Alumina

Process Chemicals
Flograde RH™
Grindings Aids for Alumina Processing

FLOGRADE RH™ is a formulation designed to increase the loading capacity of mills and improve the grinding of bauxite in alumina extraction refineries using the Bayer process.

Advantages of using FLOGRADE RH™:
- Increased bauxite flow rate at the mill of up to 50%
- Increased solids content
- No change in the particle size/granulometry of the milled product
- No changes in the TAA (total aluminium available) of the slurries after etching
- Deposit removal in pre-desilicators
- Deposit removal in transfer pipes, flake filters and pumps
- Reduction of mill electrical consumption

FLOGRADE RH Performance

Increase in the grinding capacity of mills of up to 50% with no significant variation in the particle size.
FLOMIN Flocculants for Settlers

2 main families have been especially developed by SNF to allow good performances in the extreme conditions of the decanters: Hydroxamated polyacrylamides and polyacrylates.

Hydroxamated polyacrylamides:
- Excellent affinity with the iron oxide
- Very good flocculation
- Increases settling rate
- Improves clarification of the overflow
- Decreases Yield Stress
- Improves mud pumpability
- Increases solid content
- Decreases Suspended Solids in the overflow
- Improves filtration
- Reduces lime usage

FLOMIN Flocculants for Washers:
- Large range of anionicity
- Large range of molecular weight
- Available under powder and emulsion form
- Compatibility for each caustic concentration
- Increases the mud compaction
- Improves clarification of the overflow
- Improves soda recovery
- Increases settling rate
- Increases productivity

FLOMIN ALX-S Flocculants for Hydrate Thickeners:
SNF has developed a range of polysaccharide based products to improve settling in tertiary thickeners, FLOMIN ALX-NS, ALX-S and ALX-F, their main advantages are:
- Decreased solids content in the overflow
- Reduced torque related problems
- Increased settling rates
Alumina Process Chemicals

**FLOSET**
The **FLOSET** range has been developed by SNF as a protective coating of ore stockpiles.

- Very efficient in fixing dust
- Creates a waterproof layer on the treated surface
- Excellent surface coating properties
- Can be used on mud dam to control caustic dust

**FLOSET R** is a dust controller for roads

- Prevents dust emissions from dirt roads and tracks emitted by vehicles
- Creates a crust on the road
- Allows to save a lot of water

**FLOQUAT**
SNF’s range of liquid coagulants can be used as:

- Humate removal aid, to reduce organics compounds before settlers
- Iron removal aid, to reduce iron content before safety filtration

**DRYFLOC**
The **DRYFLOC** products are especially designed polyacrylamides to dewater the tailings from the last washer. The advantages are the following:

- Saving space
- Saving on dikes building
- Saving in rehabilitation
- Saving in water
- Higher safety due to a faster consolidation of the slurry
- No particles segregation
- Avoid huge investments against dewatering equipment

**FLOFOAM**
**FLOFOAM** is a complete range of defoamers that can be used anywhere. In order to improve the efficiency, different formulations are available:

- Silicon emulsions
- Dispersions
- Oils
- Organic emulsions

**FLODRI**
**FLODRI** is a surfactant specially adapted to improve performance of vacuum filters. The advantages are:

- Increases productivity of vacuum filters
- Reduces electricity consumption
- Reduces costs of maintenance
- Reduces consumption of filter cloths
- Reduces cake moisture by 2-3%
- Increases the dry content of the cake

![Graph showing the relationship between FLODRI Dosage and Dry Content %]

- Dry content %
- FLODRI Dosage
SNF Technical expertise in Alumina Processing
Customers of SNF have access to our technical staff with expertise in alumina processing and in mining industry to solve their problems. SNF’s customer service team is dedicated to fast responses, the highest quality standards, and on-time delivery requirements. For any information concerning any products in Alumina Processing, please contact SNF.
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