

Fans and Controllers for Agricultural

Fans and Controllers for Agricultural Datasheet 1

Delta have considerable experience in providing crop drying and ventilation systems for cereal and oilseed products to ensure the optimum airflow rates to match any individual store for reliable and predictable crop management.

In cereals and oilseeds, ensuring the correct air velocity through varying crops is essential to provide adequate ventilation and cooling following high temperature drying. Equally, in crop drying using ambient or warmed air on flat stores, moving moist air through a grain mass is vitally important to prevent the risk of moisture condensing in upper grain levels. Calculating the resistance to these airflows through the floor system and the crop to be dried allows us to make a fan selection that matches precisely the airflows required for optimum efficiency. Many of our fan selection recommendations will utilise double inlet, centrifugal drying fans, fitted with vee belt drives that allow the duty matching to be done accurately. All fans that we use will be fully compliant with AMCA and BSI test procedures, for performance and noise pressure levels; for your assurance that the fan that we specify is capable of providing the stated duty.





Crop Drying

The range of of "HLZ" Double Inlet Centrifugal Fans represents the optimum choice of fan system for crop drying on traditional on-floor drying systems. With air volume outputs from 5000M³/hr (2950cfm) at pressures to match any drying arrangement with grain/oilseed crops to depths in excess of 8 metres. The "HLZ" range is ideal for high pressure applications such as large silos and bulk flat stores where ventilation is required up to depths of 30 metres.

"HLZ" fans have a highly developed inlet and impeller design to obtain maximum air pressure development with minimal frictional losses. Being double inlet, "HLZ" fans are extremely compact and work with lower air inlet velocity turbulence to match the exact airflow requirements for each application. The vee belt drive allows each installation to run at the precise speed to produce the required air volume/pressure with the minimum radiated noise and using the minimum of power to achieve optimum drying conditions.

A full range of ancillaries is available to allow for duplex mounting, including non return dampers, electrical heater unit (for down-stream fitting) auto control systems for optimum temperature/humidity controls and transitions.

A duplex arrangement of Twin Centrifugal Crop Drying Fansets with Auto Humidity Controller to dry 750 tonne cereals.



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Crop Ventilation/Conditioning

Cooling cereal and oilseed crops at harvest is essential and maintaining a low in-store temperature is the most effective method to preserve grain safely and minimise insect infestation. Chemical treatment for grain is expensive and becoming less acceptable and can be avoided with good store cooling management.

Delta have a wide range of smaller centrifugal single inlet fans from 1/3hp to 10hp to suit flat stores, silos and small building stores. These fan models are direct coupled, are available with either 1ph or 3ph motors and can have adaptors to fit the fan outlet for pressure ventilating or on the fan inlet for exhaust ventilating.





Above: 2x stage Axial Fansets and Silencers used for aeration and conditioning of a 12000 tonne oilseed flat store.

Below: Single inlet galvanised Belt Driven Centrifugal Fansets providing aeration and conditioning to a 2000 tonne flat store.





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Fan Auto Controllers

