



FRS-2: Phosphatation Sugar Refinery Decolorant

- FRS-2, high-performance adsorbent
- Designed for superior clarification in phosphatation sugar refinery.

Functionality:

- ✓ It is formulated for use as an additive in powder or slurry form in the Melter.
- ✓ Improves sugar refinery yield.
- ✓ Improves clarifiers.
- ✓ Reduces lime consumption.
- ✓ Reduces phosphoric acid consumption.
- ✓ Easy to control and automatize.
- ✓ Improves refined sugar quality.
- ✓ Reduces sugar beverage floc content.

Projected Benefits:

Parameter	Effect
Color Removal	(+) 20 – 40 %
Turbidity (Juice)	(-) 30 – 40 %
Lime Consumption	(-) 5 – 20 %
Phosphoric Acid Consumption	(-) 30 – 50 %

Feasibility study:

Phosphatation Sugar Refineries

Parameters	Regular Process	FRS-W Process
Phosphoric Acid (ppm)	450	250
Decolorant (ppm)	300	125
FRS-W (ppm)	-	300
Fine Liquor color (IU)	220-280	120-180
R1 color (IU)	23	12
R2 color (IU)	50	25
R3 color (IU)	100	38
R4 color (IU)	REJECT	75
Plant Yield Increase (%)	---	2.1

Application: The product can be applied as a dry solid or as 10 - 20% slurry in the melt station.

Process Diagram:

