



**Great Plains**  
Manufacturing, Inc.

## *Seed, Small Seeds, and Fertilizer Rate Charts*

The following pages are to assist in the proper setting of seeding and fertilizer rates for the 1205NT End-Wheel, No-Till drill. The rates indicated in the charts are approximate values. To assure the most accurate seeding rate it is recommended that the drill be calibrated for the desired seed at the time of planting.

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## Seeding Rate

Calibrating the seeding rate requires four steps:

1. selecting one of four drive types,
2. setting the seed-rate handle,
3. positioning the feed-cup door, and
4. checking the seed rate.

Refer to the seed rate charts beginning on page 5. These charts list the proper drive type and seed-rate-handle settings for various seeds and seeding rates.

The seed rate charts are based on cleaned, untreated seed of average size and test weight. The rates are based on 295/75/R22.5 rib implement tires. Many factors will affect seeding rates including foreign material, seed treatment, seed size, field conditions, tire pressure and test weight. Minor adjustments likely will be needed. Set and check the seeding rate using the procedures on page 4, then adjust the rate as necessary.

### Select Drive Type

*Refer to Figure 1*

The gearbox is designed to give you a variety of drive speeds for different types of seeds and rates. It is a linear shift pattern design with constant mesh gearing and totally sealed to keep the dirt out. No lubrication is required unless service is needed.

The gearbox brass indicator plate is positioned so the side with "1" is closest to the center of the drill.

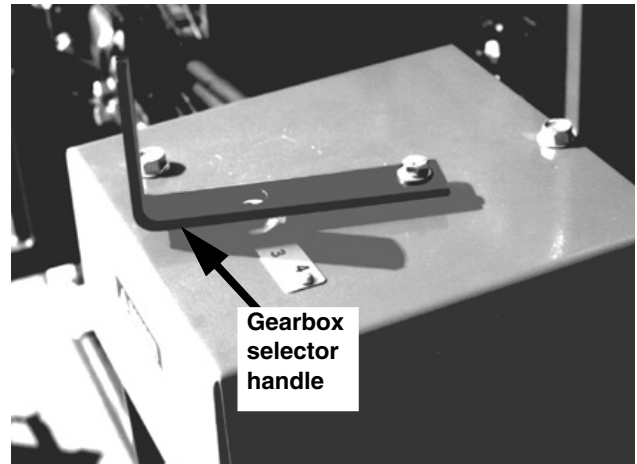
To set the gearbox move the selector handle until the desired drive type appears in the window on the handle.

See Table 1 for gear box ratios.

### Set Seed-Rate Handle

*Refer to Figure 2*

Position the seed-rate handle to setting indicated on seed rate chart. To adjust, loosen wing nut under handle. Slide handle until indicator lines up with correct setting.

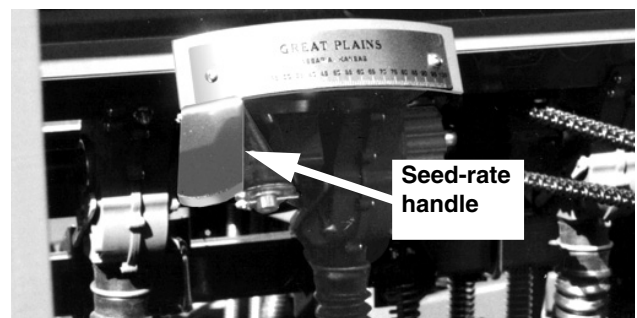


**Figure 1**  
Gearbox Handle Adjustment

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Gear Box Ratios
Setting 2 is 2.06 Times Faster Than 1
Setting 3 is 3.08 Times Faster Than 1
Setting 4 is 5.03 Times Faster Than 1

**Table 1**



**Figure 2**  
Seed-rate Handle Adjustment

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## Position Feed-Cup Doors

Refer to Figure 3

For wheat and other small seeds, move feed cup door handles to highest position. For soybeans and other large seeds, lower handles to second position. If excessive seed cracking occurs, lower handles to third position. Move handles to fourth, wide-open position, for seed cup clean out. Make sure all handles are in same position before drilling.

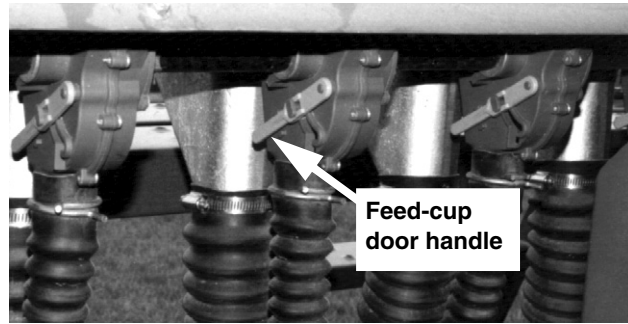
Note: Do not open cup to wide open position with seeds in the box unless complete clean out is desired.

## Check Seed Rate

**NOTE: For drills built after October 1, 2005,** use the gauge wheel tire or supplied calibration crank to calibrate. **For drills built before October 1, 2005,** use the gauge wheel to calibrate or order the calibration crank kit available through your Great Plains Dealer.

- To calibrate, use either the left hand gauge wheel or the supplied calibration crank. If using the calibration crank, attach crank to coupler on gauge wheel jackshaft with retaining pin and disengage lockout on drive wheel.
- Rotate left hand gauge wheel or calibration crank to see that feed cups and drive are working properly and are free from foreign matter.
- To adjust seeding rate, decide which drive type (gearbox) setting you need from the seeding charts beginning on page 5. Set the gearbox. Rotate drive tire or calibration crank a few turns to confirm gearbox has engaged.
- Record weight of an empty container large enough to hold seed metered for one acre.
- Place several pounds of seed over three seed cups on an outside end of drill box. Pull seed tubes off of these three openers.
- Turn drive gauge wheel or calibration crank several times to fill seed cups with seed. Turn wheel or crank until seed falls to the ground from each cup.
- Rotate drive gauge wheel 346 rotations. This is equal to one acre.

**NOTE:** You can also rotate the gauge wheel jackshaft by means of a wrench or socket. If rotating gauge wheel jackshaft, disengage the lockout on the drive wheel and use same number of rotations as for rotating drive wheel.



**Figure 3**  
**Feed-cup Door Handle Adjustment**

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- Check that the three seed cups have plenty of seed coming into them.
- Weigh metered seed. Subtract initial weight of container. Divide by three. Multiply by the number of openers on your drill to determine total pounds seeded per acre. If this figure is different than desired, set your seed rate adjustment handle accordingly.

Note: You may want to repeat the calibration procedure if your results vary greatly from seed rate chart.

- When drilling, check seeding rate by noting acres drilled, amount of seed added to drill and seed level in drill box. If you are seeding more or less than desired, adjust seeding rate slightly to compensate for field conditions.

