

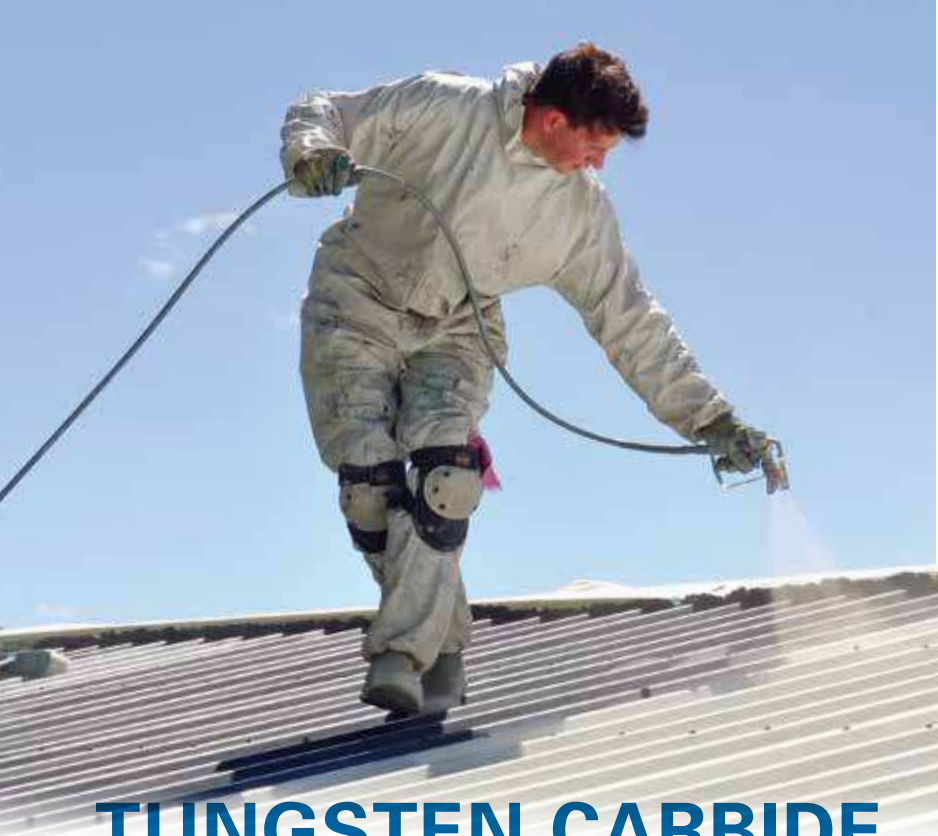


Spraying Systems Co.[®]
Experts in Spray Technology

TUNGSTEN CARBIDE TIPS

FOR HIGH-PRESSURE SPRAYING





TUNGSTEN CARBIDE TIPS SAVE ADHESIVES, COATINGS, PAINT, CHEMICALS & ELECTRICITY

In high-pressure spraying applications, the high velocity of the liquid through the nozzle causes the orifice to wear very quickly. As the orifice becomes larger, the flow rate will increase. Surprisingly, tens and even hundreds of thousands of dollars can be wasted in excess adhesives, coatings, paint and chemicals as a result of nozzle wear, product quality or uneven spray distribution. Electricity costs will also rise due to excess pump operation.

Using spray tips constructed of a harder material provide significantly longer wear life. The abrasion resistance ratio chart shows that tungsten carbide has a resistance ratio up to 250 times greater than brass.










APPROXIMATE ABRASION RESISTANCE RATIOS

Spray Nozzle Material	Resistance Ratio
Aluminum	1
Brass	1
Polypropylene	1 - 2
Steel	1.5 - 2
Monel®	2 - 3
Stainless Steel	4 - 6
Hastelloy®	4 - 6
Hardened Stainless Steel	10 - 15
Stellite®	10 - 15
Silicon Carbide (Nitride Bonded)	90 - 130
Ceramics	90 - 200
Carbides	180 - 250
Synthetic Ruby or Sapphire	600 - 2000

Monel® is a registered trademark of Special Metals Corporation.
 Hastelloy® is a registered trademark of Haynes International, Inc.
 Stellite® is a registered trademark of Deloro Stellite.



QUICK REFERENCE GUIDE

Model	Max. Pressure	Spray Pattern	Typical Applications	Page
 High-pressure TC Tips	3000 psi (207 bar)	Flat	<ul style="list-style-type: none"> Paint spraying Sealant/protective coating spraying 	4
 Heavy Edge TC Tips	4000 psi (276 bar)	Flat	<ul style="list-style-type: none"> Road paint striping Pavement and parking lot marking 	8
 Robotic TC Tips	4000 psi (276 bar)	Flat	<ul style="list-style-type: none"> Robotic spraying Sealant/coating spraying Adhesives spraying Automotive seam sealing 	10
 ECRTC Tips	4000 psi (276 bar)	Even Flat	<ul style="list-style-type: none"> Robotic spraying Viscous solution spraying such as thickened paints and adhesives Automotive seam sealing 	14
 Fine Spray TC Tips	2000 psi (138 bar)	Hollow Cone	<ul style="list-style-type: none"> Coating inside piping Evaporative cooling 	16
 Off-centered Flat Spray Tips	400 psi (275 bar)	Flat	<ul style="list-style-type: none"> Can coating 	18
 RotoClean® Airless Spray Nozzles	5000 psi (345 bar)	Flat	<ul style="list-style-type: none"> Manual spraying High-pressure paint spraying 	20
 Model HV Orifice	2000 psi (138 bar)	Flat	<ul style="list-style-type: none"> Orifice insert produces a fine finish; for use with high-pressure TC tips 	23
 High-pressure 11430 UniJet® Body	3000 psi (207 bar)	Flat	<ul style="list-style-type: none"> Nozzle body for high-pressure UniJet spray tips 	23



