B2B TREATER SETUP

BY BULK SEED SYSTEMS, INC.

B2B NOZZLE SELECTION

Bulk Seed Systems
20561 Justice Ave.
Wabasso, MN 56293

The B2B Treater is designed to apply between 150 - 670 oz. /box.

MINIMUM RATE: 150 oz./box = 15 psi on XR8002 and TJ60-11002 nozzles at 5 minute drop rate.
MAXIMUM RATE: 670 oz./box = 30 psi on XR8006 and TJ60-11006 nozzles at 5 minute drop rate.

To find the correct nozzles for your application follow the instructions below. The max pump pressure on B2B should not exceed 40psi. The suggested range is 15-30 psi. After you figure your oz./minute/nozzle needed using the calculation below, look on XR TeeJet page and follow the "Capacity one nozzle in oz./min" column to find approximate oz./minute in the 20psi range of the nozzle.

Calculation for B2B nozzle selection:

Example of 360 total oz. used per box
Example of 5 total minutes per box

360 oz. divided by 5min = 72 oz./min

72 oz. divided by 2 nozzles = 36 oz./minute/nozzle

36 oz. is final number to match up to TeeJet chart.

36 oz./minute/nozzle at 20 psi = one XR8004, and one TJ-60 11004 for the twin nozzle.

Always use same flow size nozzles together

- XR8002 with TJ-60 11002
- XR8003 with TJ-60 11003
- XR8004 with TJ-60 11004
- XR8005 with TJ-60 11005
- XR8006 with TJ-60 11006

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Updated 03/2012

XR TeeJet® Extended Range Flat Spray Tips

Typical Applications:

See selection guide on pages 2 and 6 for recommended typical applications for XR TeeJet tips.

Features:

- Excellent spray distribution over a wide range of pressures—15–60 PSI (1–4 bar).
- Ideal for rigs equipped with sprayer controllers.
- Reduces drift at lower pressures, better coverage at higher pressures.
- Available in stainless steel, ceramic and polymer in 80° and 110° spray angles with VisiFlo® color-coding.
- Ceramic is available with corrosive-resistant polypropylene VisiFlo color-coded tip holder in 80° capacities 03–08 and 110° capacities 02–08.
- Brass available in 110° only.
- Automatic spray alignment with 25612-*-NYR Quick TeeJet® cap and gasket. Reference page 63 for more information.
- Automatic spray alignment for sizes 10 and 15 with 25610-*-NYR Quick TeeJet cap and gasket. Reference page 63 for more information.

