

# DE-1008.5 Calibration & Pump Tube Selection

## Pump Tube Selection & Installation

There are 2 color coded pump tubes shipped with your applicator – Red and Blue. Use the instructions below to determine which pump tube will work best with your harvest rate and product concentration (mix rate).

### Determining your Harvest Rate

- 1: By reading across, find the weight of your load.
  - A. If the weight of your load is not listed, please round up to the next weight listed.
- 2: By reading down, find the time (in minutes) to load/unload.
  - B. If the exact time to load/unload is not listed, please round up to the faster time listed.
- 3: Moving down from your weight and over from your time, where the column and row meet is your harvest rate in Tons per Minute.

### Silage - Tons per Minute

		Tons Per Load											
		4	6	8	10	12	14	16	18	20	22	24	26
<b>Minutes to Load/Unload</b>	<b>12</b>		0.5	0.7	0.8	1.0	1.2	1.3	1.5	1.7	1.8	2.0	2.2
	<b>11</b>		0.5	0.7	0.9	1.1	1.3	1.5	1.6	1.8	2.0	2.2	2.4
	<b>10</b>		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6
	<b>9</b>		0.7	0.9	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.7	2.9
	<b>8</b>	0.5	0.8	1.0	1.3	1.5	1.8	2.0	2.3	2.5	2.8	3.0	3.3
	<b>7</b>	0.6	0.9	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.1	3.4	3.7
	<b>6</b>	0.7	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.0	4.3
	<b>5</b>	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	5.2
	<b>4</b>	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
	<b>3</b>	1.3	2.0	2.7	3.3	4.0	4.7	5.3	6.0	6.7	7.3	8.0	
	<b>2</b>	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0				
	<b>1</b>	4.0	6.0	8.0									

4: Using the following chart, find your product mix rate across the top along with the range your harvest rate falls in. This will determine which tube to install for proper application.

**NOTE:** Product mix rate of 100 tons/gallon is only recommended for use with products that have a suggested rate of 2 grams per ton or less. Products with rates over 2 grams per ton are required to mix at 50 or 25 tons per gallon. Further concentration may cause excessive product sediment build up and will skew the flowmeter calibration.

### Pump Tube Selection Chart

	Mix Rate= 100 tons/gallon*		Mix Rate = 50 tons/gallon		Mix Rate = 25 tons/gallon	
	Minimum Tons/Min.	Maximum Tons/Min.	Minimum Tons/Min.	Maximum Tons/Min.	Minimum Tons/Min.	Maximum Tons/Min.
<b>Blue Tube</b>	<b>1.5</b>	<b>4</b>	<b>0.75</b>	<b>2</b>	<b>0.5</b>	<b>1</b>
<b>Red Tube</b>	<b>3</b>	<b>8.5</b>	<b>1.5</b>	<b>4.25</b>	<b>0.75</b>	<b>2.00</b>

**\*For products equal to or less than 2 grams/ton.**

## Calibration Charts

The Calibration Charts below are to provide you with the amount of total solution that you need to apply based upon your mix rate and tonnage per minute harvested. Please note that you may need to change your mix rate if your harvest rate drops below the lowest output of the pump.

These charts are to be used along with the FM-1008.5 Flowmeter Assembly for calibration of your system.

To find out how much tonnage per minute you are harvesting, please use the harvest rate chart on reverse side.

### 100 Ton Per Gallon Mix




Tons/Min	Ounces/Min
1.50	1.92
2.00	2.56
2.50	3.20
3.00	3.84
3.50	4.48
4.00	5.12
4.50	5.76
5.00	6.40
5.50	7.04
6.00	7.68
6.50	8.32
7.00	8.96
7.50	9.60
8.00	10.24
8.50	10.88

### 50 Ton Per Gallon Mix

Tons/Min	Ounces/Min
0.75	1.92
1.00	2.56
1.25	3.2
1.50	3.84
1.75	4.48
2.00	5.12
2.25	5.76
2.50	6.4
2.75	7.04
3.00	7.68
3.25	8.32
3.50	8.96
3.75	9.6
4.00	10.24
4.25	10.88

### 25 Ton Per Gallon Mix

Tons/Min	Ounces/Min
0.50	2.56
0.75	3.84
1.00	5.12
1.25	6.4
1.50	7.68
1.75	8.96
2.00	10.24

KEY	
Blue Tube	
Blue or Red	
Red Tube	

## System Flushing

1: Your applicator should be flushed at the end of each day. To do this, turn the 3-way valve handle up toward the flush bottle input. This will allow the pump to draw clean water from the flush bottle and flush out the entire product line.

**NOTE:** 4 ft. of product line will contain approximately enough product for 1 ton of forage. It is recommended to flush out the product onto the last batch of forage harvested.

**COLD WEATHER FLUSHING:** During cold weather when there is a possibility of the product lines freezing overnight, it is recommended to fill the flush bottle with RV Waterline Antifreeze and flush the system. This will prevent the lines and the flowmeter from freezing and cracking.

## General Maintenance

The DE-1008.5 Applicator has only one "wear part". This part is the Pumping Tube. The Pumping Tube needs to be replaced as needed or annually, whichever comes first. If the Pumping Tube wears out, the motor will still run, but it will not pump any product or have a significant reduction in output.

**Part Number: 1008.5-PT-BL = 1008.5 Series (Dohrect Enject) Pumping Tube - BLUE**

**Part Number: 1008.5-PT-RD = 1008.5 Series (Dohrect Enject) Pumping Tube - RED**



**320-252-8999**

**316 33rd Ave S • Waite Park, MN 56387**

**www.DohrmannEnterprises.com**