EXCEPTIONAL WEAR RESISTANCE – 30 TIMES GREATER THAN STAINLESS STEEL



FEATURES AND BENEFITS

- Erosion- and corrosion-resistant tungsten carbide orifice insert provides long wear life
- Flat spray pattern with tapered edges provides even coverage when sprays overlap
- Tip orifice insert is recessed in a stainless steel tip body to protect against damage
- Can be used with a wide range of assemblies and extensions
- 12728 TC tips are available for plywood glue applications
[Request data sheet number 14518 for more information](#)



IDEAL FOR:

- Paint spraying
- Automotive sealants and protective coatings
- Airless paint spraying
- Applying slurry to ceramic tiles

SPECIFICATIONS:

Maximum pressure: 3000 psi (207 bar)

Spray pattern: Flat spray

Materials: Stainless steel with tungsten carbide orifice insert

ORDERING INFORMATION

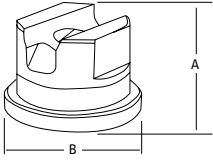
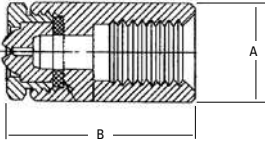
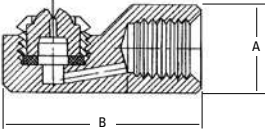
HIGH-PRESSURE TC TIPS



Example





DIMENSIONS AND WEIGHTS

	Nozzle	A (in.)	B (in.)	Net Weight (oz.)
	TP-TC	.5	.594	.357
	12020-TM-TC 9501*	.370	.734	.24
	12017-TM-TC 9501*	.370	.844	.28

Based on largest/heaviest version of each type.

*Request data sheets 14644, 14644-1 and 14644-2 for more information.

EXTENSIONS AND ASSEMBLIES

Extension	Extension Type	Max. Pressure psi	Inlet Conn. in.	Material	Lengths in.	Special Features
	9702A	2000	11/16-16 UniJet THD	Mild steel	8 10 18 24 30 36 48 60	Projects spray at 90° angle to inlet Refer to Data Sheet 9702-1
	9702C	2000	11/16-16 UniJet THD	Mild steel	8 10 18 24 30 36 48 60	Curved extension Refer to Data Sheet 9702-1

Wide range of extensions available request data sheets 9702-1, 9702-1 and 9018 for more information



DISTINCT HEAVY EDGE PATTERN COMBINED WITH LONG WEAR LIFE



FEATURES AND BENEFITS

- Heavy edge distribution for pronounced edge pattern
- Erosion- and corrosion-resistant tungsten carbide orifice insert provides long wear life
- Tip orifice insert is recessed in a stainless steel tip body to protect against damage

SPECIFICATIONS:

Maximum pressure: 4000 psi (276 bar)

Spray pattern: Flat spray

Materials: Stainless steel with tungsten carbide orifice insert



IDEAL FOR:

- Road paint striping
- Pavement marking
- Parking lot striping

ORDERING INFORMATION

HEAVY EDGE TC SPRAY TIP



Example



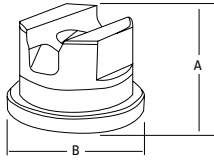
PERFORMANCE DATA: HEAVY EDGE TC SPRAY TIP

Spray Angle at 40 psi	Capacity Size	Equiv. Orifice Dia. (in.)	Capacity* (gallons per minute)					
			500 psi	1000 psi	1500 psi	2000 psi	3000 psi	4000 psi
65°	0033	.015	.12	.16	.20	.23	.29	.34
	07	.067	2.5	3.5	4.3	4.9	6.1	7.1
	08	.072	2.8	4.0	4.9	5.7	6.9	7.9
50°	0050	.018	.18	.25	.30	.36	.44	.51
	01	.026	.35	.50	.61	.72	.86	.99
	015	.031	.53	.75	.91	1.1	1.3	1.5
	02	.036	.71	1.0	1.2	1.4	1.7	2.0
	025	.040	.88	1.3	1.5	1.8	2.2	2.5
	04	.052	1.4	2.0	2.5	2.8	3.4	4.0
	05	.057	1.8	2.5	3.1	3.5	4.4	5.1
	06	.062	2.1	3.0	3.7	4.2	5.1	6.0
	07	.067	2.5	3.5	4.3	4.9	6.1	7.1
	08	.072	2.8	4.0	4.9	5.7	6.9	7.9
	09	.076	3.2	4.5	5.5	6.4	7.8	9.1
40°	0033	.015	.12	.16	.20	.23	.29	.34
	01	.026	.35	.50	.61	.72	.86	1.5
	02	.036	.71	1.0	1.2	1.4	1.7	2.0
	03	.043	1.1	1.5	1.8	2.1	2.7	3.1
	05	.057	1.8	2.5	3.1	3.5	4.4	5.1
	06	.062	2.1	3.0	3.7	4.2	5.1	6.0
	07	.067	2.5	3.5	4.3	4.9	6.1	7.1
	08	.072	2.8	4.0	4.9	5.7	6.9	7.9
	09	.076	3.2	4.5	5.5	6.4	7.8	9.1
35°	06	.062	2.1	3.0	3.7	4.2	5.1	6.0