At 15 PSI (1 bar) Pressure — At 60 PSI (4 bar) Pressure

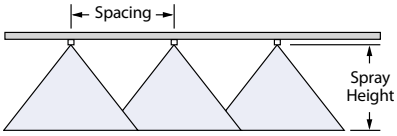
	PSI	DROP SIZE 80°	DROP SIZE 110°	CAPACITY ONE NOZZLE IN GPM	CAPACITY ONE NOZZLE IN OZ./MIN.	20″ GPA 4 MPH	5 MPH	6 MPH	8 MPH	10 MPH	12 MPH	15 MPH	20 MPH	GALLONS PER 1000 SQ. FT. 2 MPH	3 MPH	4 MPH	5 MPH
XR8001 XR11001 (100)	15	M	F	0.061	7.8	4.5	3.6	3.0	2.3	1.8	1.5	1.2	0.91	0.21	0.14	0.10	0.08
	20	F	F	0.071	9.1	5.3	4.2	3.5	2.6	2.1	1.8	1.4	1.1	0.24	0.16	0.12	0.10
	30	F	F	0.087	11	6.5	5.2	4.3	3.2	2.6	2.2	1.7	1.3	0.30	0.20	0.15	0.12
	40	F	F	0.10	13	7.4	5.9	5.0	3.7	3.0	2.5	2.0	1.5	0.34	0.23	0.17	0.14
	50	F	VF	0.11	14	8.2	6.5	5.4	4.1	3.3	2.7	2.2	1.6	0.37	0.25	0.19	0.15
	60	F	VF	0.12	15	8.9	7.1	5.9	4.5	3.6	3.0	2.4	1.8	0.41	0.27	0.20	0.16
XR80015 XR110015 (100)	15	M	F	0.092	12	6.8	5.5	4.6	3.4	2.7	2.3	1.8	1.4	0.31	0.21	0.16	0.13
	20	M	F	0.11	14	8.2	6.5	5.4	4.1	3.3	2.7	2.2	1.6	0.37	0.25	0.19	0.15
	30	F	F	0.13	17	9.7	7.7	6.4	4.8	3.9	3.2	2.6	1.9	0.44	0.29	0.22	0.18
	40	F	F	0.15	19	11.1	8.9	7.4	5.6	4.5	3.7	3.0	2.2	0.51	0.34	0.26	0.20
	50	F	F	0.17	22	12.6	10.1	8.4	6.3	5.0	4.2	3.4	2.5	0.58	0.39	0.29	0.23
	60	F	F	0.18	23	13.4	10.7	8.9	6.7	5.3	4.5	3.6	2.7	0.61	0.41	0.31	0.24
XR8002 XR11002 (50)	15	M	M	0.12	15	8.9	7.1	5.9	4.5	3.6	3.0	2.4	1.8	0.41	0.27	0.20	0.16
	20	M	F	0.14	18	10.4	8.3	6.9	5.2	4.2	3.5	2.8	2.1	0.48	0.32	0.24	0.19
	30	M	F	0.17	22	12.6	10.1	8.4	6.3	5.0	4.2	3.4	2.5	0.58	0.39	0.29	0.23
	40	F	F	0.20	26	14.9	11.9	9.9	7.4	5.9	5.0	4.0	3.0	0.68	0.45	0.34	0.27
	50	F	F	0.22	28	16.3	13.1	10.9	8.2	6.5	5.4	4.4	3.3	0.75	0.50	0.37	0.30
	60	F	F	0.24	31	17.8	14.3	11.9	8.9	7.1	5.9	4.8	3.6	0.82	0.54	0.41	0.33
XR110025 (50)	15		M	0.15	19	11.1	8.9	7.4	5.6	4.5	3.7	3.0	2.2	0.51	0.34	0.26	0.20
	20		M	0.18	23	13.4	10.7	8.9	6.7	5.3	4.5	3.6	2.7	0.61	0.41	0.31	0.24
	30		F	0.22	28	16.3	13.1	10.9	8.2	6.5	5.4	4.4	3.3	0.75	0.50	0.37	0.30
	40		F	0.25	32	18.6	14.9	12.4	9.3	7.4	6.2	5.0	3.7	0.85	0.57	0.43	0.34
	50		F	0.28	36	21	16.6	13.9	10.4	8.3	6.9	5.5	4.2	0.95	0.63	0.48	0.38
	60		F	0.31	40	23	18.4	15.3	11.5	9.2	7.7	6.1	4.6	1.1	0.70	0.53	0.42
XR8003 XR11003 (50)	15	M	M	0.18	23	13.4	10.7	8.9	6.7	5.3	4.5	3.6	2.7	0.61	0.41	0.31	0.24
	20	M	M	0.21	27	15.6	12.5	10.4	7.8	6.2	5.2	4.2	3.1	0.71	0.48	0.36	0.29
	30	M	F	0.26	33	19.3	15.4	12.9	9.7	7.7	6.4	5.1	3.9	0.88	0.59	0.44	0.35
	40	M	F	0.30	38	22	17.8	14.9	11.1	8.9	7.4	5.9	4.5	1.0	0.68	0.51	0.41
	50	M	F	0.34	44	25	20	16.8	12.6	10.1	8.4	6.7	5.0	1.2	0.77	0.58	0.46
