

## **PROJECT PROFILE**

Product Name : **SULPHUR**

### **Product Specifications:**

- Active ingredient : 80% w/w  
- Inert ingredient : 20% w/w  
( china clay, dispersing agent, suspending agent).

### **PROCESS DESCRIPTION**

Sulphur is fed to the sulphur hoppers by means of belt conveyors from the storage bin. Additives are also fed to other hoppers. The sulphur and additives are conveyed to the Paddle mixer for mixing. On the way to the paddle mixer, sulphur & additives are measured by belt weighing systems and the flow is controlled through variable frequency Drives on motors of belt conveyors.

From paddle mixer, the mixed material is conveyed to AIR CLASSIFYING MILL ACM-30) in the ACM. The material is ground to 200-250 mesh (74-63 microns). This material is pneumatically conveyed to the CYCLONE and SCREENED. The Under –size material is fed to the JET MILL for further reduction in size. The over- Size material is recycled. In the JET MILL, the material is milled by a jet of compressed Nitrogen Gas to get the size of 1-10 microns. After paddle mixer, the entire milling Operation is done in inert Nitrogen Atmosphere.

The finished product is packed in ½ kg, 1kg FFS pouches and 25 kg bags. The 25kg bags are conveyed on a salt conveyor to a Stitching machine and stitched. the 1kg, ½ pouches are taken on a take off conveyor for manual bagging. The entire packing system is designed for 10 TPD, pouches or bags.

## LIST OF MAJOR EQUIPMENT

1. Belt Conveyor.
2. Feed hopper for sulphur.
3. Feed hopper for additive.
4. Belt conveyor with belt weigher & variable frequency drives.
5. Belt conveyor.
6. Paddle mixer.
7. Belt conveyor.
8. ACM-30 Assembly.
9. Vibro sifter.
10. Screw conveyor.
11. JET MILL Assemble.
12. Packing silo.
13. Bagging machine.
14. Slat conveyor.
15. Sticking machine.
16. Nitrogen Gas Generator.

**Production Capacity** : 10 TPD

**Inputs** : Per ton of Product

a) RAW MATERIAL :  
Raw Sulphur : 0.8 MT

### Utilities

Power : 150 HP