Spray Angle at 40 psi	Capacity Size	Equiv. Orifice Dia. (in.)	Capacity* (gallons per minute)					
			500 psi	1000 psi	1500 psi	2000 psi	3000 psi	4000 psi
30°	06	.062	2.1	3.0	3.7	4.2	5.1	6.0
	07	.067	2.5	3.5	4.3	4.9	6.1	7.1
	08	.072	2.8	4.0	4.9	5.7	6.9	7.9
	09	.076	3.2	4.5	5.5	6.4	7.8	9.1
25°	0025	.013	.09	.12	.15	.18	.29	.34
	01	.026	.35	.50	.61	.72	.86	1.5
	015	.031	.53	.75	.91	1.1	1.3	1.5
	02	.036	.71	1.0	1.2	1.4	1.7	2.0
	03	.043	1.1	1.5	1.8	2.1	2.7	3.1
	04	.052	1.4	2.0	2.5	2.8	3.4	4.0
	05	.057	1.8	2.5	3.1	3.5	4.4	5.1
	06	.062	2.1	3.0	3.7	4.2	5.1	6.0
	08	.072	2.8	4.0	4.9	5.7	6.9	7.9
	10	.078	3.5	5.0	6.1	7.1	9.0	9.9
20°	03	.043	1.1	1.5	1.8	2.1	2.7	3.1
15°	0080	.023	.28	.40	.49	.57	.69	.79
	01	.026	.35	.50	.61	.72	.86	1.5
	015	.031	.53	.75	.91	1.1	1.3	1.5
	02	.036	.71	1.0	1.2	1.4	1.7	2.0
	03	.043	1.1	1.5	1.8	2.1	2.7	3.1
	04	.052	1.4	2.0	2.5	2.8	3.4	4.0
	05	.057	1.8	2.5	3.1	3.5	4.4	5.1
	06	.062	2.1	3.0	3.7	4.2	5.1	6.0
	08	.072	2.8	4.0	4.9	5.7	6.9	7.9
10°	025	.040	.88	1.3	1.5	1.8	2.5	2.5

*Tabulation is based on water spraying at temperature at 70°F (21°C).

DIMENSIONS AND WEIGHTS

	Nozzle	A (in.)	B (in.)	Net Weight (oz.)
	Small capacity (up to -025)		.375	.593
Large capacity (-03 and larger)		.50	.593	.32

Based on largest/heaviest version of each type.



REPEATABLE, UNIFORM SPRAY COVERAGE FOR PRECISION SPRAY APPLICATIONS



FEATURES AND BENEFITS

- Best coverage tolerances in TC tip line
- Tapered edge spray pattern provides even coverage when sprays overlap
- Flow channel design minimizes heavy spray pattern edges
- Tips have flats to ensure accurate spray pattern alignment every time
- Tip orifice insert is recessed in a stainless steel tip body to protect against damage
- Erosion-resistant tungsten carbide orifice insert provides longer wear life than standard stainless steel tips

SPECIFICATIONS:

Maximum pressure: 4000 psi (276 bar)

Spray pattern: Flat spray or solid stream

Materials: Stainless steel body with tungsten carbide orifice



IDEAL FOR:

- Robotic equipment in precise, repetitive paint spraying applications
- Sealant/coating spraying
- Operations where overspray is undesirable

ORDERING INFORMATION

ROBOTIC TC TIPS – ROBTC



Example



REDUCED BUILD-UP & CLOGGING EXTENDS PRODUCTION TIME BETWEEN MAINTENANCE



FEATURES AND BENEFITS

- Special tip design guides spray solution away from the orifice and reduces clogging caused by caking and build-up
- Tips have flats to ensure accurate spray pattern alignment every time
- Designed for use in applications where the spray solution tends to dry quickly; shorter tip holder than ROBTC tips

SPECIFICATIONS:

Maximum pressure: 4000 psi (276 bar)

Spray pattern: Flat spray or solid stream

Materials: Stainless steel body with tungsten carbide orifice



IDEAL FOR:

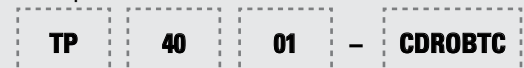
- Robotic equipment in precise, repetitive paint spraying applications
- Sealant/coating spraying
- Operations where overspray is undesirable

ORDERING INFORMATION

ROBOTIC TC TIPS – CDROBTC



Example



ROBOTIC TC TIPS – ROBTC AND CDROBTC

PERFORMANCE DATA: ROBOTIC/CDROBTC TC TIPS

Spray Angle at 40 psi	Capacity Size	Equiv. Orifice Dia.* (in.)	Capacity (gallons per minute)**								Approx.** Spray Pattern Width (in.) at 1 ft. distance
			500 psi	1000 psi	1500 psi	2000 psi	2500 psi	3000 psi	3500 psi	4000 psi	
110°	0067	.021	.24	.33	.41	.47	.53	.58	.63	.67	21 to 22
	0080	.023	.28	.40	.49	.57	.63	.69	.75	.80	21-3/4 to 22-3/4
	01	.026	.35	.50	.61	.72	.79	.87	.94	1.0	23-1/2 to 24-1/2
	015	.031	.53	.75	.91	1.1	1.2	1.3	1.4	1.5	25 to 26
	02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	26 to 27
95°	0080	.023	.28	.40	.49	.57	.63	.69	.75	.80	19-1/2 to 20-1/2
	02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	21-1/2 to 22-1/2
80°	0044	.017	.16	.22	.27	.31	.35	.38	.41	.44	14-1/2 to 15-1/2
	0050	.018	.18	.25	.30	.36	.40	.43	.47	.50	15 to 16
	0055	.019	.19	.28	.34	.39	.43	.48	.51	.55	14-1/2 to 15-1/2
	0067	.021	.24	.33	.41	.47	.53	.58	.63	.67	17 to 18
	0080	.023	.28	.40	.49	.57	.63	.69	.75	.80	17-1/4 to 18-1/4
	01	.026	.35	.50	.61	.72	.79	.87	.94	1.0	18-3/4 to 19-3/4
	015	.031	.53	.75	.91	1.1	1.2	1.3	1.4	1.5	18-1/2 to 19-1/2
	02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	18-1/2 to 19-1/2
	03	.043	1.1	1.5	1.8	2.1	2.4	2.6	2.8	3.0	18-1/2 to 19-1/2
	04	.052	1.4	2.0	2.5	2.8	3.2	3.5	3.7	4.0	18-1/2 to 19-1/2
65°	0039	.016	.14	.20	.24	.28	.31	.34	.36	.39	11-1/2 to 12-1/2
	0044	.017	.16	.22	.27	.31	.35	.38	.41	.44	12-1/2 to 13-1/2
	0050	.018	.18	.25	.30	.36	.40	.43	.47	.50	12-1/2 to 13-1/2
	0055	.019	.19	.28	.34	.39	.43	.48	.51	.55	12-1/2 to 13-1/2
	0067	.021	.24	.33	.41	.47	.53	.58	.63	.67	14-1/2 to 15-1/2
	0080	.023	.28	.40	.49	.57	.63	.69	.75	.80	14-1/2 to 15-1/2
	01	.026	.35	.50	.61	.72	.79	.87	.94	1.0	16-1/4 to 17-1/4
	015	.031	.53	.75	.91	1.1	1.2	1.3	1.4	1.5	15-1/2 to 16-1/2
	02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	14-3/4 to 15-3/4
	03	.043	1.1	1.5	1.8	2.1	2.4	2.6	2.8	3.0	15-1/2 to 16-1/2
50°	0044	.017	.16	.22	.27	.31	.35	.38	.41	.44	10-1/2 to 11-1/2
	0050	.018	.18	.25	.30	.36	.40	.43	.47	.50	10-1/2 to 11-1/2
	0055	.019	.19	.28	.34	.39	.43	.48	.51	.55	10-1/2 to 11-1/2
	0067	.021	.24	.33	.41	.47	.53	.58	.63	.67	12-1/2 to 13-1/2
	0080	.023	.28	.40	.49	.57	.63	.69	.75	.80	12-1/2 to 13-1/2
	01	.026	.35	.50	.61	.72	.79	.87	.94	1.0	13-1/2 to 14-1/2
	015	.031	.53	.75	.91	1.1	1.2	1.3	1.4	1.5	13-1/2 to 14-1/2
	02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	13-1/2 to 14-1/2
	03	.043	1.1	1.5	1.8	2.1	2.4	2.6	2.8	3.0	13-1/2 to 14-1/2
	10	.078	3.5	5.0	6.1	7.1	7.9	8.7	9.4	10.0	13-1/2 to 14-1/2
40°	0011	.009	.039	.055	.067	.078	.087	.095	.10	.11	6-1/2 to 7-1/2
	0017	.011	.06	.08	.10	.12	.13	.15	.16	.17	6-1/2 to 7-1/2
	0025	.013	.09	.12	.15	.18	.20	.22	.23	.25	7 to 8
	0044	.017	.16	.22	.27	.31	.35	.38	.41	.44	8-1/2 to 9-1/2
	0050	.018	.18	.25	.30	.36	.40	.43	.47	.50	8-1/2 to 9-1/2
	0055	.019	.19	.28	.34	.39	.43	.48	.51	.55	8-1/2 to 9-1/2
	0067	.021	.24	.33	.41	.47	.53	.58	.63	.67	10-1/2 to 11-1/2
	0080	.023	.28	.40	.49	.57	.63	.69	.75	.80	10-1/2 to 11-1/2
	01	.026	.35	.50	.61	.72	.79	.87	.94	1.0	11-1/2 to 12-1/2
	015	.031	.53	.75	.91	1.1	1.2	1.3	1.4	1.5	11-1/2 to 12-1/2
02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	11-1/2 to 12-1/2	

* For solid stream tips, the actual orifice diameter is listed.

** Spray pattern width is based on liquid with viscosity of 20 seconds, #4 Zahn Cup spraying at 1600 psi (110 bar).

*** Tabulation is based on spraying water at temperature at 70°F (21°C).



PERFORMANCE DATA: ROBOTIC/CDROBTC TC TIPS

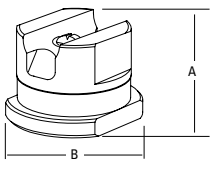
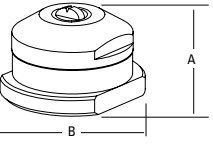
Spray Angle at 40 psi	Capacity Size	Equiv. Orifice Dia.* (in.)	Capacity (gallons per minute)**								Approx.** Spray Pattern Width (in.) at 1 ft. distance
			500 psi	1000 psi	1500 psi	2000 psi	2500 psi	3000 psi	3500 psi	4000 psi	
25°	0017	.011	.06	.08	.10	.12	.13	.15	.16	.17	5-1/2 to 6-1/2
	0039	.016	.14	.20	.24	.28	.31	.34	.36	.39	6-1/2 to 7-1/2
	0050	.018	.18	.25	.30	.36	.40	.43	.47	.50	7-1/2 to 8-1/2
	0055	.019	.19	.28	.34	.39	.43	.48	.51	.55	7-1/2 to 8-1/2
	0067	.021	.24	.33	.41	.47	.53	.58	.63	.67	8-1/2 to 9-1/2
	0080	.023	.28	.40	.49	.57	.63	.69	.75	.80	8-1/4 to 9-1/4
	01	.026	.35	.50	.61	.72	.79	.87	.94	1.0	8-1/2 to 9-1/2
	015	.031	.53	.75	.91	1.1	1.2	1.3	1.4	1.5	9-1/4 to 10-1/4
	02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	8-1/2 to 9-1/2
5°	0011	.009	.039	.055	.067	.078	.087	.095	.10	.11	2 to 3
	0039	.016	.14	.20	.24	.28	.31	.34	.36	.39	4 to 5
	0050	.018	.18	.25	.30	.35	.40	.43	.47	.50	4 to 5
	0067	.021	.24	.34	.41	.47	.53	.58	.63	.67	4 to 5
	01	.026	.35	.50	.61	.71	.79	.87	.94	1.0	5-1/4 to 6-1/4
	015	.031	.53	.75	.92	1.1	1.2	1.3	1.4	1.5	5-1/2 to 6-1/2
	02	.036	.71	1.0	1.2	1.4	1.6	1.7	1.9	2.0	5-3/4 to 6-3/4
0°	0009	.026	.30	.43	.52	.60	.67	.74	.80	.85	—
	001	.028	.42	.60	.73	.85	.95	1.0	1.1	1.2	—
	0015	.034	.62	.85	1.0	1.2	1.3	1.5	1.6	1.7	—
	002	.039	.81	1.2	1.4	1.6	1.8	2.0	2.2	2.3	—
	003	.043	.99	1.4	1.8	2.0	2.2	2.4	2.6	2.8	—
	004	.052	1.5	2.2	2.6	3.0	3.4	3.7	4.0	4.3	—
	005	.057	1.7	2.4	2.9	3.4	3.8	4.2	4.5	4.8	—
	006	.063	2.1	3.0	3.7	4.2	4.7	5.2	5.6	6.0	—

* For solid stream tips, the actual orifice diameter is listed.

** Spray pattern width is based on liquid with viscosity of 20 seconds, #4 Zahn Cup spraying at 1600 psi (110 bar).

*** Tabulation is based on spraying water at temperature at 70°F (21°C).

DIMENSIONS AND WEIGHTS

	Nozzle	A (in.)	B (in.)	Locating Flats (in.)	Net Weight (oz.)
	TP-ROBTC	.375	.59	0.5	.32
	TP-CDROBTC	.313	.59	0.5	.32

Based on largest/heaviest version of each type.



EVEN SPRAY DISTRIBUTION, MINIMAL OVERSPRAY



CDECRTC Tip

ECRTC Tip

FEATURES AND BENEFITS

- Flat spray pattern with uniform distribution ensures even coverage
- Even distribution across spray pattern
- Tip orifice insert is recessed in a stainless steel tip body to protect against damage
- Erosion-resistant tungsten carbide orifice insert provides longer wear life than standard stainless steel tips
- CDECRTC tips feature a shorter tip holder than ECRTC tips and are designed for use in applications where the spray solution tends to dry quickly. The tip design helps the solution slide away from the orifice and prevents clogging caused by caking and build-up

SPECIFICATIONS:

Maximum pressure: 4000 psi (276 bar)

Spray pattern: Even flat spray

Materials: Stainless steel body with tungsten carbide orifice



IDEAL FOR:

- Spraying viscous solutions such as thick paints, epoxies, adhesives and other solutions prone to clogging
- High particulate solution spraying

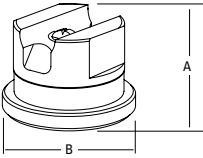
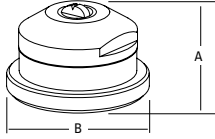
PERFORMANCE DATA: ECRTC/CDECRTC TIPS