	60	F	F	0.37	47	27	22	18.3	13.7	11.0	9.2	7.3	5.5	1.3	0.84	0.63	0.50
XR8004 XR11004 (50)	15	C	M	0.24	31	17.8	14.3	11.9	8.9	7.1	5.9	4.8	3.6	0.82	0.54	0.41	0.33
	20	C	M	0.28	36	21	16.6	13.9	10.4	8.3	6.9	5.5	4.2	1.0	0.63	0.48	0.38
	30	M	M	0.35	45	26	21	17.3	13.0	10.4	8.7	6.9	5.2	1.2	0.79	0.60	0.48
	40	M	M	0.40	51	30	24	19.8	14.9	11.9	9.9	7.9	5.9	1.4	0.91	0.68	0.54
	50	M	F	0.45	58	33	27	22	16.7	13.4	11.1	8.9	6.7	1.5	1.0	0.77	0.61
	60	M	F	0.49	63	36	29	24	18.2	14.6	12.1	9.7	7.3	1.7	1.1	0.83	0.67
XR8005 XR11005 (50)	15	C	M	0.31	40	23	18.4	15.3	11.5	9.2	7.7	6.1	4.6	1.1	0.70	0.53	0.42
	20	C	M	0.35	45	26	21	17.3	13.0	10.4	8.7	6.9	5.2	1.2	0.79	0.60	0.48
	30	C	M	0.43	55	32	26	21	16.0	12.8	10.6	8.5	6.4	1.5	0.97	0.73	0.58
	40	M	M	0.50	64	37	30	25	18.6	14.9	12.4	9.9	7.4	1.7	1.1	0.85	0.68
	50	M	M	0.56	72	42	33	28	21	16.6	13.9	11.1	8.3	1.9	1.3	0.95	0.76
	60	M	F	0.61	78	45	36	30	23	18.1	15.1	12.1	9.1	2.1	1.4	1.0	0.83
XR8006 XR11006 (50)	15	C	C	0.37	47	27	22	18.3	13.7	11.0	9.2	7.3	5.5	1.3	0.84	0.63	0.50
	20	C	C	0.42	54	31	25	21	15.6	12.5	10.4	8.3	6.2	1.4	1.0	0.71	0.57
	30	C	M	0.52	67	39	31	26	19.3	15.4	12.9	10.3	7.7	1.8	1.2	0.88	0.71
	40	C	M	0.60	77	45	36	30	22	17.8	14.9	11.9	8.9	2.0	1.4	1.0	0.82
	50	C	M	0.67	86	50	40	33	25	19.9	16.6	13.3	9.9	2.3	1.5	1.1	0.91
	60	C	M	0.73	93	54	43	36	27	22	18.1	14.5	10.8	2.5	1.7	1.2	0.99
XR8008 XR11008 (50)	15	VC	C	0.49	63	36	29	24	18.2	14.6	12.1	9.7	7.3	1.7	1.1	0.83	0.67
	20	VC	C	0.57	73	42	34	28	21	16.9	14.1	11.3	8.5	1.9	1.3	0.97	0.78
	30	C	C	0.69	88	51	41	34	26	20	17.1	13.7	10.2	2.3	1.6	1.2	0.94
	40	C	C	0.80	102	59	48	40	30	24	19.8	15.8	11.9	2.7	1.8	1.4	1.1
	50	C	M	0.89	114	66	53	44	33	26	22	17.6	13.2	3.0	2.0	1.5	1.2
	60	C	M	0.98	125	73	58	49	36	29	24	19.4	14.6	3.3	2.2	1.7	1.3
XR8010† XR11010†	15			0.61	78	45	36	30	23	18.1	15.1	12.1	9.1	2.1	1.4	1.0	0.83
	20			0.71	91	53	42	35	26	21	17.6	14.1	10.5	2.4	1.6	1.2	0.97
	30			0.87	111	65	52	43	32	26	22	17.2	12.9	3.0	2.0	1.5	1.2
	40			1.00	128	74	59	50	37	30	25	19.8	14.9	3.4	2.3	1.7	1.4
	50			1.12	143	83	67	55	42	33	28	22	16.6	3.8	2.5	1.9	1.5
	60			1.22	156	91	72	60	45	36	30	24	18.1	4.1	2.8	2.1	1.7
XR8015† XR11015†	15			0.92	118	68	55	46	34	27	23	18.2	13.7	3.1	2.1	1.6	1.3
	20			1.06	136	79	63	52	39	31	26	21	15.7	3.6	2.4	1.8	1.4
	30			1.30	166	97	77	64	48	39	32	26	19.3	4.4	2.9	2.2	1.8
	40			1.50	192	111	89	74	56	45	37	30	22	5.1	3.4	2.6	2.0
	50			1.68	215	125	100	83	62	50	42	33	25	5.7	3.8	2.9	2.3
	60			1.84	236	137	109	91	68	55	46	36	27	6.3	4.2	3.1	2.5

