Design And Analysis Of Pneumatic Conveyor

For Powder Material Handling

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ABSTRACT

In the industries where bulk material is to be transferred from one place in

the process plant to the other, material handling systems are required.

Various types of conveyors are available in the market having their own

Characteristic features. But in the industries where very high mass flow

rates are required, pneumatic conveying system can be very useful.

Various other conveyors are also present but some occupy a lot of space in

the plant whereas some cannot give such high mass flow rates.

The design data for some materials are available in the different

Material handling design data books. If one wants to design a system for

any new material the he can start the design by comparing the material

Physical properties with the materials which have already been conveyed.

Pneumatic conveying system is a conventional material handling system

like belt conveyor or chain conveyor. The main advantage of pneumatic

conveying system is that material is transferred in close loop, thereby

Preventing the environmental effect on the material and vice versa. There is

wide scope for experimentation in the field of pneumatic conveying system.

KEYWORDS

Pneumatic, Handling, Chilli