Spray Angle at 40 psi	Capacity Size	Equiv. Orifice Dia. (in.)	Capacity (gallons per minute)**						Approx.* Spray Pattern Width (in.) at 1 ft. distance
			500 psi	1000 psi	1500 psi	2000 psi	3000 psi	4000 psi	
110°	0017	.011	.06	.08	.10	.12	.14	.16	15
	0025	.013	.09	.12	.15	.18	.22	.25	16
	0039	.016	.14	.20	.24	.28	.34	.39	18
	0050	.018	.18	.25	.30	.36	.43	.50	19-1/2
	067	.021	.24	.33	.41	.47	.58	.67	20-1/2
	0080	.023	.28	.40	.49	.57	.69	.80	22
95°	01	.026	.35	.50	.61	.72	.86	1.00	23-1/2
	0017	.011	.06	.08	.10	.12	.15	.17	13
95°	0039	.016	.14	.20	.24	.28	.34	.39	16
	0039	.016	.14	.20	.24	.28	.34	.39	14
80°	0039	.016	.14	.20	.24	.28	.34	.39	14
	0050	.018	.18	.25	.30	.36	.45	.50	15
	0055	.019	.19	.28	.34	.39	.48	.55	15
	0067	.021	.24	.33	.41	.47	.58	.67	16
80°	0080	.023	.28	.40	.49	.57	.69	.80	17-1/4
	0017	.011	.06	.08	.10	.12	.14	.16	9.5
	0025	.013	.09	.12	.15	.18	.21	.24	10
	0039	.016	.14	.20	.24	.28	.34	.39	12
65°	0050	.018	.18	.25	.30	.36	.43	.50	13
	0067	.021	.24	.33	.41	.47	.58	.67	14-3/4
50°	0050	0.018	.18	.25	.30	.36	.43	.50	11
40°	0055	.019	.19	.28	.34	.39	.48	.56	9

* Spray pattern width is based on liquid with viscosity of 20 seconds, #4 Zahn Cup spraying at 1600 psi (110 bar).

** Tabulation is based on spraying water at temperature at 70°F (21°C).

DIMENSIONS AND WEIGHTS

	Nozzle	A (in.)	B (in.)	Net Weight (oz.)
	TP-ECRTC	.375	.59	.32
	TP-CDECRTC	.313	.59	.32

Based on largest/heaviest version of each type.

ORDERING INFORMATION

ECRTC TIPS

Tip Code	Spray Angle	Capacity Size	—	Tip Type	Example
TP	50	0050	—	ECRTC	

CDECRTC TIPS

Tip Code	Spray Angle	Capacity Size	—	Tip Type	Example
TP	50	0050	—	CDECRTC	

HYDRAULIC FINE SPRAY – VERY SMALL DROPS WITHOUT COMPRESSED AIR



FEATURES AND BENEFITS

- High-pressure tip with tungsten carbide orifice for long wear life
- Hollow cone spray pattern with circular impact area
- Excellent atomization without use of costly compressed air

SPECIFICATIONS:

Maximum pressure: 2000 psi (138 bar)

Spray pattern: Hollow cone

Materials: 303 stainless steel with tungsten carbide orifice



IDEAL FOR:

- Coating inside piping/tubing
- Evaporative cooling

ORDERING INFORMATION

TN-SSTC SPRAY TIP



Example



PERFORMANCE DATA: FINE SPRAY TC TIPS

Capacity Size	Equiv. Orifice Dia. (in.)	Capacity* (gallons per minute)					Approx.** Spray Pattern Width (in.) at 1 ft. distance
		400 psi	750 psi	1000 psi	1500 psi	2000 psi	
.60	.016	.032	.043	.050	.061	.072	3
.80	.0135	.042	.058	.067	.082	.095	3
.90	.016	.047	.065	.075	.092	.11	3
1	.020	.053	.072	.083	.10	.12	3-1/2
1.5	.020	.080	.11	.13	.15	.18	3-1/2
1.8	.025	.094	.13	.15	.18	.22	4-1/2
2	.028	.11	.14	.17	.21	.24	4-1/2
3	.028	.16	.22	.25	.31	.35	6
4	.042	.21	.29	.33	.41	.47	8
6	.042	.32	.43	.50	.61	.71	10
8	.060	.42	.58	.67	.82	.94	12
9	.060	.47	.65	.75	.92	1.1	14
10	.064	.53	.72	.83	1.0	1.2	16
12	.076	.63	.87	1.0	1.2	1.4	18
14	.076	.74	1.0	1.2	1.4	1.6	14
15	.081	.79	1.1	1.25	1.5	1.7	16
16	.086	.84	1.2	1.3	1.6	1.9	18
18	.076	.95	1.3	1.5	1.8	2.1	16
20	.081	1.1	1.4	1.7	2.1	2.4	18
22	.076	1.2	1.6	1.8	2.3	2.6	12
24	.081	1.3	1.7	2.0	2.5	2.8	13
26	.086	1.4	1.9	2.2	2.7	3.1	14

* Tabulated capacities based on water.

** Spray pattern diameter is based on liquid with viscosity of 20 seconds, #4 Zahn Cup spraying at 1600 psi (110 bar). Coverage will vary with viscosities and pressures.

DIMENSIONS AND WEIGHTS

	Nozzle	A (in.)	B (in.)	Net Weight (oz.)
	TN-SSTC	.593	.625	.42

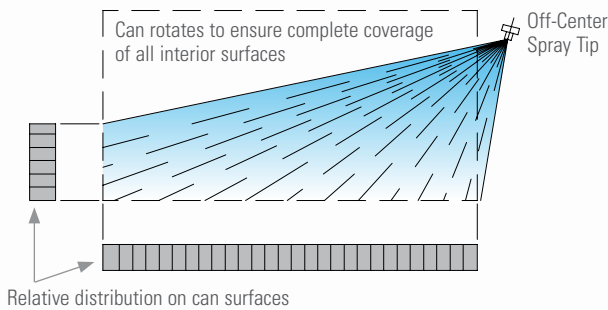
Based on largest/heaviest version of each type.

