

LiquiShift® Tube Selector

Notes on the LiquiShift system:

1. Find out what product will be used. The viscosity range is a critical factor for metering tube. Any given set of tubes may work for two different viscosity ranges, but the system will cover a different set of Speed/ Application Rates for each product. Remember that the viscosity will increase as temperature decreases. This is more pronounced in the higher viscosity products (10-34-0). The 10-34-0 (high viscosity) slide is set for 60 degrees.
2. Get the farmer to be as specific as possible on the Minimum and Maximum Speed and Rate. Get the range that will cover 90% of the use.
3. Find out what is most important; being able to hit the lowest/slowest rate or being able to hit the highest/fastest rate.
4. The tube selector is based on pressures from 15 to 65 PSI. Higher rates can be achieved by running at higher pressure (which is not a problem).
5. If higher rates are needed (typically for high rate / high speed with low viscosity nitrogen), we use a 5' set of tan and black tubes. This is not on the tube selector slide. This set of tubes will have a flow about 1.4 times as much as the 8' tan and black tubes.
6. When selecting tubes, run the Minimum and Maximum rate and speed a few times to see which tubes fit the best. Keep in mind possible future rate changes.
7. To demonstrate the great variable range possible with the LiquiShift system, do this:
 - A. Pick a product (let's say a Medium Viscosity starter).
 - B. Pick a set of tubes (let's say Green/Orange).
 - C. Pick a Minimum Speed (4 MPH). Set the Red line on 4 MPH.
 - D. Move the slide so the left end of the Medium Viscosity green bar is on the Red line.
 - E. Look at the Row Spacing (let's say 30"). Read the Application Rate (should be just under 4 GPA).
 - F. Move the Red line to 6 MPH (hypothetical Maximum Speed). Move the slide until the Red line is on the right end of the green bar.
 - G. Look at 30" row spacing. Read the Application Rate (should be 33 GPA).
 - H. Conclusion: For a Green/Orange tube set and a Medium Viscosity starter, the LiquiShift will be able to apply from 4 GPA to 33 GPA at 4 MPH to 6 MPH.
8. Do the same demonstration for an orifice to see **The LiquiShift difference**.
9. Other tube combinations are possible. We tried to identify what would probably be the most used sets to use for this slide selector.

