

Nitrogen Generator - Pesticide Free Fumigation

The CROP-PROTECTOR Nitrogen Generator is used for efficient infestation control

The principle of Nitrogen fumigation is to flush pure Nitrogen into the silo/storage container and thereby create an Oxygen free environment. The low level of Oxygen inside the silo will gradually kill almost all insects, mites, and fungi. First, they will be paralyzed and with longer treatment terminated. This "green" and "natural" fumigation is ideal to fumigate organic products.

The CROP-PROTECTOR Nitrogen Generators use a Pressure Swing Adsorption (PSA) system to generate the Nitrogen. Distribution of the Nitrogen is possible through a simple network of hoses and valves to the storage containers.

Inside the storage containers an iGRAIN Oxygen sensor monitor the flushing process and the decreasing Oxygen concentration, thereby creating the lethal modified atmosphere.

Advantages

- Green fumigation technology - also for ORGANIC products
- Efficient infestation control
- O₂ sniffer cables report the Oxygen conditions in each silo cell
- Suitable for all types of crops: Nuts, beans, fruit, grains etc
- Data available in the iGRAIN Dashboard Manager, local PLC/SCADA system and via the iGRAIN Smart App

Nitrogen is especially effective for preservation of:

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|---------|----------------|---------------|
| • Beans | • Coffee beans | • Vegetables |
| • Wheat | • Maize | • Cocoa beans |
| • Rice | • Lentils | • Fruits |
| • Nuts | • Rapeseed | • Pasta |



Nitrogen Generator



Control system