## Equations for calibrating seed rate:

$$\frac{\text{measured seed} - \text{empty container}}{3 \text{ (number of seed cups measured)}} = \text{pounds per seed cup}$$

$$\text{pounds per seed cup} \times \text{number of openers} = \text{pounds per acre}$$



**1205NT Calibration Crank**

## Seed Rate Charts for Imperial Measurement (pounds per acre)

Setting number		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>Wheat</b> Drive Type 2 (Based on 64#/bu)	Row Spacing	7"	0	11	19	26	34	43	49	60	69	78	90	99	109	120	131	141	152	163	174	176	177
		7.5"	0	10	18	24	32	40	46	56	64	73	84	92	102	112	122	131	142	152	162	164	165
		8"	0	9	17	23	30	37	43	52	60	69	79	86	96	105	114	123	133	143	152	153	154
		10"	0	8	13	18	24	30	34	42	48	55	63	69	76	84	91	99	106	114	122	123	124
<b>Wheat</b> Drive Type 3 (Based on 64#/bu)	Row Spacing	7"	0	14	26	38	51	64	75	89	103	117	131	144	159	174	189	206	219	235	248	254	256
		7.5"	0	13	25	36	48	59	70	83	96	109	123	134	149	162	176	192	205	219	232	237	239
		8"	0	12	23	34	45	56	66	78	90	102	115	126	139	152	165	180	192	205	217	223	224
		10"	0	10	18	27	36	45	53	62	72	82	92	101	111	121	132	144	154	164	174	178	179
<b>Rice</b> Short Grain Drive Type 3 (Based on 43#/bu)	Row Spacing	7"	3	9	16	24	33	39	48	54	63	72	82	92	101	110	119	127	134	142	149	149	149
		7.5"	2	9	14	23	31	37	44	51	59	67	77	85	94	102	111	118	125	132	139	139	139
		8"	2	8	14	21	29	34	42	48	55	63	72	80	88	96	104	111	117	124	131	131	131
		10"	2	7	11	17	23	27	33	38	44	50	57	64	70	77	83	89	94	99	105	105	105
<b>Rice</b> Short Grain Drive Type 4 (Based on 43#/bu)	Row Spacing	7"	4	15	25	40	54	64	78	89	103	117	134	149	164	179	194	207	219	231	243	243	243
		7.5"	4	14	24	37	50	60	72	83	96	109	125	139	153	167	181	193	204	215	227	227	227
		8"	4	13	22	35	47	56	68	78	90	102	117	131	143	156	169	181	191	202	213	213	213
		10"	3	11	18	28	38	45	54	62	72	82	94	105	115	125	136	145	153	162	170	170	170
<b>Rice</b> Long Grain Drive Type 3 (Based on 47#/bu)	Row Spacing	7"	0	0	11	19	27	36	45	53	61	69	77	84	91	99	107	116	124	131	138	143	148
		7.5"	0	0	11	17	25	34	42	49	57	65	72	79	85	92	100	108	116	123	129	134	138
		8"	0	0	10	16	24	31	40	46	53	61	67	74	80	87	94	101	108	115	121	125	130
		10"	0	0	8	13	19	25	32	37	42	49	54	59	64	69	75	81	87	92	97	100	104
<b>Rice</b> Long Grain Drive Type 4 (Based on 47#/bu)	Row Spacing	7"	0	0	18	30	44	59	74	86	99	113	125	137	149	161	175	188	202	214	225	234	242
		7.5"	0	0	17	28	41	55	69	80	92	105	117	128	139	151	163	176	188	200	210	218	226
		8"	0	0	16	27	39	51	65	75	87	99	110	120	130	141	153	165	177	187	197	204	211
		10"	0	0	13	21	31	41	52	60	69	79	88	96	104	113	123	132	141	150	158	164	169
<b>Barley</b> Drive Type 1 (Based on 51#/bu)	Row Spacing	7"	2	4	7	9	12	16	19	22	26	30	33	37	41	45	49	53	56	59	62	63	63
		7.5"	2	4	6	9	12	15	18	21	24	28	31	35	38	42	46	49	52	55	58	59	59
		8"	1	3	6	8	11	14	17	20	23	26	29	32	36	40	43	46	49	52	54	55	55
		10"	1	3	5	6	9	11	13	16	18	21	23	26	29	32	34	37	39	42	44	44	44
<b>Barley</b> Drive Type 2 (Based on 51#/bu)	Row Spacing	7"	3	7	14	19	26	32	39	46	53	61	68	75	82	89	97	105	114	122	130	132	134
		7.5"	3	7	13	17	24	30	36	43	49	57	64	70	77	83	91	98	106	114	121	123	125
		8"	3	7	12	16	22	28	34	40	46	53	60	65	72	78	85	92	100	107	114	116	117
		10"	2	5	10	13	18	22	27	32	37	43	48	52	58	63	68	74	80	85	91	92	94
<b>Barley</b> Drive Type 4 (Based on 51#/bu)	Row Spacing	7"	7	18	33	45	63	78	95	113	130	149	166	182	201	218	238	257	278	299	318	323	328
		7.5"	7	17	31	42	58	72	88	105	121	139	155	170	188	204	222	240	260	279	297	301	306
		8"	6	16	29	40	55	68	83	99	113	130	146	160	176	191	208	225	244	261	278	282	287
		10"	5	13	23	32	44	54	66	79	91	104	117	128	141	153	167	180	195	209	222	226	230
<b>Oats</b> Drive Type 3 (Based on 37#/bu)	Row Spacing	7"	0	5	10	15	21	27	33	40	47	54	62	68	76	82	90	97	104	111	119	120	120
		7.5"	0	4	10	14	19	25	31	37	44	51	58	64	70	77	84	90	97	104	111	112	112
		8"	0	4	9	13	18	24	29	35	41	47	54	60	66	72	78	85	91	97	104	105	105
		10"	0	3	7	10	14	19	23	28	33	38	43	48	53	58	63	68	73	78	83	84	84

Setting number		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>Rye</b> Drive Type 1 (Based on 57#/bu)	Row Spacing	7"	0	2	7	11	16	21	24	30	35	40	45	50	54	59	63	69	74	80	87	87	88
		7.5"	0	2	6	10	15	19	22	28	33	38	42	46	50	55	59	64	69	75	81	81	82
		8"	0	2	6	10	14	18	21	26	31	35	40	44	47	51	55	60	65	70	76	76	77
		10"	0	2	5	8	11	14	17	21	24	28	32	35	38	41	44	48	52	56	61	61	61
<b>Millet</b> Drive Type 1 (Based on 60#/bu)	Row Spacing	7"	1	4	7	10	13	17	20	23	27	31	34	38	42	45	49	53	57	61	65	66	67
		7.5"	1	4	7	9	13	16	19	22	25	29	32	35	39	42	46	49	53	57	61	62	63
		8"	1	4	6	9	12	15	18	20	24	27	30	33	36	39	43	46	50	53	57	58	59
		10"	1	3	5	7	9	12	14	16	19	21	24	26	29	32	34	37	40	43	46	46	47
<b>Buck Wheat</b> Drive Type 3 (Based on 48#/bu)	Row Spacing	7"	0	10	18	25	36	45	56	67	79	92	106	116	129	142	154	168	179	192	217	207	210
		7.5"	0	9	17	24	34	42	52	62	74	85	99	109	120	132	144	156	167	179	202	194	196
		8"	0	8	16	22	31	39	49	59	69	80	92	102	113	124	135	147	157	168	189	181	183
		10"	0	7	13	18	25	31	39	47	55	64	74	81	90	99	108	117	126	134	152	145	147
<b>Flax or Sudan</b> Drive Type 1 (Based on 55#/bu)	Row Spacing	7"	0	3	7	10	14	17	21	24	28	32	36	39	43	47	51	55	60	65	70	71	73
		7.5"	0	3	7	9	13	16	19	23	26	30	34	37	40	44	47	52	56	61	66	67	68
		8"	0	3	6	9	12	15	18	21	25	28	31	34	37	41	44	49	52	57	61	62	64
		10"	0	2	5	7	10	12	15	17	20	22	25	27	30	33	35	39	42	45	49	50	51
<b>Sun flowers</b> Drive Type 1 (Based on 28#/bu)	Row Spacing	7"	0	0	2	4	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	34	35
		7.5"	0	0	2	3	5	7	9	10	12	14	16	18	20	22	24	26	27	29	31	32	33
		8"	0	0	2	3	5	6	8	10	12	13	15	17	19	21	22	24	26	27	29	30	31
		10"	0	0	1	3	4	5	6	8	9	11	12	14	15	16	18	19	20	22	23	24	24
<b>Soybeans</b> Drive Type 1 (Based on 58#/bu)	Row Spacing	7"	0	2	7	11	17	20	25	29	34	38	42	48	52	57	61	67	70	75	79	80	80
		7.5"	0	2	6	11	15	19	23	27	31	36	40	44	49	53	57	62	65	70	74	74	75
		8"	0	2	6	10	15	17	22	25	29	34	37	42	46	50	54	58	61	65	69	70	70
		10"	0	2	5	8	12	14	17	20	24	27	30	33	37	40	43	46	49	52	56	56	56
<b>Soybeans</b> Drive Type 2 (Based on 58#/bu)	Row Spacing	7"	0	5	14	23	34	41	51	59	69	79	87	98	107	117	126	136	144	153	163	164	164
		7.5"	0	5	13	22	32	38	47	55	64	73	81	91	100	109	118	127	134	143	152	153	153
		8"	0	4	12	20	30	36	44	52	60	69	76	86	94	102	110	119	126	134	143	143	144
		10"	0	4	10	16	24	29	35	42	48	55	61	68	75	82	88	95	101	107	114	115	115
<b>Soybeans</b> Drive Type 3 (Based on 58#/bu)	Row Spacing	7"	0	10	19	35	51	61	76	87	100	113	127	141	155	168	183	195	213	227	244	243	244
		7.5"	0	9	18	32	48	57	71	81	93	105	119	131	145	157	171	182	199	212	227	227	228
		8"	0	9	17	30	45	53	67	76	87	99	111	123	136	147	160	171	186	199	213	213	213
		10"	0	7	14	24	36	42	53	61	70	79	89	98	108	118	128	137	149	159	170	170	171
<b>Peas</b> Drive Type 3 (Based on 61#/bu)	Row Spacing	7"	0	8	16	29	45	59	72	87	102	118	132	145	160	173	187	202	215	228	241	243	244
		7.5"	0	8	15	27	42	55	67	82	95	110	123	136	149	161	175	188	201	213	225	226	227
		8"	0	7	14	26	39	52	63	76	89	103	116	127	140	151	164	177	188	200	211	212	213
		10"	0	6	11	20	31	41	50	61	71	82	93	102	112	121	131	141	151	160	169	170	171
<b>Pinto Beans</b> Drive Type 1 (Based on 61#/bu)	Row Spacing	7"	0	0	7	11	15	20	25	30	35	40	45	50	55	59	64	69	73	78	83	83	83
		7.5"	0	0	7	10	14	19	24	28	33	38	42	47	51	55	60	65	68	73	77	77	77
		8"	0	0	6	10	13	18	22	27	31	35	40	44	48	52	56	61	64	68	72	72	72
		10"	0	0	5	8	10	14	18	21	25	28	32	35	38	41	45	49	51	54	58	58	58

