Patent Search

Invention Title	CONCENTRIC CONICAL LOADING TEE PNEUMATIC FEEDER TO HANDLE MOISTURE AND DRY POWERS FOR LONG DISTANCE
Publication Number	42/2022
Publication Date	21/10/2022
Publication Type	INA
Application Number	202241057804
Application Filing Date	10/10/2022
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	MECHANICAL ENGINEERING
Classification (IPC)	B65G0053660000, A01C0007080000, B65G0053460000, F23K0003020000, C11D0003390000

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Abstract:

ABSTRACT Feeding powders in pneumatic conveying systems, possesses an issue of handling both moisture and dry powders in a typical feeding system where a pov stored in hoppers is fed into the conveying system through a rotary air lock valve, where in the mixing length and mixing chamber is a main criterion for the design. A shown in fig 1 and 2, in which fig. 1 is an eccentric loading Tee and Fig.2 is a L shape Loading Tee, in the prior art of two systems, there is no effective mixing of air and well as generating a Dense phase flow at the transport section or delivery section is not achievable. The invention concentric conical loading Tee with upstream ventu provide a buffer space for the particles to be stored and mixed with the air to generate a dense phase flow at the transport section. Being a concentric conical tee, the can handle material of high moisture content, concentric conical tee is also capable handing material with varying angle of repose.

Complete Specification

CLAIMS
We claim
[Claim 1]
An invention consisting of Concentric Loading Tee for Dense Phase Long Transport
[Claim 2]
A Concentric Loading Tee Which can handle both Dry and wet powders.
[Claim 3]
A Concentric Loading Tee Which can handle varying Angle of Repose.
[Claim 4]
A Concentric Loading Tee Which can handle High Moisture Content.
[Claim 5]
A Buffer Space in Concentric Loading Tee which will aid in generating a Dense phase Long Distance Transport

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Page last updated on: 26/06/2019