Note: Always double check your application rates.
Tabulations are based on spraying water at 70°F (21°C).
†Available in all stainless steel only.

Very Fine — Fine — Medium — Coarse — Very Coarse — Extremely Coarse

CONTACT PRODUCT	SYSTEMIC PRODUCT	DRIFT MANAGEMENT
EXCELLENT	GOOD	GOOD
GOOD*	VERY GOOD*	VERY GOOD*

*At pressures below 30 PSI (2.0 bar)



Optimum Spray Height

	20″
80°	30″
110°	20″

See pages 173–187 for drop size classification, useful formulas and information.

How to order:

Specify tip number.

Examples:

- XR8004VS – Stainless Steel with VisiFlo color-coding
- XR11004-VP – Polymer with VisiFlo color-coding (110° only)
- XR11004-VK – Ceramic with polypropylene VisiFlo color-coding
- XR8010SS – Stainless Steel
- XR11004VB – Brass with VisiFlo color-coding (110° only)

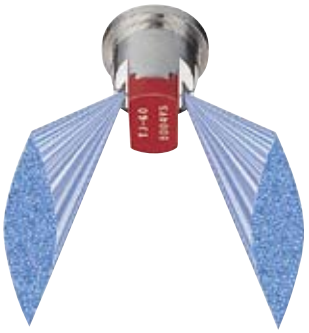
TwinJet® Twin Flat Spray Tips

Typical Applications:

See selection guide on pages 2 and 6 for recommended typical applications for TwinJet tips.

Features:

- Penetrates crop residue or dense foliage.
- Smaller droplets for thorough coverage.
- Better spray distribution along boom than with hollow cone nozzles.
- Available in stainless steel with VisiFlo® color-coding in 65°, 80° and 110° spray angles.
- Recommended pressure rating 30–60 PSI (2–4 bar).
- See page 40 for TwinJet even flat spray tips.
- Automatic spray alignment with 25598-*-NYR Quick TeeJet® cap and gasket. Reference page 63 for more information.
- Reference technical section, pages 181–186 for additional information on drift.