Setting number		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<b>Alfalfa or Rape</b> Drive Type 1 (Based on 60#/bu)	Row Spacing 7"	2	5	7	10	13	16	20	23	27	32	35	38	43	47	51	54	59	63	68	70	72
	Row Spacing 7.5"	2	4	7	10	12	15	18	22	25	29	33	36	40	43	47	51	55	59	63	65	67
	Row Spacing 8"	2	4	6	9	12	14	17	20	24	28	31	34	37	41	44	47	52	55	60	61	63
	Row Spacing 10"	1	3	5	7	9	12	14	16	19	22	25	27	30	33	35	38	41	44	48	49	50
<b>Milo</b> Drive Type 1 (Based on 64#/bu)	Row Spacing 7"	0	4	8	11	15	19	24	29	34	38	44	49	54	59	64	69	74	79	84	86	88
	Row Spacing 7.5"	0	4	7	10	14	18	22	27	31	36	41	45	50	55	60	65	69	73	78	80	82
	Row Spacing 8"	0	4	7	10	13	17	21	25	29	34	39	43	47	52	56	61	65	69	73	75	77
	Row Spacing 10"	0	3	5	8	11	14	17	20	23	27	31	34	38	41	45	49	52	55	59	60	61
<b>Wheat Grass</b> Drive Type 1 (Based on 23#/bu)	Row Spacing 7"	0	1	2	3	4	4	5	6	7	8	9	10	11	12	13	14	15	17	16	18	18
	Row Spacing 7.5"	0	1	2	2	3	4	5	6	7	8	9	10	11	11	12	13	14	15	15	17	17
	Row Spacing 8"	0	1	2	2	3	4	5	6	6	7	8	9	10	11	12	13	13	15	14	16	16
	Row Spacing 10"	0	1	1	2	3	3	4	4	5	6	7	7	8	9	9	10	11	12	11	13	13

## Small Seeds Attachment

To set and calibrate the seeding rate on the optional small seeds attachment, follow these steps:

**NOTE: For drills built after October 1, 2005,** calibrate using gauge wheel or supplied calibration crank. **For drills built before October 1, 2005,** calibrate using gauge wheel or order the calibration crank kit available through your Great Plains Dealer.

1. To calibrate, use either the left hand gauge wheel or the supplied calibration crank. If using the calibration crank, attach crank to coupler on gauge wheel jackshaft with retaining pin and disengage lockout on drive wheel.
2. Rotate left hand gauge wheel or calibration crank to see that feed cups and drive are working properly and are free from foreign matter.
3. From the small seeds seed rate chart on page 9 find the setting number for desired feeding rate (and row spacing). Move the small seed cup adjustment lever to that setting number.
4. Record weight of an empty container large enough to hold seed metered for one acre.
5. Place several pounds of seed over three seed cups on an outside end of drill box. Pull seed tubes off of these three openers.
6. Turn drive gauge wheel or calibration crank several times to fill seed cups with seed. Turn wheel or crank until seed falls to the ground from each cup.
7. Rotate drive gauge wheel or calibration crank 346 rotations. This is equal to one acre.

**NOTE:** You can also rotate the gauge wheel jackshaft by means of a wrench or socket. If rotating gauge wheel jackshaft, disengage the lockout on the drive wheel and use same number of rotations as for rotating drive wheel.

8. Check that the three seed cups have plenty of seed coming into them.
9. Weigh metered seed. Subtract initial weight of container. Divide by three. Multiply by the number of openers on your drill to determine total pounds seeded per acre. If this figure is different than desired, set your seed rate adjustment handle accordingly.

**Note:** You may want to repeat the calibration procedure if your results vary greatly from seed rate chart.



**1205NT Calibration Crank**

### Equations for calibrating seed rate:

$$\frac{\text{measured seed} - \text{empty container}}{3 \text{ (number of seed cups measured)}} = \text{pounds per seed cup}$$

$$\text{pounds per seed cup} \times \text{number of openers} = \text{pounds per acre}$$

10. When drilling, check seeding rate by noting acres drilled, amount of seed added to small seed box and seed level in small seeds box. If you are seeding more or less than desired, adjust seeding rate slightly to compensate for field conditions.

