



WHY CHOOSE AIR PERMEABLE FABRIC?

- ✔ Uniform Thickness
- ✔ Consistent Airflow
- ✔ No Unraveling
- ✔ No Sealing Required
- ✔ Ease of Installation
- ✔ Ideal for Bends
- ✔ Unusual Shapes
- ✔ Extremely Efficient
- ✔ Low Operating Cost
- ✔ Economical to Purchase

POLYFLOW[®] AIR-PERMEABLE NEEDLED POLYESTER FABRIC

Traditional air flow fabrics are usually of a solid woven construction. This type of material can have “hot spots” caused by uneven air flow through the weave, leading to lack of fluidity and reduced capacity. PolyFlow[®] gives an even air distribution to ensure a good cushion for a consistent flow with virtually no abrasion wear.

Unlike solid woven belts, PolyFlow[®] does not need to have the edges heat or silicone sealed to prevent air loss, and the needle felt material is easy to cut and drill for flange fitting.

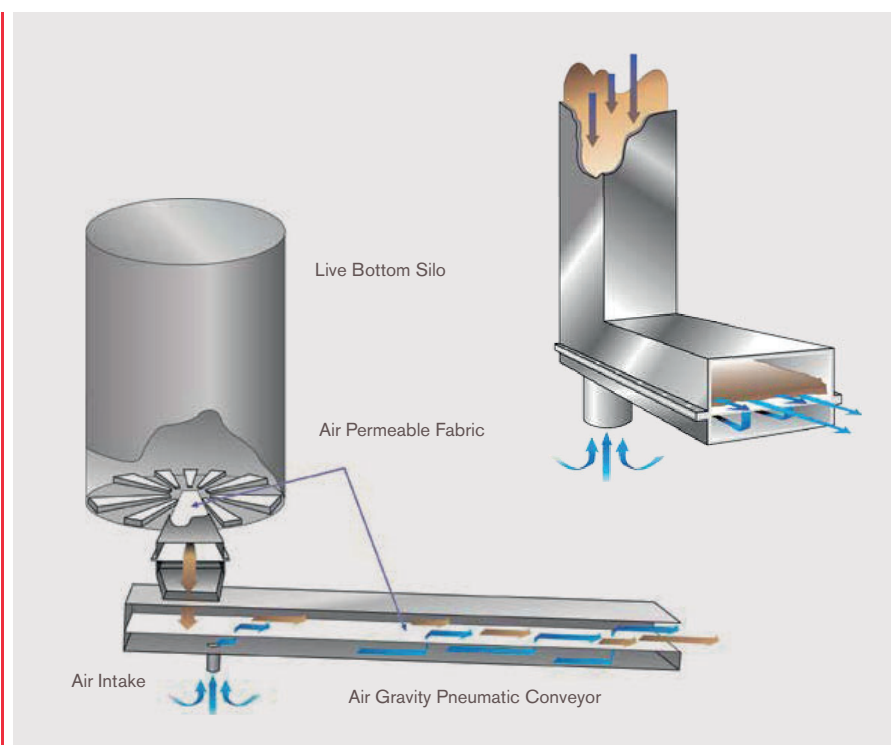
Extensive testing by Spoornet Transwerk (South African Railways) for their cement applications has proved that PolyFlow[®] not only gives consistently good flow rates, but has shown no particulate infiltration to retard the flow or shorten the belt life.

The standard PolyFlow[®] material has a very small aperture opening of just 7 microns and is designed to operate at up to 150° C., but a special high heat (250° C.) version is available to order, as are versions with different water permeabilities.



INDUSTRIES AND APPLICATIONS

- Cement
- Barite
- Alumina
- Flour
- Fly Ash
- Silica Sand
- Pumice
- Kaolin
- Resins
- Chemicals
- Wheat



PLEASE CONTACT US FOR
MORE TECHNICAL DETAILS
OR TECHNICAL ADVICE
REGARDING THE POLYFLOW[®]
AIR-PERMEABLE
POLYESTER FABRIC

muller|beltex



POLYFLOW[®] 1950 & 1951

Polyveyor was specifically designed to be the ideal membrane for fluidized bed and air gravity conveyors. The special needed construction provides uniform and consistent air flow across the entire surface of the fabric. This in turn means maximum conveyor efficiency and output.

TECHNICAL SPECIFICATIONS

Material	Composition	Description	Thickness	Weight g/m ²	Color	Permeability @ 1/2" Water Pressure	Temp. Range
PolyFlow 1950	Polyester	Needed	6 mm	4100 g/m ²	White	.5 CFM	-51° / 154°C
PolyFlow 1951 *	Polyester	Needed	6 mm	3000 g/m ²	White	1.5 CFM	-51° / 154°C
PolyFlow High-Heat	Kevlar/ Polyester	Needed	8 mm	3000 g/m ²	Yellow/ White	1.5 CFM	Max 260°C 315°C intermittent

* Delivery from stock

POLYFLOW[®] HIGH-HEAT

Kevlar fabric is needed onto a Polyveyor 1951 polyester base. This versatile fabric is rated for a temperature of 260°C continuous or 315°C intermittent.

DIFFERENCES BETWEEN POLYFLOW[®] AIR-PERMEABLE POLYESTER FABRIC AND SOLID WOVEN FABRIC

	Air - Permeable Fabric	VS	Solid Woven Fabric
Design	PolyFlow [®] has been specifically designed for the concepts and principles of fluidization.		This is a conveyor product often used in a fluidization application.
Airflow Consistency	Uniform air permeability ensures an even flow of particulate, resulting in a longer operating life.		Due to the woven nature of cotton fabric, airflow is inconsistent. Air will find the route of least resistance, resulting in areas not being fully fluidized. This shortens the life of the air bed.
Fray Resistant	PolyFlow [®] will not fray when it is cut or holes are punched. Heat-sealing the sides or the holes is not needed, which results in a quicker and easier way to fit the polyester fabric.		Solid woven fabric will fray even after the edges or holes have been heat sealed.
Stretch Resistant	PolyFlow [®] does not require stretching when installed in order to fully fluidize, and PolyFlow [®] will not stretch once installed.		Even after stretching in the installation process, the solid woven fabric continues to stretch, sometimes creating a 75-100 mm "hump" that may cause blockage problems and slower conveying.
Mildew Resistant	PolyFlow [®] is rot and mildew resistant.		Solid woven cotton fabric will mildew and eventually rot.
Pore Openings	With extremely small pore openings, averaging 4 microns, PolyFlow [®] will not allow the particulate to infiltrate.		Solid woven fabrics, with numerous yarn "knuckles", have very large pore openings, allowing the particulate to infiltrate the fabric and block its flow. It also allows the product to be trapped within the fabric, causing excessive wear.
Air Leakage	The construction of PolyFlow [®] naturally provides a better seal. The smooth surface of PolyFlow [®] allows the caulking to seal better, ensuring no air leaks.		Caulking is usually applied between the pneumatic conveyor structure and the air-permeable membrane. The irregular surface of the solid woven fabric makes sealing the system difficult.