

Sandhya MineChem Industries



CASE STUDY 247

Product quality issues with Chinese screening technology resulted in the rejection of nearly 3000 metric tons of silica sand



CUSTOMER NAME

Sandhya MineChem Industries

CUSTOMER TENURE

7 years

INDUSTRY

Silica Sand

EQUIPMENT

5-Deck Stack Sizer®

LOCATION

Gujarat, India



"Derrick is 1st Class. They care about what they're making and that is why they are #1 in the world for fine screening equipment."

Mr. Bharat Bhide | Technical Director at Sandhya Minechem Industries



Why Derrick?

Our award-winning customer service and the unique combination of high capacity and efficiency of the Stack Sizer® and non-blinding, long-lasting Polyweb® urethane technology set Derrick® above the competition. Previously, competing Chinese equipment suffered frequent downtime for maintenance and cleaning. Derrick machines require little to no downtime, and with Polyweb panel's lifespans of 6-8 months, Derrick panels are low in operating expense and achieve a substantial return on investment.

Overview

Sandhya MineChem Industries produces high-quality silica sand for glass production at competitive rates. The company was experiencing issues with its Chinese screening equipment. One major issue was low screening

efficiencies, which resulted in large quantities of valuable product being rejected. Another issue was that the panels lasted 3 months or less, resulting in high OPEX. Since Sandhya replaced their Chinese machines with Derrick equipment, Sandhya's plant is achieving high recovery and now realizing 75% yield from every ton of raw ore they process. With low-energy, high-efficiency Derrick Super G® motors, Sandhya also saves on energy.

The Challenge

Sandhya, a family owned and operated business, needed a solution to revitalize their silica sand operation with drastically underperforming equipment from China. Silica sand imperfections, such as large amounts of coarse grains, can significantly impair glass production and harm Sandhya's market share. Equipment inefficiencies were causing

increased amounts of waste material. Their operation was impeded by local government restrictions, which contributed to growing unwanted costs for Sandhya.

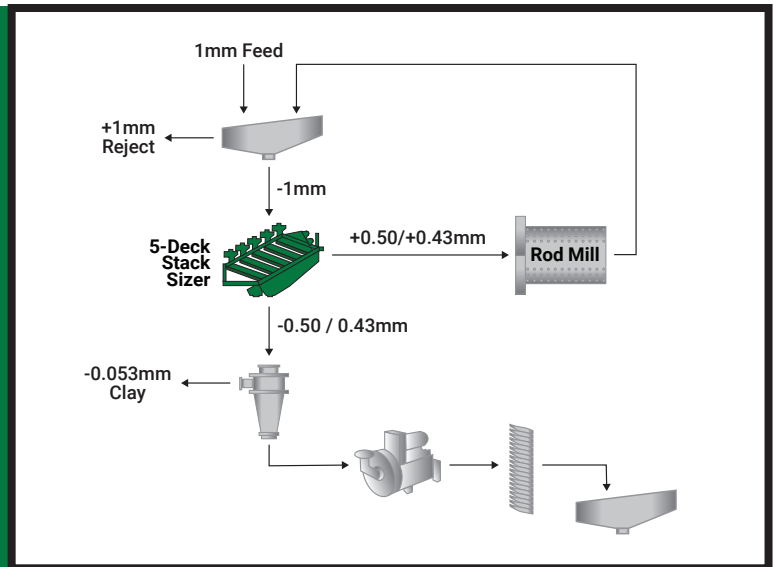
The Solution

A 5-deck Derrick Stack Sizer fitted with Polyweb panels allow Sandhya to process 800 metric tons per line each day. Previously, they processed 40 tons per hour with competitor equipment, but the high capacity of the Stack Sizer can process up to 70 tons per hour, giving the plant even more room to grow production. Derrick screen technology can remove 100% of coarse grains in 850 and 1000µm processed materials. With increased efficiency, reduced energy consumption, and less waste byproduct, Sandhya will see a total

return on investment once the plant operates at full capacity.

The Results

Derrick's global team assessed Sandhya MineChem Industries' concerns at their silica sand plant and quickly mobilized to install a 5-deck Stack Sizer. Sandhya benefitted instantly from minimal downtime at the plant and almost no costly and time-consuming waste removal. The key metric for success was the removal of imperfections in the processed silica sand. Derrick fine screens removed 100% of coarse grains in 850 and 1000µm processed materials with Derrick's 500/430 micron high open area urethane screen panels. Since installing the 5-deck Stack Sizer at Sandhya MineChem Industries' Silica Sand Plant in March 2023, service engineers from Derrick India have visited twice and are available by phone 24 hours a day, seven days a week.



KEY INSTALLATION BENEFITS



5-deck Stack Sizer operating with minimal downtime



More efficient operations with a clear timeline for quick return on investment



8.5m USD per year in energy savings for SMC's glass customer



Higher quality silica sand for glass making

DERRICK
STACK
SIZER®



5-Deck Stack Sizer®

The Derrick Stack Sizer provides a unique combination of high capacity and efficiency that sets it far above the nearest competition. Operators worldwide are using the Stack Sizer in a wide variety of applications and capitalizing on the numerous benefits of these remarkable machines to earn significant returns.

- Up to five decks stacked one above the other operate in parallel, giving high capacity with minimal space requirements
- Easy access for maintenance, servicing, and screen panel replacement
- Long lasting Polyweb Urethane screen panels - 6-12 months is common

Scan here to discover more about the Stack Sizer!



SCAN ME



For more information, please contact your local Derrick sales representative.
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