DESIGNED FOR UNIFORM COATING OF CAN INTERIORS



FEATURES AND BENEFITS

- Off-centered, flat spray pattern – resulting uniform coating thickness on the interior of cans



IDEAL FOR:

- Can coating applications

SPECIFICATIONS:

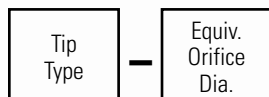
Maximum pressure: 4000 psi (275 bar)

Spray pattern: Flat spray

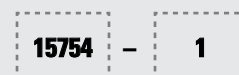
Materials: Stainless steel tip holder with tungsten carbide orifice insert

ORDERING INFORMATION

OFF-CENTERED FLAT SPRAY TIPS



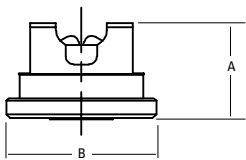
Example



PERFORMANCE DATA: OFF-CENTERED FLAT SPRAY TIPS

Spray Tip No.	Equiv. Orifice Dia. (in.)	Capacity (gallons per minute)		Spray angle at 500 psi
		500 psi	1000 psi	
15754-1	.015	.12	.16	80°
15754-2	.009	.04	.06	30°
15754-3	.017	.15	.21	82°
15754-4	.013	.09	.12	75°
15754-5	.013	.09	.12	40°
15754-6	.013	.09	.12	50°
15754-7	.022	.26	.36	25°
15754-8	.026	.36	.50	25°
15754-9	.009	.04	.06	80°

DIMENSIONS AND WEIGHTS

	Nozzle	A (in.)	B (in.)	Net Weight (oz.)
	15754	.375	.594	.26

Based on largest/heaviest version of each type.



CLEAR CLOGS QUICKLY & EASILY; MAXIMIZE PRODUCTIVITY



FEATURES AND BENEFITS

- Simply rotate handle 180° and blow obstructions out of the opening in the back of the tip – it's fast and easy
- Tungsten carbide orifice provides maximum erosion resistance for high-pressure spraying
- Easy to replace the orifice – no need to disassemble
- Guard safety feature

SPECIFICATIONS:

Maximum pressure: 5000 psi (345 bar)

Spray pattern: Flat spray

Materials: Stainless steel holder with tungsten carbide orifice insert and protective nylon lugs



IDEAL FOR:

- Manual spraying
- High-pressure paint spraying
- Road paint striping
- Fiberglass manufacturing

ORDERING INFORMATION

ROTOCLEAN AIRLESS SPRAY NOZZLES

RotoClean
Number

+

Orifice/Handle
Insert Kit

Example

AA225 – 6

+

26081-813



PERFORMANCE DATA: ROTOCLEAN AIRLESS SPRAY NOZZLES

For 225 Handle/Orifice Insert No. 26081-	Equiv. Orifice Dia. (in.)	Flow Rate Capacity* (gallons per minute)				Approx.** Spray Pattern Width (in.) at 1 ft. distance
		500 psi	1000 psi	1500 psi	2000 psi	
813	.013	.09	.12	.15	.18	16-1/2
815	.015	.12	.16	.20	.23	17
918	.018	.18	.25	.30	.36	19
1021	.021	.24	.33	.41	.47	21
1023	.023	.28	.40	.49	.57	22
1126	.026	.35	.50	.61	.72	23
611	.011	.06	.08	.10	.12	13
713	.013	.09	.12	.15	.18	14
715	.015	.12	.16	.20	.23	15
818	.018	.18	.25	.30	.36	17
921	.021	.24	.33	.41	.47	19
923	.023	.28	.40	.49	.57	19
1026	.026	.35	.50	.61	.72	21
1031	.031	.53	.75	.91	1.1	21
1036	.036	.71	1.0	1.2	1.4	22
511	.011	.06	.08	.10	.12	11-1/2
613	.013	.09	.12	.15	.18	12-1/2
615	.015	.12	.16	.20	.23	13
718	.018	.18	.25	.30	.36	15
821	.021	.24	.33	.41	.47	17
823	.023	.28	.40	.49	.57	17
926	.026	.35	.50	.61	.72	19
931	.031	.53	.75	.91	1.1	19
936	.036	.71	1.0	1.2	1.4	19
513	.013	.09	.12	.15	.18	10-1/2
515	.015	.12	.16	.20	.23	11
***	.017	.16	.22	.27	.31	12-1/2
618	.018	.18	.25	.30	.36	13
***	.019	.19	.28	.34	.39	13
721	.021	.24	.33	.41	.47	15
723	.023	.28	.40	.49	.57	15
726	.026	.35	.50	.61	.72	16
731	.031	.53	.75	.91	1.1	16
736	.036	.71	1.0	1.2	1.4	16
411	.011	.06	.08	.10	.12	8-1/2
413	.013	.09	.12	.15	.18	9
415	.015	.12	.16	.20	.23	10
***	.017	.16	.22	.27	.31	10-1/2
518	.018	.18	.25	.30	.36	11
***	.019	.19	.28	.34	.39	11

