Technical Information

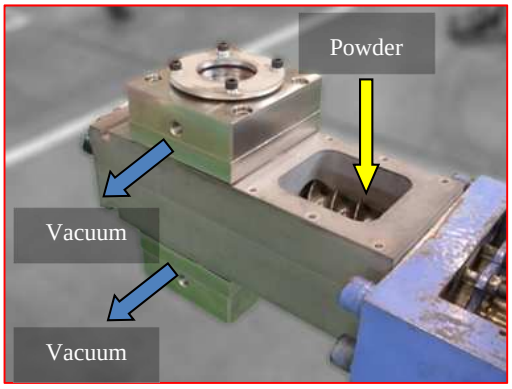
Side-Feed Deaerator “SFD”

Developed to remarkably improve productivity of powder material

Background

① Outline

Recently, demands on high throughput – high quality extrusion has been increasing, and particle size of mineral filler used for compounding is getting smaller. When these small particle gets aerated, their bulk density becomes small, and conveying efficiency in the extruder dramatically decreases, which ends up having a throughput-limiting build up at feed throat. We have developed a deaeration side-feeder that will give you a solution to this problem.

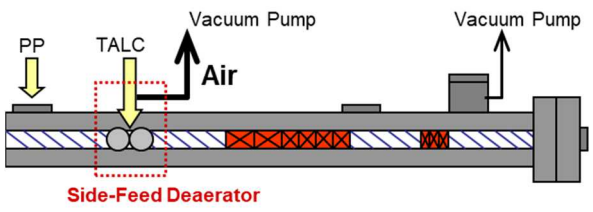


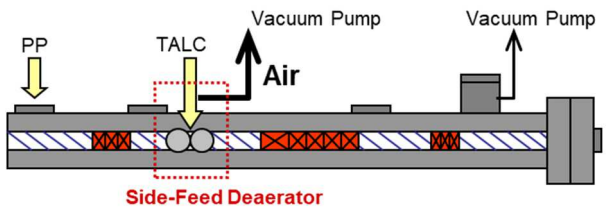
Side-Feed Deaerator Unit

Japan Pat. No.3712185

②Installation on Extruder

Side-Feed Deaerator is installed at conveying section of the extruder, and will be connected to vacuum pump that pulls out the air from the mineral filler to increase bulk density, which results in high throughput.

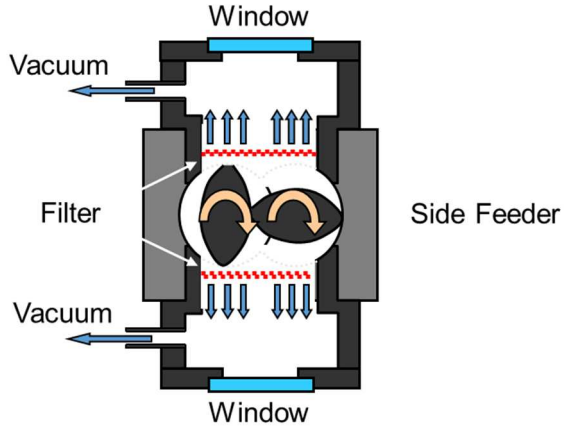


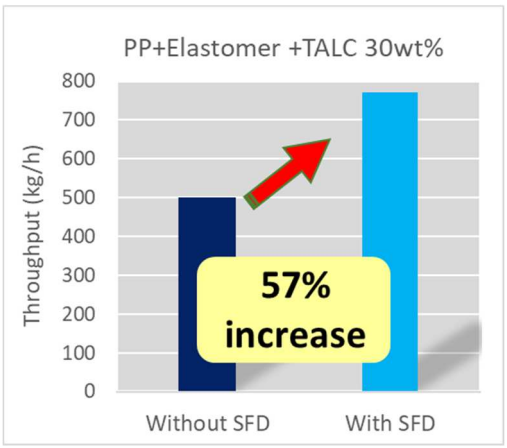


③Basic Mechanism

Basic construction of Side-Feed Deaerator is shown below. Special filter is installed in between inlet of the side feeder and extruder, and vacuum is pulled though the filter. On Polypropylene and TALC

compounding process, 50% throughput increase was obtained. (Effect of Side-Feed Deaerator varies depending on process)





④Remarks

We have delivered an extruder size ranging from 26.5mm to 443mm. From the vast delivery experience and technology, we will provide the most suitable equipment and process for your application. In our technical center, we have variety of special devices for trial purposes, including this Side-Feed Deaerator.