## Small Seeds Attachment Seed Rate Chart (pounds per acre)

Setting Number		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>Kentucky Blue Grass, Fescue, Annual Rye Grass</b>	Row Spacing	7"	0	.2	1.0	1.6	2.3	2.8	3.5	4.0	4.5	5.0	5.4	5.9	6.3	6.7	7.1	7.5	7.9	8.0	8.6	9.0
		7.5"	0	.2	.9	1.5	2.2	2.7	3.3	3.7	4.2	4.6	5.1	5.5	5.9	6.3	6.7	7.0	7.4	7.7	8.1	8.4
		8"	0	.2	.9	1.4	2.0	2.5	3.0	3.5	3.9	4.3	4.8	5.1	5.5	5.9	6.2	6.6	6.9	7.5	7.5	7.9
		10"	0	.1	.7	1.1	1.6	2.0	2.4	2.7	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	5.4	5.7	5.9	6.2
<b>Ladino Clover, Canary Grass, Timothy, Canola</b>	Row Spacing	7"	0	.9	1.7	2.8	4.1	5.2	6.6	7.9	9.2	10.5	11.8	13.3	14.6	15.9	17.4	18.7	20.0	22.0	23.4	25.1
		7.5"	0	.9	1.6	2.6	3.9	4.9	6.1	7.4	8.6	9.8	11.1	12.5	13.7	14.9	16.3	17.6	18.8	20.4	21.9	23.5
		8"	0	.8	1.5	2.5	3.6	4.6	5.7	6.9	8.0	9.2	10.3	11.6	12.8	13.9	15.2	16.4	17.5	19.0	20.5	21.9
		10"	0	.6	1.5	1.9	2.5	3.6	4.5	5.4	6.3	7.2	8.1	9.1	10.0	10.9	12.0	12.9	13.8	14.9	16.1	17.2
<b>Bermuda, Red Top, Unhulled Lespedeza, Sericia, Sand &amp; Weeping Love Grass</b>	Row Spacing	7"	0	.6	.9	1.5	2.2	2.8	3.6	4.3	5.1	5.6	6.2	6.7	7.1	7.7	8.1	8.7	9.4	10.0	10.5	11.0
		7.5"	0	.5	.9	1.4	2.1	2.6	3.3	4.0	4.7	5.3	5.8	6.3	6.7	7.2	7.6	8.2	8.8	9.3	9.8	10.4
		8"	0	.5	.8	1.3	2.0	2.5	3.1	3.8	4.4	4.9	5.4	5.9	6.5	6.7	7.1	7.6	8.2	8.7	9.2	9.7
		10"	0	.4	.6	1.0	1.5	1.9	2.4	3.0	3.5	3.9	4.2	4.6	4.9	5.3	5.6	6.0	6.4	6.8	7.2	7.6
<b>Red &amp; Sweet Clover, Lespedeza Hulled</b>	Row Spacing	7"	0	1.3	2.9	4.5	6.1	7.7	9.7	11.3	13.1	14.6	16.3	17.8	19.3	21.0	22.7	24.6	25.8	27.5	29.0	30.5
		7.5"	0	1.2	2.7	4.2	5.7	7.2	9.1	10.6	12.3	13.7	15.3	16.7	18.1	19.7	21.2	22.7	24.2	25.8	27.2	28.6
		8"	0	1.1	2.5	3.9	5.3	6.7	8.5	9.9	11.5	12.8	14.3	15.6	16.9	18.3	19.8	21.2	22.6	24.1	25.4	26.7
		10"	0	.9	2.0	3.1	4.2	5.3	6.7	7.8	9.0	10.0	11.2	12.2	13.3	14.4	15.6	16.6	17.8	18.9	19.9	20.9
<b>Bird's-foot Trefoil, Sudan</b>	Row Spacing	7"	0	1.5	2.8	4.5	5.8	7.5	9.2	10.9	12.5	14.4	16.5	18.2	20.0	21.9	24.0	25.6	27.5	29.0	31.1	32.9
		7.5"	0	1.4	2.6	4.2	5.4	7.0	8.6	10.2	11.9	13.5	15.4	17.0	18.8	20.5	22.5	24.0	25.8	27.6	29.1	30.9
		8"	0	1.3	2.5	3.9	5.1	6.6	8.1	9.5	11.0	12.6	14.4	15.9	17.5	19.2	21.0	22.4	24.1	25.7	27.2	28.8
		10"	0	1.0	1.9	3.1	4.0	5.1	6.3	7.5	8.6	9.9	11.3	12.5	13.8	15.1	16.5	17.6	18.9	20.2	21.4	22.7
<b>Orchard Grass</b>	Row Spacing	7"	0	0	.2	.6	.7	1.1	1.3	1.7	2.1	2.4	2.8	3.0	3.4	3.7	4.1	4.3	4.7	5.0	5.2	5.4
		7.5"	0	0	.2	.5	.7	1.1	1.2	1.6	1.9	2.3	2.6	2.8	3.2	3.5	3.9	4.0	4.4	4.6	4.9	5.1
		8"	0	0	.2	.5	.7	1.0	1.1	1.5	1.8	2.1	2.5	2.6	2.9	3.3	3.6	3.8	4.1	4.3	4.6	4.8
		10"	0	0	.1	.4	.5	.8	.9	1.2	1.4	1.7	1.9	2.1	2.3	2.6	2.8	3.0	3.2	3.3	3.6	3.7
<b>Millet, Reed Canary</b>	Row Spacing	7"	.4	1.2	2.1	3.0	3.8	4.7	5.6	6.4	7.3	8.1	9.0	9.9	10.7	11.6	12.5	13.3	14.2	15.1	15.9	16.1
		7.5"	.3	1.2	2.0	2.8	3.6	4.4	5.2	6.0	6.8	7.6	8.4	9.3	10.1	10.9	11.7	12.5	13.3	14.1	14.9	15.1
		8"	.3	1.1	1.8	2.6	3.3	4.1	4.9	5.6	6.4	7.1	7.9	8.6	9.4	10.2	10.9	11.7	12.4	13.2	13.9	14.1
		10"	.3	.8	1.4	2.0	2.6	3.2	3.8	4.4	5.0	5.6	6.2	6.8	7.4	8.0	8.6	9.2	9.8	10.4	10.9	11.5
<b>Alfalfa, Red Alsike, Crimson Clover</b>	Row Spacing	7"	0	1.9	3.0	4.1	5.1	6.4	7.5	8.4	9.5	10.8	11.8	12.9	14.0	15.0	16.3	17.3	18.3	20.0	20.6	21.6
		7.5"	0	1.8	2.8	3.9	4.8	6.0	7.0	7.9	9.0	10.0	11.1	12.1	13.2	14.0	15.3	16.2	17.2	18.3	19.3	20.3
		8"	0	1.6	2.6	3.6	4.5	5.6	6.6	7.4	8.4	9.4	10.3	11.3	12.3	13.1	13.0	15.2	16.1	17.1	18.0	18.9
		10"	0	1.3	2.1	2.8	3.5	4.4	5.1	5.8	6.6	7.4	8.1	8.9	9.7	10.3	11.2	11.9	12.6	13.4	14.2	14.9

## Fertilizer Meter Rate

Fertilizer application rates will vary with fertilizer type, density and particle size. Relative humidity and field conditions can also affect application rates. The chart on page 11 is based on material with a density of 65 pounds per cubic foot (1.04 kg/L) and average particle size. Initially set rate according to the charts, then calibrate the drill to your material as described below.

**NOTE: For drills built after October 1, 2005,** calibrate using gauge wheels or supplied calibration crank. **For drills built before October 1, 2005,** calibrate using gauge wheels or order calibration crank kit available through your Great Plains Dealer.

1. To calibrate using gauge wheels, raise drill with tractor hydraulics so drive wheels are off the ground. To calibrate using supplied calibration crank, attach crank to coupler on gauge wheel jackshaft with retaining pin. Disengage lockout on the drive wheels.
2. Rotate drive wheels or calibration crank to see that metering system is working properly and free from foreign material.
3. From the chart on page 11, find the setting number for your row spacing and desired application rate. Rotate gate adjustment knob to the number obtained from the chart.

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**IMPORTANT:** The fertilizer rate chart is for granular fertilizer with a density of 65 pounds per cubic foot (1.04 kg/L). If you are applying fertilizer with a different density, use the density conversion chart.

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4. Check that gauge-wheel tires are the correct size and properly inflated. Refer to "Tire Inflation Chart", page 60.
5. Record the weight of an empty container large enough to hold fertilizer metered for one acre.
6. Place several pounds of fertilizer over three fertilizer feed cups on outside end of drill box. Pull fertilizer tubes off these three openers.
7. Turn gauge wheels or calibration crank a few turns to fill feed cups with material. Continue to turn until fertilizer drops to the ground from all three tubes.



1205NT Calibration Crank

### Equations for calibrating seed rate:

$$\frac{\text{measured seed} - \text{empty container}}{3 \text{ (number of seed cups measured)}} = \text{pounds per seed cup}$$

$$\text{pounds per seed cup} \times \text{number of openers} = \text{pounds per acre}$$

**NOTE:** You can also rotate the gauge wheel jackshaft by means of a wrench or socket. If rotating gauge wheel jackshaft, disengage the lockout on the drive wheel and use same number of rotations as for rotating drive wheel.