For 225 Handle/Orifice Insert No. 26081-	Equiv. Orifice Dia. (in.)	Flow Rate Capacity* (gallons per minute)				Approx.** Spray Pattern Width (in.) at 1 ft. distance
		500 psi	1000 psi	1500 psi	2000 psi	
621	.021	.24	.33	.41	.47	12
623	.023	.28	.40	.49	.57	13
626	.026	.35	.50	.61	.72	14
631	.031	.53	.75	.91	1.1	14
636	.036	.71	1.0	1.2	1.4	14
311	.011	.06	.08	.10	.12	7-1/2
313	.013	.09	.12	.15	.18	8
***	.017	.16	.22	.27	.31	9-1/2
418	.018	.18	.25	.30	.36	10
***	.019	.19	.28	.34	.39	10
521	.021	.24	.33	.41	.47	11
523	.023	.28	.40	.49	.57	11
526	.026	.35	.50	.61	.72	12
***	.029	.46	.65	.80	.92	12
531	.031	.53	.75	.91	1.1	12
536	.036	.71	1.0	1.2	1.4	12
315	.015	.12	.16	.20	.23	7
318	.018	.18	.25	.30	.36	7
***	.019	.19	.28	.34	.39	7
421	.021	.24	.33	.41	.47	8
423	.023	.28	.40	.49	.57	8-1/2
426	.026	.35	.50	.61	.72	9
431	.031	.53	.75	.91	1.1	9
436	.036	.71	1.0	1.2	1.4	9
211	.011	.06	.08	.10	.12	5
213	.013	.09	.12	.15	.18	5
215	.015	.12	.16	.20	.23	5-1/2
***	.017	.16	.22	.27	.31	6
321	.021	.24	.33	.41	.47	6-1/2
323	.023	.28	.40	.49	.57	7
326	.026	.35	.50	.61	.72	7
331	.031	.53	.75	.91	1.1	7
336	.036	.71	1.0	1.2	1.4	7
218	.018	.18	.25	.30	.36	5
221	.021	.24	.33	.41	.47	5-1/2
223	.023	.28	.40	.49	.57	5-1/2
226	.026	.35	.50	.61	.72	6
231	.031	.53	.75	.91	1.1	6
236	.036	.71	1.0	1.2	1.4	6

* Tabulated capacities based on water.

** Spray pattern width is based on liquid with viscosity of 20 seconds, #4 Zahn Cup spraying at 1600 psi (110 bar). Coverage will vary with viscosities and pressures.

*** Available on special request.



DIMENSIONS AND WEIGHTS

	Nozzle	A (in.)	B (in.)	Net Weight (oz.)
	225	2.437	2	4.2

Based on largest/heaviest version of each type.

COMPATIBLE SPRAY GUNS

RotoClean No.	Connection Thread Size	Gasket No.	Compatible Spray Gun
225-2	11/16"-16	7894-NY	SPRAYING SYSTEMS CO. 24 AUA AND GRACO
225-3	3/4"-16	19078-NY	BALCRANK
225-6	7/8"-14	11918-NY	GRACO
225-8	3/8" NPS	12552-NY	NORDSON
225-9	3/8" NPS	10660-NY	DEVILBISS
225-10	3/4"-20	19079-NY	BINKS 50
225-11	M18 x 1 Metric	7894-NY	ATLAS COPCO
225-12	3/8" NPS	7894-NY	SPEE-FLO
225-13	M18 x 1 Metric	7894-NY	DEICKE & KOPPERSCHMIDT
225-14	1-14	9632-NY	SPRAYING SYSTEMS CO. 44 AUA
225-15	11/16"-16	12552-NY	BINKS 43
225-16	5/8"-14 BSPP	11918-NY	—
225-17	11/16"-16	13358-NY	WAGNER
225-18	M18 x 1.5 Metric	7894-NY	—

MODEL HV ORIFICE

- Produces a flat spray pattern with feathering spray pattern edges
- Orifice insert produces a fine finish; for use with high-pressure TC tips
- Ideal for high-pressure, high-wear spray applications



Model HV Orifice

DIMENSIONS AND WEIGHTS

	Orifice	A (in.)	B (in.)	Net Weight (oz.)
	HV	.25	.593	.32

Based on largest/heaviest version of each type.

ORDERING INFORMATION MODEL HV ORIFICE INSERT

Orifice Type — Capacity Size

Example: **HV** — **8**

PERFORMANCE DATA: MODEL HV ORIFICE INSERT

Capacity Size	Used With TC Tip	
	Tip Type	Equiv. Orifice Dia. (in.)
8	-0008TC	.007
10	-0011TC	.009
12	-0017TC	.011
14	-0025TC	.013
16	-0033TC	.015
17	-0039TC	.016
19	-0050TC	.018
22	-0067TC	.021
24	-0080TC	.023
27	-01TC	.026

HIGH-PRESSURE 11430 UNIJET® NOZZLE BODY

- Use with TC tips available in a wide range of spray patterns, spray angles and capacity sizes
- Nozzle replacement costs are low because only the spray tips are replaced; the nozzle body can be reused
- Spray tip replacement is quick and easy – simply unscrew the tip retainer cap
- Built-in strainer prevents wear by keeping debris from entering the nozzle orifice





Spraying Systems Co.[®]

Experts in Spray Technology

North Avenue and Schmale Road, P.O. Box 7900, Wheaton, IL 60187-7901 USA

Tel: 1.800.95.SPRAY Intl. Tel: 1.630.665.5000

Fax: 1.888.95.SPRAY Intl. Fax: 1.630.260.0842

www.spray.com



Bulletin No. 644A ©Spraying Systems Co. 2018