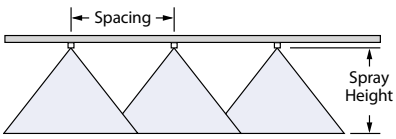


	PSI	DROP SIZE 80°	DROP SIZE 110°	CAPACITY ONE NOZZLE IN GPM	CAPACITY ONE NOZZLE IN OZ./MIN.	20″ GPA 4 MPH	5 MPH	6 MPH	8 MPH	10 MPH	12 MPH	15 MPH	20 MPH	GALLONS PER 1000 SQ. FT. 2 MPH	3 MPH	4 MPH	5 MPH
TJ60-6501 TJ60-8001 (100)	30	VF		0.087	11	6.5	5.2	4.3	3.2	2.6	2.2	1.7	1.3	0.30	0.20	0.15	0.12
	35	VF		0.094	12	7.0	5.6	4.7	3.5	2.8	2.3	1.9	1.4	0.32	0.21	0.16	0.13
	40	VF		0.10	13	7.4	5.9	5.0	3.7	3.0	2.5	2.0	1.5	0.34	0.23	0.17	0.14
	50	VF		0.11	14	8.2	6.5	5.4	4.1	3.3	2.7	2.2	1.6	0.37	0.25	0.19	0.15
	60	VF		0.12	15	8.9	7.1	5.9	4.5	3.6	3.0	2.4	1.8	0.41	0.27	0.20	0.16
TJ60-650134 (100)	30			0.12	15	8.9	7.1	5.9	4.5	3.6	3.0	2.4	1.8	0.41	0.27	0.20	0.16
	35			0.13	17	9.7	7.7	6.4	4.8	3.9	3.2	2.6	1.9	0.44	0.29	0.22	0.18
	40			0.134	17	9.9	8.0	6.6	5.0	4.0	3.3	2.7	2.0	0.46	0.30	0.23	0.18
	50			0.15	19	11.1	8.9	7.4	5.6	4.5	3.7	3.0	2.2	0.51	0.34	0.26	0.20
	60			0.16	20	11.9	9.5	7.9	5.9	4.8	4.0	3.2	2.4	0.54	0.36	0.27	0.22
TJ60-6502 TJ60-8002 TJ60-11002 (100)	30	F	F	0.17	22	12.6	10.1	8.4	6.3	5.0	4.2	3.4	2.5	0.58	0.39	0.29	0.23
	35	F	VF	0.19	24	14.1	11.3	9.4	7.1	5.6	4.7	3.8	2.8	0.65	0.43	0.32	0.26
	40	F	VF	0.20	26	14.9	11.9	9.9	7.4	5.9	5.0	4.0	3.0	0.68	0.45	0.34	0.27
	50	F	VF	0.22	28	16.3	13.1	10.9	8.2	6.5	5.4	4.4	3.3	0.75	0.50	0.37	0.30
	60	F	VF	0.24	31	17.8	14.3	11.9	8.9	7.1	5.9	4.8	3.6	0.82	0.54	0.41	0.33
TJ60-6503 TJ60-8003 TJ60-11003 (100)	30	F	F	0.26	33	19.3	15.4	12.9	9.7	7.7	6.4	5.1	3.9	0.88	0.59	0.44	0.35
	35	F	F	0.28	36	21	16.6	13.9	10.4	8.3	6.9	5.5	4.2	0.95	0.63	0.48	0.38
	40	F	F	0.30	38	22	17.8	14.9	11.1	8.9	7.4	5.9	4.5	1.0	0.68	0.51	0.41
	50	F	F	0.34	44	25	20	16.8	12.6	10.1	8.4	6.7	5.0	1.2	0.77	0.58	0.46
	60	F	F	0.37	47	27	22	18.3	13.7	11.0	9.2	7.3	5.5	1.3	0.84	0.63	0.50
TJ60-6504 TJ60-8004 TJ60-11004 (50)	30	M	F	0.35	45	26	21	17.3	13.0	10.4	8.7	6.9	5.2	1.2	0.79	0.60	0.48
	35	M	F	0.37	47	27	22	18.3	13.7	11.0	9.2	7.3	5.5	1.3	0.84	0.63	0.50
	40	F	F	0.40	51	30	24	19.8	14.9	11.9	9.9	7.9	5.9	1.4	0.91	0.68	0.54
	50	F	F	0.45	58	33	27	22	16.7	13.4	11.1	8.9	6.7	1.5	1.0	0.77	0.61
	60	F	F	0.49	63	36	29	24	18.2	14.6	12.1	9.7	7.3	1.7	1.1	0.83	0.67
TJ60-8005 TJ60-11005 (50)	30	M	M	0.43	55	32	26	21	16.0	12.8	10.6	8.5	6.4	1.5	0.97	0.73	0.58
	35	M	M	0.47	60	35	28	23	17.4	14.0	11.6	9.3	7.0	1.6	1.07	0.80	0.64
	40	M	M	0.50	64	37	30	25	18.6	14.9	12.4	9.9	7.4	1.7	1.13	0.85	0.68
	50	F	F	0.56	72	42	33	28	21	16.6	13.9	11.1	8.3	1.9	1.3	0.95	0.76
	60	F	F	0.61	78	45	36	30	23	18.1	15.1	12.1	9.1	2.1	1.4	1.04	0.83
TJ60-6506 TJ60-8006 TJ60-11006 (50)	30	M	M	0.52	67	39	31	26	19.3	15.4	12.9	10.3	7.7	1.8	1.2	0.88	0.71
	35	M	M	0.56	72	42	33	28	21	16.6	13.9	11.1	8.3	1.9	1.3	0.95	0.76
	40	M	M	0.60	77	45	36	30	22	17.8	14.9	11.9	8.9	2.0	1.4	1.0	0.82
	50	M	F	0.67	86	50	40	33	25	19.9	16.6	13.3	9.9	2.3	1.5	1.1	0.91
	60	M	F	0.73	93	54	43	36	27	22	18.1	14.5	10.8	2.5	1.7	1.2	0.99
TJ60-6508 TJ60-8008 TJ60-11008 (50)	30	C	M	0.69	88	51	41	34	26	20	17.1	13.7	10.2	2.3	1.6	1.2	0.94
	35	M	M	0.75	96	56	45	37	28	22	18.6	14.9	11.1	2.6	1.7	1.3	1.0
	40	M	M	0.80	102	59	48	40	30	24	19.8	15.8	11.9	2.7	1.8	1.4	1.1
	50	M	M	0.89	114	66	53	44	33	26	22	17.6	13.2	3.0	2.0	1.5	1.2
	60	M	M	0.98	125	73	58	49	36	29	24	19.4	14.6	3.3	2.2	1.7	1.3
TJ60-8010 TJ60-11010 (50)	30	C	M	0.87	111	65	52	43	32	26	22	17.2	12.9	3.0	2.0	1.5	1.2
	35	C	M	0.94	120	70	56	47	35	28	23	18.6	14.0	3.2	2.1	1.6	1.3
	40	C	M	1.00	128	74	59	50	37	30	25	19.8	14.9	3.4	2.3	1.7	1.4
	50	M	M	1.12	143	83	67	55	42	33	28	22	16.6	3.8	2.5	1.9	1.5
	60	M	M	1.22	156	91	72	60	45	36	30	24	18.1	4.1	2.8	2.1	1.7

Note: Always double check your application rates.
Tabulations are based on spraying water at 70°F (21°C).

Very Fine · Fine · Medium · Coarse · Very Coarse · Extremely Coarse

CONTACT PRODUCT	SYSTEMIC PRODUCT	DRIFT MANAGEMENT
EXCELLENT	—	—



Optimum Spray Height

	20″
65°	35″
80°	30″
110°	20″

See pages 173–187 for drop size classification, useful formulas and information.

How to order:

Specify tip number.
Example:

TJ60-8002VS – Stainless Steel with VisiFlo color-coding