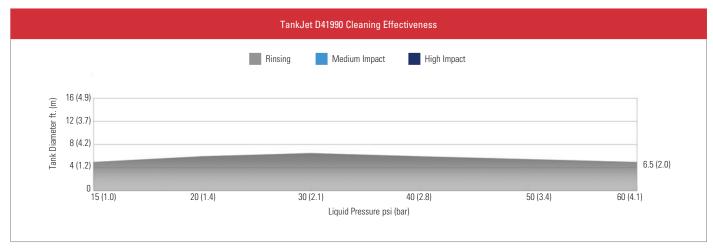
#### **IDEAL FOR CLEANING:**

- Chemical tanks
- Beverage tanks
- Canisters

- Food tanks
- Kegs/drums
- Totes/containers

#### **ADDITIONAL SIZES AVAILABLE**

For D41990 up to 16 ft. see page D18



		Liquid Flow Capacity gpm (lpm)								
Nozzle Inlet	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)
- B - C - 1	3/8" Threaded	2.4 (60)	0.71 (18)	0.79 (20)	-	-	1 (25)	0.12 (0.05)
L A	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

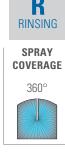


<sup>\*</sup>Add B prior to inlet connection for BSPT connections.

#### **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





MOUNTING OPTIONS							
Vertical	<b></b>	ŧ					
Horizontal	+	+					
45° Up	K	×					
45° Down	K	×					

#### TankJet D41892 tank cleaning nozzle

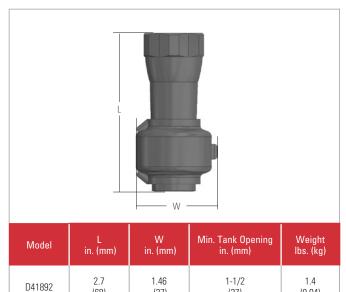
#### **SPECIFICATIONS**

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

#### **IDEAL FOR CLEANING:**

- Chemical containers
- Mixing tanks
- Food containers

#### **DIMENSIONS AND WEIGHTS**



(37)

(37)

(0.04)



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	C	4.0	4.9	5.7	6.4	7.0	7.5
1/2	0	(15.9)	(18.3)	(20.5)	(22.5)	(26)	(29)

#### **ORDERING INFORMATION**

#### TANKJET D41892 TANK CLEANING NOZZLE



<sup>\*</sup>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



SPRAY COVERAGE TJ9-A 2 x 175°

MOUNTING OPTIONS						
Vertical	<b>†</b>	ŧ				
Horizontal	+	<b>→</b>				
45° Up	K	×				
45° Down	K	×				





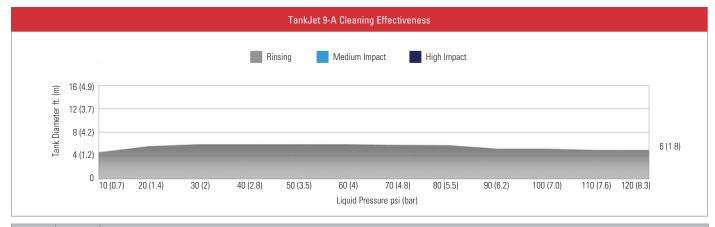


#### **SPECIFICATIONS**

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					

#### IDEAL FOR CLEANING:

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



	Model	Liquid Flow Capacity gpm (Ipm)							
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)	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)	lbs. (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



<sup>\*</sup> 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.

