

Solid phase conveying system



The Solid Phase conveying system is part of our wide range of materials handling systems. It is based on our most advanced technology to meet the requirements of today's modern aluminium smelter.

The Solid Phase conveying system developed by REEL Alesa is a unique materials handling technology with extraordinary low operating and maintenance costs.







Solid Phase – a step ahead in pneumatic conveying technology

Our Solid Phase system features a special pneumatic conveyor designed for handling dry bulk materials with compressed air. The automatic system works at a low air velocity in the conveying pipe and enables a high material-to-air ratio. It is the result of extensive research, tested initially on a model scale and subsequently in plants with industrial applications.

Health, safety and environment (HSE) benefits

Compared to conventional conveyors available on the market, our fully enclosed solid phase conveying system delivers an unrivalled environmental performance.

We are certified ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

Industries and materials

We serve the aluminium, cement, power, mining and minerals, steel and magnesium industries. The Solid Phase system conveys dry bulk materials such as alumina (fresh and reacted), alumina hydrate, fluoride, carbon products and many more. With a small product sample, our lab is able to determine the optimal conveying variables for each specific product.

Unique Solid Phase technology

The application consists of a specially developed pressure vessel, a conveying pipe and special diverters. Compressed air is supplied by a separate centralised source. This breakthrough technology reduces air consumption by 50 per cent compared to a standard dense phase system. Due to its extremely low conveying speed (similar to an air gravity conveying system), the system gently conveys your product and generates no additional fines. Our system can be routed in any direction, horizontally or vertically, making it readily adaptable to both existing plants and greenfield projects.

Compelling benefits

As your technology partner, we provide you with the most economical low maintenance Solid Phase conveying system on the market today.

Proven design

Best economical value due to:

- Reduced air and power consumption
- Long distance, high capacity conveying
- Long lifetime
- Reliable operation

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