



AT & ST Series Seed Treater Quick Reference Sheet



SEED FLOW CALIBRATION

1. Set the adjustable seed gate lever at a position that you and your equipment can handle. Calibrations should be done with at least 40 units or 2000 lbs.
2. When equipment is in position, begin running seed through the seed treater. Using a stop watch, begin timing as soon as the seed lands on the distribution cone at the bottom of the supply hopper.

NOTE: Be sure the surge hopper stays full at all times. If seed does not pile up in the hopper, the seed calibration will not be accurate.

3. Stop timing after all seed has left the surge hopper and calculate the seed flow rate: Total Pounds per Minute.

EXAMPLE: 2000 pounds takes 4 minutes and 33 seconds, or 273 seconds
2000 pounds / 273 seconds = 7.32 pounds/seconds
7.32 x 60 seconds = 440 lbs/minute
440 / 100 = 4.40 cwt/min (hundred weight per minute)

PUMP CALIBRATION

1. Premix enough liquid for the amount of seed you are treating and pour into the 35 gallon poly tank. It's always a good practice to mix up 20% extra slurry to help fill all the lines. Turn on the agitation pump and allow liquid to mix.

2. As the chemical is mixing, determine the number of ounces needed in one minute.

EXAMPLE: The seed treatment slurry rate is 5 ounces per cwt.
Seed Flow Rate = 4.40 cwt/min. x 5 oz./cwt. = 22 oz./min.
22 oz. is the rate the pump should be pumping in one minute.

3. Refer to the charts on the back page for the approximate rate for each nozzle size available at the given pressures. In the above example, for a rate of 22 oz per minute, nozzle size TG-1 at approximately 35 psi would be the best option.
4. After the correct nozzle has been installed. Hold the spray nozzle over a measuring pitcher and turn the "CHEMICAL PUMP" switch to "HAND". Liquid should begin spraying into the measuring pitcher. Allow the pump to run until all air has been removed.
5. As the pump is running, set the desired pressure using the regulator valve (right).
6. After you have set the pressure and all air has been removed from the line, empty the remaining liquid in the measuring pitcher back into the mix tank.
7. Now you are ready to check liquid flow. Hold the spray nozzle over the measuring pitcher. Turn the "CHEMICAL PUMP" switch to "HAND". Using a stop watch, begin timing as soon as liquid begins spraying into the measuring pitcher.
8. As soon as one minute is up, turn the "CHEMICAL PUMP" switch to "OFF". Read the level on the side of the measuring cup. This number should equal the number of ounces needed to flow through the pump in one minute. If the ounces needed per minute have not been met, re-adjust the regulator valve up or down accordingly and repeat steps 7 & 8 until the liquid flow rate has been matched.



**Pressure Gauge and
Regulator**

TREATING SEED

1. Position conveyors, overhead hopper, or seed box so the first seed coming into the seed treater lands on the lower proximity switch which automatically turns on the pump(s).
2. Turn the "CHEMICAL PUMP" switch to "AUTO".
3. Turn the switches to "ON" for the Auger.
4. Begin sending seed into the seed treater. As soon as seed lands on the proximity switch, the pump will turn on and the seed treating process will begin.

NOTE: If the first seed is not as well coated, the "CHEMICAL PUMP" switch can initially be turned to "Hand" before the seed comes into the treater. Once the surge hopper is full, the switch can be turned to "Auto".

5. When all seed has passed through the spray chamber, the pump will automatically shut off.

Refer to the Owners Manual for Further Details





USC AT & ST Series Pump Settings



**NOTE: ALL CALIBRATIONS WERE DONE USING WATER.
NUMBERS ARE NOT EXACT, ONLY USE THESE NUMBERS AS A STARTING POINT OR FOR
TROUBLESHOOTING.**

Ounces per Minute

<u>Nozzle Size</u>	<u>psi</u>								
	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>	<u>50</u>	<u>55</u>	<u>60</u>
TG-1	14	17	19	22	24	25	25.3	25.5	26.5
TG-2	28	33.5	38	43	45	48	50	54	56
TG-3	44.5	54.5	62	67	71	76	79	82	85
TG-4	70	77	84	90	97	102	107	112	116
TG-6	105	116	127	137	146	154	161	168	175

Milliliters per Minute

<u>Nozzle Size</u>	<u>psi</u>								
	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>	<u>50</u>	<u>55</u>	<u>60</u>
TG-1	414	503	562	651	710	739	747	754	784
TG-2	828	991	1124	1272	1331	1419	1479	1597	1656
TG-3	1316	1612	1834	1981	2100	2248	2336	2425	2514
TG-4	2070	2277	2484	2662	2869	3016	3164	3312	3430
TG-6	3105	3430	3756	4051	4318	4554	4761	4968	5175

NOTE: 1 oz = 29.57 ml

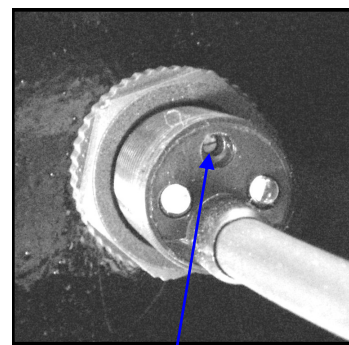
PROXIMITY SWITCH ADJUSTMENT GUIDE

The proximity switch mounted inside the cone of the seed treater detects when seed is present. This will automatically shut off the pump when all seed has left the hopper.

Sometimes the proximity switch does not properly work. This can be caused from wear, dust, or even moisture. The first step is to clean the lens of the proximity switch. If this does not solve the problem, the next step would be to adjust the sensitivity of the proximity switch.

Using the small screwdriver provided inside the control panel, you can adjust the proximity switch by turning the adjusting screw on the back of the proximity switch.

- Turn Clockwise to make the proximity switch more sensitive.
- Turn Counterclockwise to make the proximity switch less sensitive.



Sensitivity Adjustment Screw