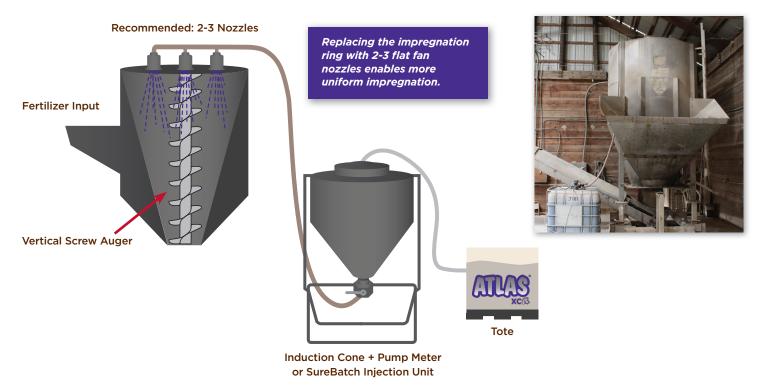
Best Practices for Blending with Atlas XC



A Guide for Nutrien Ag Solutions Operations

This best practices guide is designed to make blending with Atlas XC as easy as possible for your location. Follow these suggestions to successfully impregnate Atlas XC onto dry blends using vertical, volumetric (horizontal), and rotary (drum) blenders.

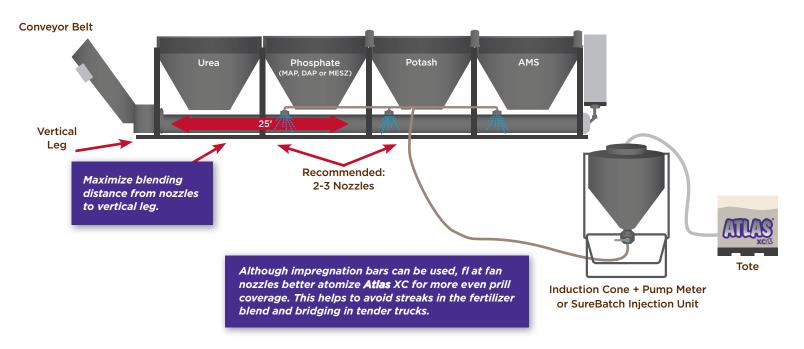
Vertical Blenders



Recommended Practices:

- 1. If you are currently using an impregnation ring successfully, there is no need to change the application equipment. However, replacement of the impregnation ring with 2-3 fl at fan nozzles at top of the blender is generally recommended for more uniform impregnation.
- 2. Hook up a tote of Atlas XC to the induction cone and pump meter or the SureFire SureBatch injection unit connected to a horizontal impregnation line.
- 3. MOST IMPORTANT: A successful blending process is the following:
 - Add Potash first
 - Start pumping Atlas XC
 - Add Phosphate (MAP, DAP or MESZ)
 - Add AMS (if applicable)
- 4. Blend for 5-7 minutes longer than usual to ensure proper coverage and coating of fertilizer prills.

TIP: Allowing for additional blending time will ensure that the impregnated fertilizer is dry when it is augured onto the tender truck.



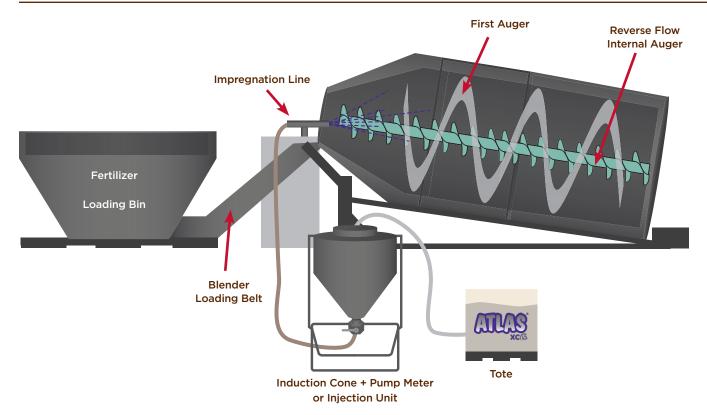
Recommended Practices:

- 1. Although an impregnation bar can be used, it is recommended to replace the impregnation bar on top of the mixing auger with flat fan nozzles placed 18" to 24" apart for best results. Nozzle location should be as far from the end of the mixing auger as possible to allow more time for blending.
- 2. Hook up a tote of Atlas XC to the induction cone and pump meter or the SureFire SureBatch injection unit connected to a horizontal impregnation line.
- 3. The recommended order of the fertilizer bins is:
 - AMS (if applicable)
 - Potash
 - Phosphate (MAP, DAP or MESZ)
 - Urea
- 4. For operations that currently place impregnation bars outside of the building on top of the cross auger, replace the bar with 2 nozzles for best results.

TIP: Unlike with vertical and rotary blenders, extending the blending time with volumetric blenders is not an option because of the constant speed of the auger. Make sure there is enough distance between the nozzles and vertical leg to allow some "extra time" for the fertilizer to dry.

Cross Auger with Impregnation Bar





Recommended Practices:

- 1. Hook up a tote of Atlas XC to the induction cone and pump meter or the SureFire SureBatch injection unit connected to a horizontal impregnation line.
- 2. At the end of the impregnation line, either place a large fl at fan nozzle or reduce down to a ¼" pipe that will shoot Atlas XC straight into the blender. Once the load cell is full of fertilizer, begin the pump. Inject Atlas XC into the blender as fertilizer enters from the load cell.
- 3. Turn on conveyor belt to unload the load cell. Continue to apply Atlas XC until the desired number of ounces have been applied to the dry blend.
 - The recommended rate is 16-32 ounces of Atlas XC per ton of dry fertilizer.
- 4. Allow the load to blend for 3-5 minutes, then add any desired sulfur or micronutrient packages.
- 5. Blend for 2-3 additional minutes, whether or not sulfur or micronutrients have been added.
- 6. Unload the blender.

TIP: For blends that call for products of different weights, an internal reverse flow auger makes sure that all fertilizer sources blend evenly throughout the load. Without this auger, the lighter product will work its way to the top of the rotary blender and will not mix well with P & K.







Recommended Impregnation Rates for Atlas XC on Dry Fertilizers

Blends with or without Urea

1-2 liters/tonne

Notes:

If higher volumes are needed to achieve necessary coverage, add water up to desired volume.

A SureFire SureBatch injection unit can be used with all three blender types to pump and meter Atlas XC.

Questions about blending with Atlas XC?

Email the blending help desk at info@agricen.com or call (800) 787-3724.

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