

AIRSLIDE™ AERATION UNIT PACKAGES

FOR BINS AND SILOS

APPLICATION: FLSmidth Airslide Aeration Unit Packages are supplied for installation as aeration units on the sloped conical bottoms of bins and silos to aid in the withdrawal of dry, relatively free-flowing material. Slope angles should be no less than 45° from the horizontal with silo diameters up to 21 feet (6.4 m). Units can be applied to other storage configurations.

SPECIFICATION: General

Each Airslide Aeration Unit Package consists of standard FLSmidth 8-inch (200 mm) open-type Airslide conveyor units in lengths of 5 and 10 feet (1.5 and 3 m) depending on the slope length of the conical storage area. Each package consists of three or six Airslide conveyor units for layout as three or six spoke patterns. Three spoke patterns are normally used with materials which have good fluidizable characteristics. Six spoke patterns provide maximum aeration for difficult materials which can be fluidized.

Airslide conveyor units have been successfully used in handling fine, dry materials such as cement, gypsum, soda ash, fly ash and dusts, barites, bentonite, hydrated lime, ground limestone, ground ores, alumina, alumina hydrate, catalysts, silica, phosphates, talc, detergent and soap powder, calcined magnesite and other materials. Material should be generally no less than 40 percent passing 200 mesh.

Construction

Each unit is a standard 8-inch (200 mm) Airslide conveyor unit [10-inch (250 mm) installation width] constructed of fabricated steel plate covered with a specially woven polyester fabric which can handle materials up to 350°F (175°C).

Air Supply

A source of clean, dry air is required. Minimum SCFM for each package is listed. Pressures should be 3 - 5 PSIG (.21 - .35 Kg/cm²) minimum at the aeration unit. Blower units, such as Sutorbilt/Roots blower units offered by FLSmidth, are a reliable, economical source of air for the aeration packages.

ORDER DATA: SPECIFY - AIRSLIDE AERATION UNIT PACKAGE NUMBER

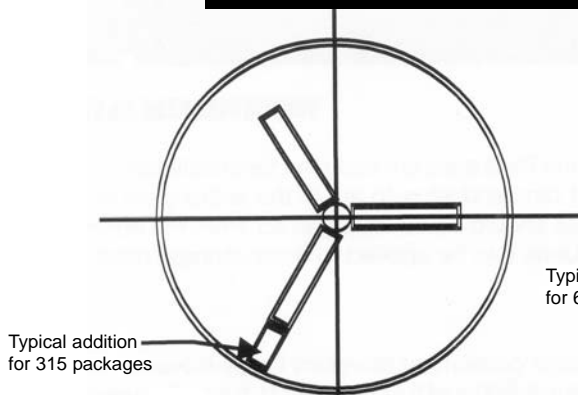
When ordering specific packages it is important to determine the slope length of the silo hopper within the limitations mentioned in paragraph I. Airslide aeration units should be sized to run no less than one half of the slope length.

Materials which have relatively free-flowing properties usually require a three spoke array; whereas a six spoke array should be used with fluidizable materials which require maximum aeration.

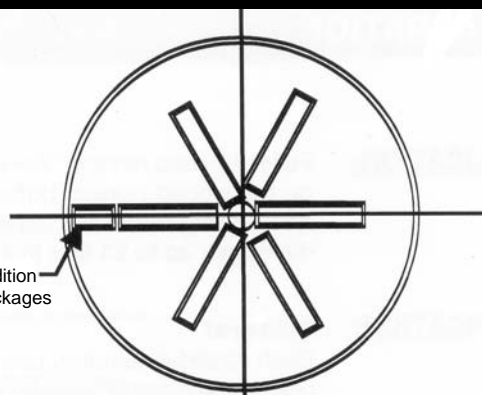
Packages 315 and 615 are offered when more complete clean-out in the spring line area of larger silos is required.

