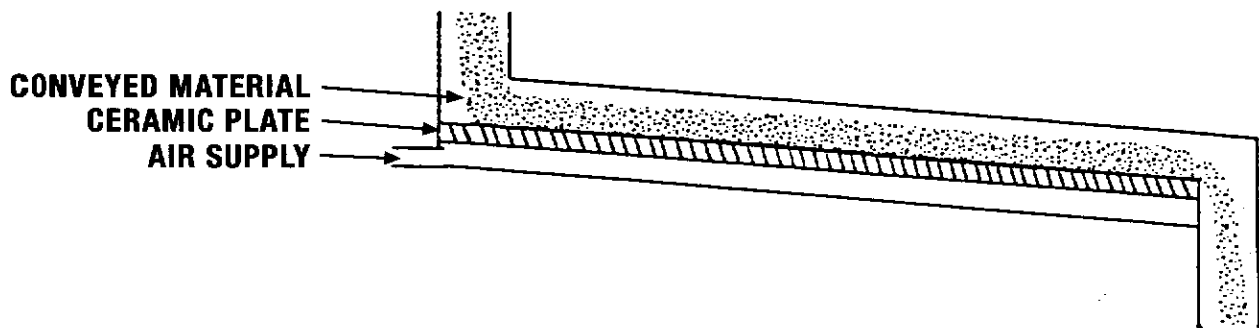


FILTROS PERMEABLE CERAMICS FOR AIR-GRAVITY CONVEYING



The powdered material to be conveyed rests on a permeable ceramic plate which is inclined about 5° below horizontal. A small amount of air blown under the trough of plates diffuses through them, fluidizing the material to be conveyed. The fluidized material, having essentially no friction between particles or the ceramic plate, flows down the incline with the characteristics of a liquid.

A special Filtros permeable ceramic plate, made to exact specifications, is the heart of the air conveying system. Characteristics of this system using Filtros plates are:

- 1) **Mechanical Strength:** High strength is inherent. It does not depend upon a frame or supporting mesh for rigidity.
- 2) **Abrasion resistance:** Abrasion resistance is very good, and where extreme abrasion is a problem, special formulations are available.
- 3) **Smooth conveying surface:** The plate surfaces are machined or pressed flat with no rough surface texture to resist the flow of fluidized materials.
- 4) **Temperature resistance:** Formulations are available for usage temperatures up to 2500°F. Drying or heat processing of low moisture content powders can be designed into this system.

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- 5) **Chemical resistance:** The material is essentially inert and will not deteriorate from contact with most chemicals. It will not rot or otherwise deteriorate.
- 6) **Maintenance:** Maintenance using this system is exceptionally low with basically only blower upkeep to maintain. The conveyor has no moving parts.
- 7) **Energy requirements:** The air flow requirements are usually provided by a blower which demands far less energy input than a mechanical system.
- 8) **Dust collection:** The conveyor may or may not be completely enclosed depending upon the dusting characteristics of the conveyed material. Since air flow is very low, only minimal dust collection may be necessary.
- 9) **Capacities:** Due to the characteristics of air-gravity conveying, exceptionally large tonnages of material can be easily handled with this system. Long conveying distances are common.
- 10) **Conveying-plus:** This system can also be used for drying, heat (or cold) processing, particle size separation and mixing. Other materials, such as flat wafers, sheets of solid material, low density items, or anything that can be air-floated, can be conveyed.



Filtros Limited

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