8. Place a container under the three tubes to gather metered fertilizer.
9. Turn gauge wheel for approximately 346 rotations (one acre). Check that the three feed cups have plenty of fertilizer coming into them.
10. Weigh metered material. Subtract initial weight of the empty container. Divide by three. Multiply by the number of openers on your drill to determine total pounds-per-acre metered. If this figure is different than desired, reset adjustment knob accordingly.

Note: You may want to repeat the calibration procedure if your results vary greatly from the chart.

1. When drilling, check the rate by noting acres drilled, amount of fertilizer added to the drill and level of material in drill box. If you are applying more or less than desired, adjust the metering rate slightly to compensate for field conditions.

## Fertilizer Rate Chart (pounds per acre)

Setting number	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
Row Spacing	6"	13	25	48	67	89	112	131	154	173	197	218	234	261	279	292	303	306	308
	7"	13	23	41	57	78	95	111	131	148	165	184	199	221	235	246	256	259	261
	7.5"	11	20	38	54	72	89	105	123	138	157	174	187	209	223	234	242	245	247
	8"	11	20	36	50	69	84	98	115	130	146	163	176	195	207	219	226	228	231
	10"	8	16	29	40	54	67	79	92	104	118	131	140	157	167	175	182	183	185

## Density Conversion Chart

The fertilizer meter charts are based on fertilizer with a density of 65 pounds per cubic foot (1.04 kilograms per liter). If you are applying fertilizer of a different density, use the following table to convert application rate.

Density, lb/ft <sup>3</sup> (kg/l)	45.0 (0.72)	50.0 (0.80)	55.0 (0.88)	60.0 (0.96)	65.0 (1.04)	70.0 (1.12)	75.0 (0.87)	80.0 (0.81)
Conversion Factor	1.45	1.30	1.20	1.10	1.00	0.93	0.87	0.81

Example: Your fertilizer has a density of 75 pounds per cubic foot, and you want to apply 100 pounds per acre. Multiply the desired application rate by the conversion factor.

$$100 \times 0.87 = 87$$

Adjust drill to the setting closest to 87 pounds per acre.

### Seed Rate Charts for Metric Measurement (kilograms per hectare)

Setting number		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>Alfalfa or Rape</b> Drive Type 1 (Based on .64 Kg/liter)	Row Spacing	15.2cm	2.5	6.2	9.3	13.5	17.3	21.4	25.6	30.5	35.4	41.2	46.0	50.3	55.7	60.9	66.2	71.0	77.1	83.0	89.0	91.6	94.3
		17.8cm	2.0	5.3	8.0	11.6	14.8	18.4	22.0	26.2	30.3	35.4	39.4	43.1	47.7	52.2	56.8	60.9	66.1	71.1	76.3	78.6	80.8
		19.1cm	1.9	4.9	7.5	10.8	13.8	17.2	20.5	24.4	28.3	33.0	36.8	40.3	44.6	48.7	53.0	56.8	61.7	66.4	71.2	73.3	75.4
		20.3cm	1.8	4.6	7.1	10.1	12.9	16.1	19.2	22.9	26.5	30.9	34.5	37.7	41.8	45.6	49.6	53.2	57.8	62.2	66.8	68.7	70.7
		25.4cm	1.5	3.7	5.6	8.1	10.3	12.9	15.4	18.3	21.2	24.7	27.6	30.2	33.5	36.5	39.7	42.6	46.3	49.7	53.4	55.0	56.6
<b>Barley</b> Drive Type 1 (Based on .54 Kg/liter)	Row Spacing	15.2cm	2.1	5.1	8.5	12.0	16.2	20.3	24.9	29.3	33.8	38.7	43.7	48.6	53.7	59.3	64.1	69.3	73.5	77.6	81.5	82.1	82.7
		17.8cm	1.8	4.4	7.3	10.2	13.8	17.4	21.3	25.1	29.0	33.2	37.5	41.7	46.0	50.9	55.0	59.4	63.1	66.5	69.8	70.4	71.0
		19.1cm	1.7	4.0	6.8	9.5	12.9	16.3	20.0	23.5	27.1	31.0	34.9	38.8	43.0	47.4	51.3	55.5	58.8	62.1	65.2	65.7	68.2
		20.3cm	1.6	3.8	6.4	9.0	12.1	15.2	18.7	22.0	25.4	29.1	32.8	36.4	40.3	44.5	48.1	52.0	55.1	58.2	61.1	61.5	62.1
		25.4cm	1.2	3.0	5.1	7.2	9.7	12.1	14.9	17.6	20.3	23.2	26.2	29.2	32.2	35.6	38.5	41.5	44.1	46.6	48.8	49.3	49.6
<b>Barley</b> Drive Type 2 (Based on .54 Kg/liter)	Row Spacing	15.2cm	3.9	9.8	17.9	24.3	33.5	41.5	50.6	60.3	69.4	79.7	85.8	97.7	107.6	116.9	127.4	137.8	149.1	159.9	170.2	172.9	175.6
		17.8cm	3.4	8.3	15.3	20.8	28.6	35.6	43.4	51.6	59.4	68.4	76.3	83.8	92.2	100.1	109.2	118.1	127.8	137.1	145.8	148.2	150.4
		19.1cm	3.1	7.7	14.3	19.3	26.7	33.2	40.5	48.3	55.5	63.8	71.3	78.1	86.1	93.5	101.9	110.1	119.2	127.9	136.1	138.2	140.4
		20.3cm	2.9	7.3	13.4	18.2	25.0	31.1	37.9	45.2	52.0	59.8	66.8	73.2	80.7	87.7	95.7	103.3	111.8	119.9	127.7	129.7	131.7
		25.4cm	2.4	5.8	10.7	14.5	20.1	24.9	30.4	36.2	41.7	47.8	53.4	58.6	64.6	70.2	76.5	82.6	89.5	95.9	100.1	103.7	105.3
<b>Barley</b> Drive Type 4 (Based on .54 Kg/liter)	Row Spacing	15.2cm	9.5	23.8	43.6	59.2	81.8	101.5	123.8	147.4	169.6	195.0	217.9	238.8	263.2	285.8	311.8	336.8	364.5	391.0	416.1	422.7	429.3
		17.8cm	8.2	20.4	37.3	50.7	70.2	87.0	106.2	126.4	145.4	167.2	186.8	204.7	225.6	245.0	267.2	288.9	312.6	335.1	356.7	362.3	368.0
		19.1cm	7.6	19.0	34.8	47.4	65.5	81.2	99.1	118.0	135.7	155.9	174.4	191.1	210.5	228.7	249.5	269.4	291.7	312.8	332.9	338.2	343.4
		20.3cm	7.2	17.9	32.7	44.3	61.4	76.1	92.8	110.6	127.2	146.3	163.5	179.2	197.4	214.4	233.9	252.6	273.5	293.2	312.1	317.1	322.0
		25.4cm	5.7	14.3	26.2	35.5	49.1	60.9	74.3	88.5	101.8	117.0	130.8	143.3	157.9	171.5	187.0	202.1	218.8	234.6	249.7	253.6	257.7
<b>Buck Wheat</b> Drive Type 3 (Based on .51 Kg/liter)	Row Spacing	15.2cm	0.0	12.7	23.6	33.0	47.0	58.6	73.0	87.5	103.7	119.9	138.2	152.4	168.9	185.7	201.5	219.4	235.0	251.0	268.0	268.5	273.6
		17.8cm	0.0	10.9	20.2	28.3	40.3	50.3	62.5	75.0	88.9	102.8	118.4	130.6	144.7	159.2	172.8	188.1	201.4	215.6	226.7	229.3	233.1
		19.1cm	0.0	10.1	18.9	26.5	37.6	46.9	58.4	70.1	83.0	95.9	110.6	121.8	135.1	148.5	161.2	175.6	187.9	201.2	214.4	214.6	218.9
		20.3cm	0.0	9.4	17.6	24.8	35.3	44.0	54.8	65.7	77.8	89.9	103.6	114.3	126.6	139.3	151.2	164.6	176.3	188.6	201.0	201.7	202.6
		25.4cm	0.0	7.6	14.1	19.9	28.2	35.1	43.8	52.5	62.2	72.0	83.0	91.4	101.3	111.4	120.9	131.7	141.0	150.9	160.8	164.7	170.1
<b>Flax or Sudan</b> Drive Type 1 (Based on .58 Kg/liter)	Row Spacing	15.2cm	0.0	4.2	9.2	13.1	18.1	22.6	27.1	31.8	36.8	41.5	46.9	51.3	56.0	61.1	66.4	72.6	78.4	85.0	91.9	93.4	95.3
		17.8cm	0.0	3.6	7.9	11.2	15.5	19.4	23.2	27.2	31.5	35.6	40.3	44.0	48.1	52.3	56.8	62.2	67.1	72.9	78.8	80.2	81.6
		19.1cm	0.0	3.4	7.4	10.6	14.5	18.1	21.7	25.4	29.4	33.2	37.6	41.1	44.8	48.8	53.1	58.0	62.6	68.0	73.5	74.8	76.2
		20.3cm	0.0	3.1	6.8	9.9	13.6	17.0	20.3	23.8	27.6	31.1	35.3	38.5	42.0	45.8	49.7	54.5	58.7	63.8	68.9	70.1	71.4
		25.4cm	0.0	2.5	5.5	7.9	10.9	13.6	16.3	19.1	22.1	24.9	28.2	30.8	33.6	36.6	39.7	43.6	47.0	51.0	55.2	56.0	57.1
<b>Millet</b> Drive Type 1 (Based on .64 Kg/liter)	Row Spacing	15.2cm	1.6	5.3	9.2	13.1	17.6	21.9	26.3	30.5	35.4	40.1	44.7	49.4	54.5	58.8	64.0	69.3	74.1	79.5	85.1	86.4	87.7
		17.8cm	1.3	4.5	7.9	11.2	15.0	18.7	22.6	26.3	30.3	34.4	38.3	42.3	46.7	50.4	54.9	59.4	63.5	68.1	73.0	74.1	75.2
		19.1cm	1.2	4.2	7.4	10.6	14.0	17.5	21.0	24.5	28.3	32.0	35.7	39.5	43.6	47.0	51.2	55.5	59.3	63.5	68.0	69.2	70.2
		20.3cm	1.2	3.9	6.8	9.9	13.1	16.4	19.8	22.9	26.5	30.0	33.5	37.0	40.9	44.1	48.1	52.0	55.6	59.6	63.8	64.8	65.8
		25.4cm	0.9	3.1	5.5	7.9	10.6	13.1	15.7	18.3	21.2	24.0	26.8	29.6	32.7	35.4	38.4	41.5	44.5	47.7	51.1	51.9	52.7
<b>Milo</b> Drive Type 1 (Based on .68 Kg/liter)	Row Spacing	15.2cm	0.0	5.3	9.9	14.6	19.9	25.3	31.2	37.6	43.8	50.3	57.8	63.7	70.5	77.2	83.9	90.7	97.2	103.0	109.7	112.6	114.6
		17.8cm	0.0	4.5	8.4	12.6	17.1	21.7	26.7	32.2	37.6	43.1	49.5	54.6	60.5	66.2	71.9	77.8	83.3	88.2	94.0	96.6	98.2
		19.1cm	0.0	4.2	7.9	11.7	15.9	20.2	24.9	30.1	35.0	40.3	46.3	51.0	56.5	61.9	67.1	72.5	77.8	82.3	87.7	90.0	91.6
		20.3cm	0.0	3.9	7.4	11.0	14.9	18.9	23.4	28.2	32.9	37.7	43.3	47.7	52.9	57.9	62.9	68.0	72.9	77.1	82.2	84.4	85.9
		25.4cm	0.0	3.1	6.0	8.8	11.9	15.2	18.7	22.6	26.3	30.2	34.7	38.2	42.3	46.4	50.3	54.5	58.4	61.7	65.8	67.6	68.7
<b>Oats</b> Drive Type 3 (Based on .15 Kg/liter)	Row Spacing	15.2cm	0.0	5.8	13.6	19.4	26.9	35.4	43.4	52.5	51.5	71.0	81.1	89.5	98.8	107.9	117.3	126.8	136.1	145.5	155.6	155.8	158.8
		17.8cm	0.0	5.1	11.7	16.6	23.0	30.3	37.3	45.0	52.8	60.9	69.5	76.7	84.8	92.5	100.6	108.6	116.6	124.7	133.4	133.4	136.5
		19.1cm	0.0	4.7	10.9	15.6	21.5	28.3	34.7	42.0	49.3	56.8	64.8	71.5	79.0	86.3	93.9	101.4	108.9	116.4	124.4	124.5	127.5
		20.3cm	0.0	4.4	10.2	14.6	20.2	26.5	32.6	39.4	46.1	53.2	60.7	67.1	74.1	80.9	88.0	95.1	102.1	109.1	116.6	116.7	119.7
		25.4cm	0.0	3.5	8.2	11.7	16.2	21.2	26.0	31.5	36.9	42.6	48.6	53.7	59.3	64.8	70.4	76.0	81.6	87.3	93.3	93.4	95.6