A. Description: Airslide Aeration Unit Packages - 3 spoke arrangement			
Package Number	Hopper Slope Length (ft.)	Airslide Aeration Unit	Minimum Air Requirements (SCFM)
305	6' - 10'	three - 5 foot units	100
310	11' - 15'	three - 10 foot units	200
315	16' - 21'	three - 5 foot units & three 10 foot units	300
B. Description: Airslide Aeration Unit Packages - 6 spoke arrangement			
Package Number	Hopper Slope Length (ft.)	Airslide Aeration Unit	Minimum Air Requirements (SCFM)
605	6' - 10'	six - 5 foot units	200
610	11' - 15'	six - 10 foot units	400
615	16' - 21'	six - 5 foot units & six 10 foot units	600

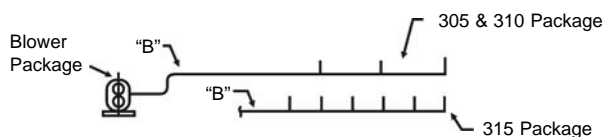
AIRSLIDE™ AERATION UNIT PACKAGES



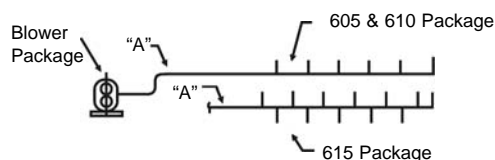
AERATION PACKAGE NO	'B' PIPE SIZE
305	2"
310	2 1/2"
315	3"



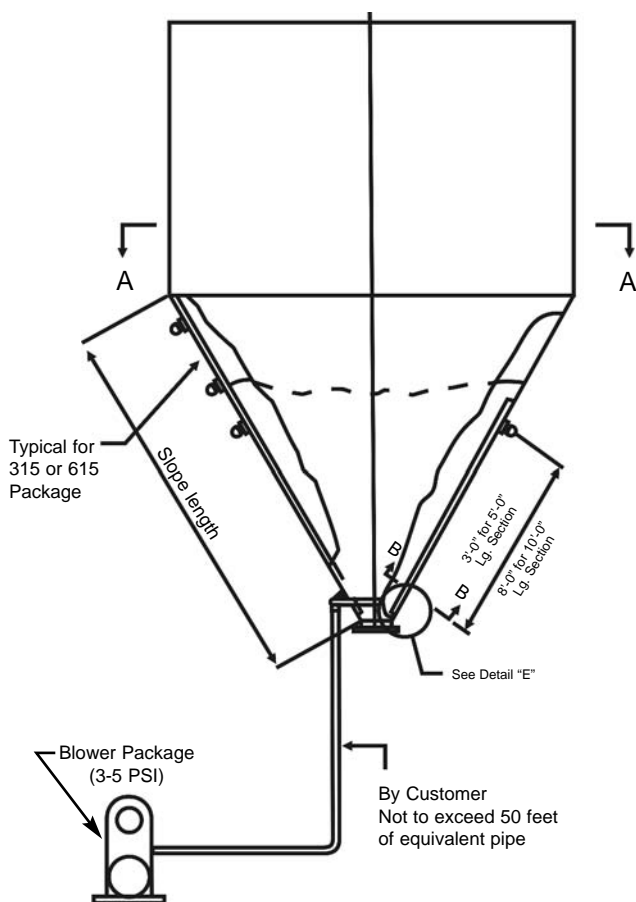
AERATION PACKAGE NO	'A' PIPE SIZE
605	2 1/2"
610	3"
615	4"



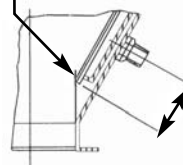
PIPING SCHEMATIC
THREE SPOKE ARRANGEMENT



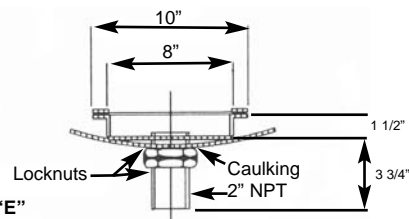
PIPING SCHEMATIC
SIX SPOKE ARRANGEMENT



Size of opening determines airslide conveyor positions. Edge of one Airslide conveyor should be positioned in line with the opening, remaining Airslide conveyors to clear each other.



Enlarged Detail "E"
Airslide Conveyor Placement



Enlarged Section "B-B"
Airslide Conveyor Cross Section

NOTE:

1. Inside of cone should be smooth and flat. If not, fillers must be employed to afford continuous support throughout length of Airslide conveyor section.
2. Locknuts must be pulled tight against cone plate to insure that the section rests against inside face of cone for its entire length.
3. Avoid any burning or welding near exposed Airslide fabric. If burning or welding is necessary, protect the exposed fabric from sparks or hot metal.
4. Each Airslide conveyor section is furnished with two tank nipples & caps. One cap must be removed for air connection.