

## FRS-J: Sulphitation Replacement in Sugar Mill

- FRS-J, a high-performance adsorbent in white powder potential to eliminate sulphitation.
- Designed for superior clarification of juices and syrups in the Sugar Mill.

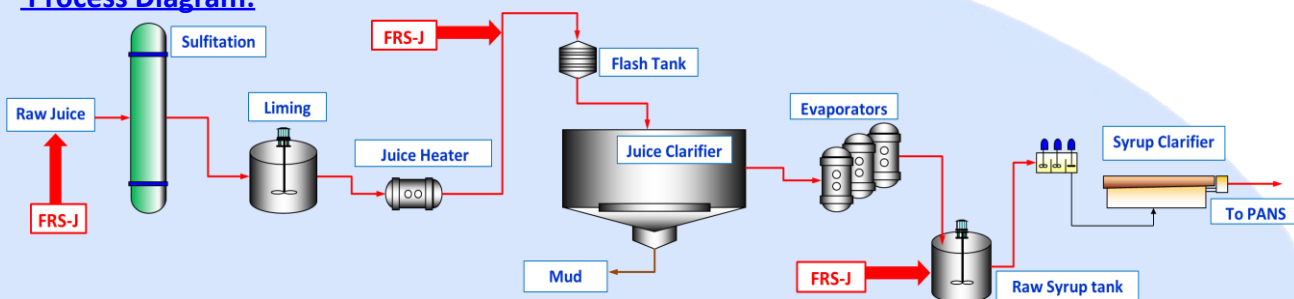
### Functionality:

- ✓ Combines with different purification mechanisms like bleaching action, impurities occlusion, coagulation, adsorption, oxidation, etc.
- ✓ Reduction on scaling for longer evaporator cycle of operation.
- ✓ Replacement to the traditional sulphitation.
- ✓ Reduction in lime dosing (associated lime incrustation problems in the evaporators).
- ✓ Easy to control and automatize.
- ✓ Increases overall factory yield.

### Projected Benefits:

Parameter	Effect
Color Removal (Juice)	(+) 10 – 40 %
Turbidity (Juice)	(-) 30 – 40 %
Lime Reduction	(-) 5 – 20 %
Sulfur Consumption	(-) 0 %

### Process Diagram:



### Feasibility study:

Taking as a base of calculations US\$ per ton of sugar produced and overall recovery of 89%.

Application	Average Cost
Based on Cane (U\$/TC)	0.16
Based on Sugar (U\$/TS)	1.45
Projected Profit (U\$/TS)	4.56

Projected Savings	U\$/Ton Sugar
Sulfur Consumption	0.75
Lime Consumption (20% Reduction)	0.25
Purity Drop in Final Molasses	2.01
Bonus on Better Sugar Quality	3.00

**Application:** The product can be applied as a dry solid or as 10 - 20% slurry in the following treatment:

- Raw Juice
- Sulfated/Limed Hot Juice
- Raw Syrup