Setting number		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>Peas</b> Drive Type 3 (Based on .65 Kg/liter)	Row Spacing	15.2cm	0.0	10.8	21.2	38.3	58.3	77.1	94.2	114.4	133.5	154.3	173.2	190.2	209.0	228.2	245.0	264.3	281.6	298.8	315.9	317.6	319.0
		17.8cm	0.0	9.2	18.2	32.8	50.0	66.1	80.7	98.0	114.4	132.3	148.4	163.0	179.2	193.9	210.1	226.6	241.4	256.1	270.9	272.3	273.5
		19.1cm	0.0	8.4	17.1	30.5	46.6	61.7	75.3	91.5	106.8	123.4	138.5	152.2	167.2	181.0	196.0	211.5	225.3	239.0	252.8	254.1	255.2
		20.3cm	0.0	7.9	15.9	28.6	43.7	57.8	70.6	85.8	100.1	115.8	129.9	142.7	158.7	169.6	183.8	198.2	211.2	224.1	237.0	238.2	239.2
		25.4cm	0.0	6.4	12.8	22.9	34.9	46.3	56.5	68.6	80.2	92.5	104.0	114.2	125.4	135.7	147.0	158.6	169.0	179.3	189.6	190.5	191.4
<b>Pinto Beans</b> Drive Type 1 (Based on .65 Kg/liter)	Row Spacing	15.2cm	0.0	0.0	9.5	14.5	19.5	26.5	33.2	39.6	46.3	52.9	59.5	65.3	71.5	77.2	83.5	90.7	95.9	101.8	107.7	107.8	107.9
		17.8cm	0.0	0.0	8.2	12.5	16.7	22.7	28.4	34.0	39.6	45.4	51.0	56.0	61.3	66.2	71.6	77.7	82.2	87.3	92.3	92.5	92.6
		19.1cm	0.0	0.0	7.6	11.6	15.8	21.2	28.5	31.7	37.0	42.3	47.8	52.3	57.1	61.9	66.8	72.3	76.7	81.5	86.1	87.9	88.3
		20.3cm	0.0	0.0	7.2	10.9	14.7	19.9	24.9	29.8	34.7	39.8	44.8	49.1	53.6	57.9	62.8	67.9	71.9	76.3	80.8	80.9	81.0
		25.4cm	0.0	0.0	5.7	8.8	11.7	15.9	19.9	23.8	27.7	31.8	35.7	39.2	42.9	46.4	50.2	54.5	57.5	61.1	64.6	64.8	64.8
<b>Rice</b> Short Grain Drive Type 3 (Based on .46 Kg/liter)	Row Spacing	15.2cm	3.3	12.3	20.2	31.8	43.0	51.2	62.3	71.3	82.3	94.0	107.3	119.9	131.6	143.6	155.6	166.0	175.7	185.4	195.5	198.2	199.8
		17.8cm	2.8	10.6	17.4	27.2	38.9	43.9	53.4	61.1	70.6	80.6	92.1	102.8	112.8	123.0	133.4	142.4	150.6	158.9	167.5	170.1	171.9
		19.1cm	2.6	9.9	16.2	25.4	34.5	41.0	49.8	57.0	65.9	75.2	85.9	95.9	105.3	114.9	124.4	132.9	140.6	148.3	156.4	158.9	159.4
		20.3cm	2.5	9.2	15.2	23.8	32.3	38.4	46.7	53.4	61.7	70.5	80.5	89.9	98.7	107.7	116.6	124.6	131.7	139.0	146.6	148.6	150.0
		25.4cm	1.9	7.4	12.1	19.1	25.8	30.8	37.4	42.8	49.4	56.4	64.4	72.0	78.9	86.1	93.3	99.7	105.4	111.3	117.3	119.8	120.7
<b>Rice</b> Short Grain Drive Type 4 (Based on .46 Kg/liter)	Row Spacing	15.2cm	5.3	20.1	33.0	51.8	70.2	83.5	101.6	116.2	134.2	153.2	175.0	195.5	214.5	234.1	253.6	270.8	286.4	302.2	318.7	325.8	330.1
		17.8cm	4.5	17.2	28.3	44.3	60.2	71.5	87.0	99.7	115.1	131.4	150.0	167.6	183.9	200.6	217.4	232.2	245.5	259.1	273.2	279.8	285.0
		19.1cm	4.3	16.1	26.4	41.4	56.1	66.8	81.3	93.0	107.3	122.6	140.0	158.4	171.7	187.3	202.9	216.7	229.1	241.8	255.0	262.3	268.2
		20.3cm	3.9	15.0	24.8	38.8	52.7	62.8	78.1	87.2	100.7	115.0	131.2	148.8	180.9	175.8	190.2	203.1	214.8	226.7	239.0	243.2	247.1
		25.4cm	3.1	12.0	19.9	31.1	42.1	50.1	61.0	69.7	80.5	91.9	105.0	117.3	128.8	140.4	152.2	162.5	171.9	181.3	191.2	196.6	199.8
<b>Rice</b> Long Grain Drive Type 3 (Based on .50 Kg/liter)	Row Spacing	15.2cm	0.0	0.0	14.8	24.3	35.5	47.0	59.2	68.7	79.4	90.7	100.8	110.1	119.6	129.7	140.7	151.2	162.0	172.1	180.8	187.6	194.1
		17.8cm	0.0	0.0	12.7	20.9	30.4	40.3	50.7	58.9	68.0	77.8	88.3	94.4	102.5	111.1	120.6	129.7	138.9	147.5	154.9	160.9	166.4
		19.1cm	0.0	0.0	11.8	19.4	28.4	37.6	47.4	55.0	63.5	72.6	80.6	88.1	95.7	103.7	112.5	121.0	129.7	137.6	144.6	150.1	155.3
		20.3cm	0.0	0.0	11.1	18.2	26.8	35.3	44.3	51.5	59.5	68.0	75.6	82.6	89.7	97.2	105.5	113.4	121.6	129.1	135.5	140.8	145.6
		25.4cm	0.0	0.0	8.9	14.6	21.2	28.2	35.5	41.2	47.6	54.5	60.5	66.1	71.7	77.8	84.4	90.7	97.2	103.3	108.5	112.6	116.4
<b>Rice</b> Long Grain Drive Type 4 (Based on .50 Kg/liter)	Row Spacing	15.2cm	0.0	0.0	24.1	39.6	57.8	76.6	96.4	112.0	129.4	148.0	164.3	179.6	195.0	211.4	229.4	246.5	264.5	280.6	294.7	305.9	316.5
		17.8cm	0.0	0.0	20.7	34.0	49.5	65.7	82.7	96.0	110.9	126.9	140.8	154.0	167.2	181.2	196.6	211.4	226.4	240.5	252.6	262.3	271.2
		19.1cm	0.0	0.0	19.3	31.7	46.3	61.3	77.2	89.6	103.6	118.3	131.5	143.7	155.9	169.1	183.4	197.3	211.4	224.4	235.8	244.7	253.2
		20.3cm	0.0	0.0	18.1	29.8	43.3	57.5	72.4	84.0	97.1	110.9	123.3	134.7	148.3	158.5	172.0	184.9	198.2	210.4	221.1	229.5	237.3
		25.4cm	0.0	0.0	14.5	23.8	34.7	45.9	57.9	67.2	77.7	88.8	98.6	107.8	117.0	126.9	137.6	148.0	158.5	168.4	176.8	183.6	189.8
<b>Rye</b> Drive Type 1 (Based on .60 Kg/liter)	Row Spacing	15.2cm	0.0	3.1	8.8	14.1	20.8	26.9	31.4	38.8	45.7	52.8	59.4	65.1	70.6	76.7	82.9	90.4	97.1	105.0	113.4	114.2	114.6
		17.8cm	0.0	2.7	7.5	12.1	17.7	23.0	26.9	33.3	39.2	45.2	51.0	55.8	60.5	65.8	71.0	77.5	83.3	90.0	97.2	97.9	98.2
		19.1cm	0.0	2.5	7.1	11.3	16.6	21.6	25.1	31.1	36.6	42.2	47.6	52.1	56.5	61.4	66.2	72.3	77.7	84.0	90.7	91.3	91.6
		20.3cm	0.0	2.4	6.6	10.7	15.5	20.2	23.6	29.2	34.2	39.5	44.6	48.8	53.0	57.5	62.1	67.7	72.9	78.7	85.0	85.5	85.9
		25.4cm	0.0	1.9	5.3	8.5	12.5	16.2	18.9	23.4	27.4	31.7	35.7	39.1	42.4	46.0	49.7	54.2	58.3	63.0	68.0	68.5	68.7
<b>Soybeans</b> Drive Type 1 (Based on .61 Kg/liter)	Row Spacing	15.2cm	0.0	3.1	8.8	14.7	21.7	25.9	32.2	37.8	43.9	50.2	55.5	62.2	68.5	74.3	80.2	88.4	91.5	97.6	103.8	104.4	104.7
		17.8cm	0.0	2.7	7.5	12.6	18.5	22.2	27.6	32.4	37.6	43.0	47.6	53.3	58.7	63.7	68.7	74.1	78.4	83.6	89.0	89.5	89.7
		19.1cm	0.0	2.5	7.0	11.8	17.3	20.8	25.7	30.3	35.1	40.1	44.3	49.7	54.8	59.5	64.2	69.2	73.2	78.0	83.1	83.5	83.8
		20.3cm	0.0	2.4	6.5	11.0	16.3	19.4	24.1	28.4	32.9	37.6	41.7	46.7	51.3	55.7	60.2	64.8	68.6	73.1	77.9	78.3	78.5
		25.4cm	0.0	1.9	5.3	8.9	13.0	15.6	19.3	22.7	26.4	30.1	33.3	37.4	41.1	44.6	48.2	51.9	54.9	58.5	62.3	62.8	62.9
<b>Soybeans</b> Drive Type 2 (Based on .61 Kg/liter)	Row Spacing	15.2cm	0.0	6.5	18.0	30.2	44.5	53.3	66.1	77.8	90.3	103.1	114.1	127.9	140.7	152.8	164.8	177.6	187.9	200.5	213.4	214.5	215.2
		17.8cm	0.0	5.5	15.4	25.9	38.2	45.7	56.7	66.7	77.4	88.4	97.8	109.6	120.6	130.9	141.3	152.2	161.1	171.9	183.0	183.9	184.5
		19.1cm	0.0	5.2	14.4	24.3	35.6	42.7	52.9	62.2	72.3	82.4	91.3	102.3	112.5	122.1	131.9	142.1	150.3	160.4	170.8	171.7	172.1
		20.3cm	0.0	4.8	13.5	22.7	33.3	40.1	49.6	58.4	67.7	77.4	85.5	96.0	105.5	114.5	123.6	133.2	141.0	150.3	160.1	160.9	161.4
		25.4cm	0.0	3.9	10.8	18.2	26.7	32.0	39.6	46.7	54.2	61.9	68.5	76.8	84.4	91.6	98.9	106.5	112.8	120.4	127.6	128.8	129.1

