

Best Practices for Blending with

ATLAS[®] XC₃



A Guide for Retail Operations

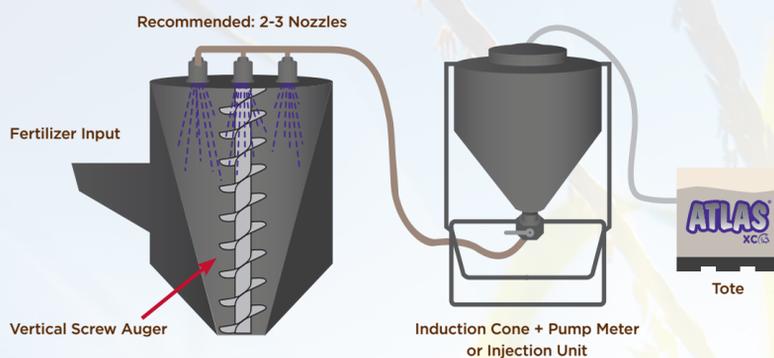
This best practices guide is designed to make blending with Atlas XC as easy as possible for your location. Follow these suggestions to successfully impregnate Atlas XC onto dry blends using vertical, volumetric (horizontal), and rotary (drum) blenders.

Recommended Impregnation Rates on Dry Fertilizer

Blends with or without urea

1-2 Liters/tonne

Vertical Blenders



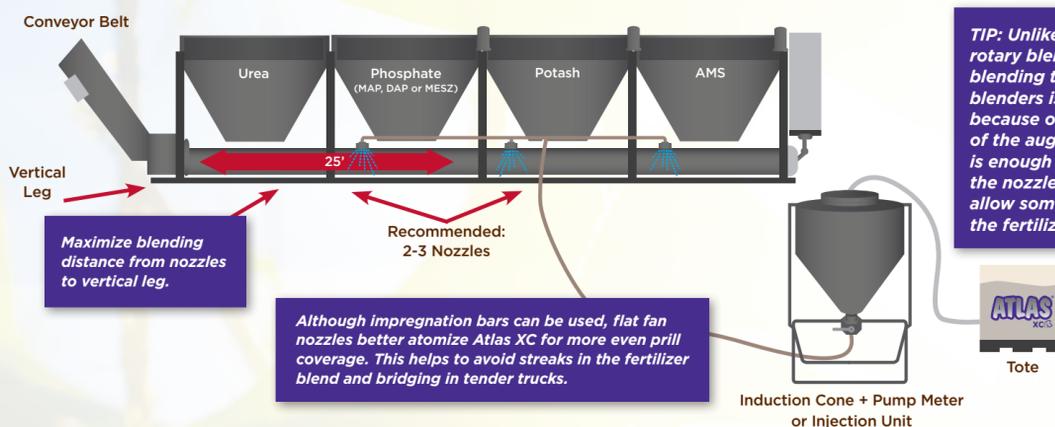
TIP: Replacing the impregnation ring with 2-3 flat fan nozzles enables more uniform impregnation.

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. 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 flat 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 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.

Volumetric (Horizontal) Blenders

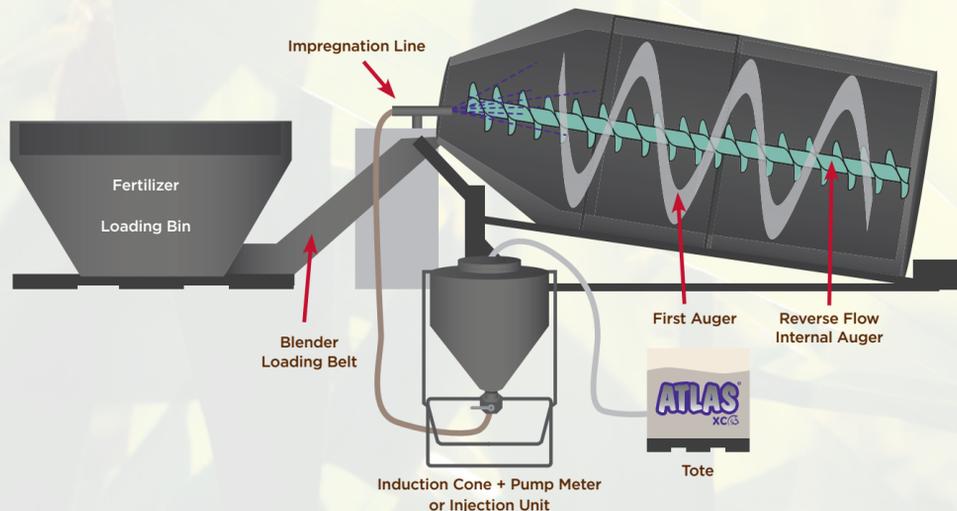


TIP: Unlike with vertical and rotary blenders, extending the blending time with volumetric blenders is not an option because of the constant speed of the auger. Make sure there is enough distance between the nozzles and vertical leg to allow some "extra time" for the fertilizer to dry.

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 injection unit connected to a horizontal impregnation line.
3. The recommended order of the fertilizer bins is:
 - AMS and/or Urea (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.

Rotary (Drum) Blenders



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 Practices:

1. Hook up a tote of Atlas XC to the induction cone and pump meter or the injection unit connected to a horizontal impregnation line.
2. At the end of the impregnation line, either place a large flat fan nozzle or reduce down to a 1/4" 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 1-2 Liters of Atlas XC per tonne 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.