Setting number		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>Soybeans</b> Drive Type 3 (Based on .61 Kg/liter)	Row Spacing	15.2cm	0.0	12.9	25.3	45.4	66.8	79.4	99.8	113.4	130.6	147.4	166.3	184.1	202.9	220.4	239.8	255.4	278.7	297.9	317.4	317.7	318.0
		17.8cm	0.0	11.1	21.7	38.8	57.3	68.0	85.5	97.2	111.9	126.4	142.5	157.7	173.9	189.0	205.6	218.9	238.9	255.3	272.0	272.4	254.5
		19.1cm	0.0	10.3	20.2	36.3	53.4	63.5	79.8	90.7	104.5	118.0	133.0	147.3	162.3	176.3	191.9	204.3	223.0	238.2	253.9	254.1	254.5
		20.3cm	0.0	9.8	19.0	34.0	50.1	59.5	74.9	85.1	98.0	110.6	124.7	138.1	152.1	165.3	179.9	191.5	209.0	223.4	238.0	238.2	238.6
		25.4cm	0.0	7.7	15.2	27.2	40.1	47.6	59.8	68.0	78.4	88.5	99.7	110.5	121.7	132.3	143.9	153.2	167.2	178.7	190.5	190.8	190.8
<b>Sun flowers</b> Drive Type 1 (Based on .30 Kg/liter)	Row Spacing	15.2cm	0.0	0.0	2.2	4.7	6.8	9.3	12.0	14.5	17.3	20.0	22.7	25.3	28.0	30.6	33.3	35.8	38.3	40.4	43.0	44.2	45.7
		17.8cm	0.0	0.0	2.0	4.0	6.0	8.0	10.3	12.5	14.8	17.1	19.4	21.7	23.9	26.3	28.5	30.6	32.8	34.7	36.9	37.9	39.2
		19.1cm	0.0	0.0	1.8	3.8	5.5	7.5	9.5	11.6	13.8	15.9	18.2	20.2	22.3	24.6	26.6	28.6	30.6	32.3	34.5	35.4	36.5
		20.3cm	0.0	0.0	1.7	3.8	5.2	7.0	9.0	10.9	12.9	14.9	17.0	18.9	21.0	23.0	25.0	26.8	28.7	30.3	32.2	33.2	34.2
		25.4cm	0.0	0.0	1.3	2.8	4.2	5.6	7.2	8.8	10.3	12.0	13.6	15.2	16.7	18.4	20.0	21.4	22.9	24.3	25.8	26.6	27.4
<b>Wheat</b> Drive Type 2 (Based on .68 Kg/liter)	Row Spacing	15.2cm	0.0	14.0	24.6	34.1	44.3	55.8	64.4	78.5	90.3	102.6	117.5	129.2	143.0	157.5	170.9	184.3	198.8	213.2	227.9	230.9	231.2
		17.8cm	0.0	12.0	21.1	29.3	37.9	47.8	55.2	67.2	77.4	87.9	100.7	110.7	122.6	134.9	146.5	158.0	170.3	182.8	195.3	197.9	196.2
		19.1cm	0.0	11.2	19.8	27.3	35.5	44.6	51.5	62.8	72.3	82.1	94.1	103.4	114.4	126.0	136.7	147.4	159.0	170.7	182.3	184.8	184.9
		20.3cm	0.0	10.6	18.5	25.6	33.2	41.8	48.3	58.8	67.7	77.0	88.1	96.9	107.3	118.1	128.2	138.2	149.1	160.0	171.0	173.2	173.3
		25.4cm	0.0	8.4	14.8	20.4	26.6	33.5	38.6	47.0	54.2	61.5	70.5	77.6	85.8	94.5	102.5	110.6	119.2	128.0	136.7	138.5	138.8
<b>Wheat</b> Drive Type 3 (Based on .68 Kg/liter)	Row Spacing	15.2cm	0.0	17.9	34.4	50.2	66.8	83.3	98.2	116.3	134.8	153.2	172.1	188.6	206.4	227.2	247.2	269.3	287.2	307.2	325.4	333.1	335.5
		17.8cm	0.0	15.3	29.4	43.1	57.3	71.4	84.2	99.7	115.5	131.4	147.5	161.7	178.6	194.8	212.0	230.8	246.1	263.4	278.9	285.6	287.5
		19.1cm	0.0	14.3	27.5	40.2	53.4	66.6	78.6	93.1	107.9	122.6	137.6	150.9	166.7	181.8	197.8	215.4	229.7	245.8	260.4	266.5	268.3
		20.3cm	0.0	13.4	25.7	37.7	50.1	62.4	73.6	87.2	101.2	115.0	129.1	141.5	156.3	170.4	185.5	202.0	215.3	230.4	244.1	249.9	251.6
		25.4cm	0.0	10.7	20.7	30.1	40.1	50.0	58.9	69.5	80.8	91.9	103.3	113.2	125.1	138.3	148.3	161.6	172.3	184.3	195.2	199.8	201.3
<b>Wheat Grass</b> Drive Type 1 (Based on .25 Kg/liter)	Row Spacing	15.2cm	0.0	1.0	2.4	3.4	4.7	5.7	6.7	8.3	9.4	10.8	12.1	13.4	14.7	15.9	17.3	18.9	20.1	20.4	20.8	23.4	23.7
		17.8cm	0.0	0.9	2.0	2.9	4.0	4.9	5.7	7.1	8.1	9.3	10.4	11.5	12.6	13.7	14.8	16.2	17.2	17.4	17.9	20.0	20.3
		19.1cm	0.0	0.8	1.9	2.7	3.8	4.6	5.4	6.6	7.5	8.6	9.7	10.7	11.8	12.8	13.9	15.0	16.1	16.3	16.6	18.6	19.0
		20.3cm	0.0	0.8	1.8	2.5	3.6	4.4	5.1	6.2	7.1	8.1	9.1	10.0	11.0	12.0	13.0	14.1	15.0	15.3	15.6	17.5	17.7
		25.4cm	0.0	0.7	1.5	2.0	2.8	3.5	4.0	4.9	5.7	6.5	7.3	8.0	8.9	9.5	10.4	11.3	12.0	12.2	12.5	14.0	14.3

## Fertilizer Application Rate (Metric)

The application rate of dry granular fertilizer is affected by many factors: fertilizer type and density, relative humidity and the moisture content of the material itself. Due to these variables, this chart should be used only to closely approximate the amount of fertilizer being applied.

### Fertilizer Rate Chart (kg per hectare)

Setting number	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
Row Spacing	15.2cm	17	26	35	54	72	98	122	140	157	189	219	236	253	278	303	331	359	387	414
	17.8cm	15	22	29	43	61	83	104	119	134	161	186	201	214	237	258	282	305	329	353
	19.1cm	13	20	27	42	57	76	98	112	126	150	175	189	202	222	243	265	287	310	331
	20.3cm	12	19	26	40	54	70	92	106	118	141	164	177	190	209	228	248	269	291	311
	25.4cm	10	16	21	33	43	58	74	84	94	113	131	141	152	167	182	199	216	232	248
	30.5cm	9	13	18	27	36	49	62	71	79	94	110	118	127	139	152	166	180	194	208

The preceding chart has been computed using fertilizer that has a density of 1041 kilograms/cubic meter. If you are applying fertilizer that has a density other than this, use the following conversion table:

Density, kg/l	725	800	875	950	1041	1125	1200	1275
Conversion Factor	1.44	1.30	1.20	1.10	1.00	.93	.87	.82

For example: You're using fertilizer with a 1200 kg/cubic meter density and you desire a rate of 112 kg/hectare. Multiply  $112 \times .87 = 98$  kg. Therefore, use the setting closest to 98 kilograms.