



CROPSAFE PESTICIDES INDIA PVT. LTD.



Better product for better life

INTRODUCTION

CROPSAFE PESTICIDES

INDIA PVT. LTD.

- An ISO certified company with GLP manufacturing facility with presence in 40+ countries extensively covering the domestic market and export to Asia, Africa, Latin America, CIS countries and Middle East.
- Leading manufacturers and exporter of Agrochemical Products
- Young & Dynamic team with 25 years + experience in AGRO industry.
- 350+ registered products with GLP dossiers among with acute 6 pack Toxicological and 5 batch Chemistry data.
- ISO and NABL accredited company with GMP compliant manufacturing setup

OUR VISION

Leveraging the trust of our valued clients and associates, we offer integrated consultancy services encompassing complete machinery installation and advanced technology transfer for pesticide formulation manufacturing worldwide.





Our overseas clients/associates trusted us with supply of various machineries and technology transfer along with long term supply agreement to supply technical and other adjuvants and inners required for formulations.

In the recent times we have exported / at various stages of Project development to clients in the following countries:

1. **CROATIA:** Formulation Plant of EC, SC & SL products with Technical & formulation Know-how.
2. **PAKISTAN:** Complete plant and technology transfer for manufacturing Sulfur WDG,DF and SC.
3. **IRAN:** Formulation Plant of EC, SC & SL with Technical & formulation Know-how.
4. **KENYA:** Complete from the scratch for EC, SC, SL, WDG, SP/WP formulations with Technical & formulation Know-how.
5. **UAE:** Various mixing Vessels for one of our existing client.

Turnkey Projects Completed/Ongoing



Turnkey Projects Completed/Ongoing

6. Algeria: Formulation Plant of EC, SC & SL, Air Classifier Mill (WP) products with Technical & formulation Know-how.

7. Nigeria: Formulation Plant of EC, SL

8. Serbia: Organic & Compound Fertilizer Production Line.

9. Bangladesh: Formulation Plant of EC, SC, SL, WP/SP, WDG.

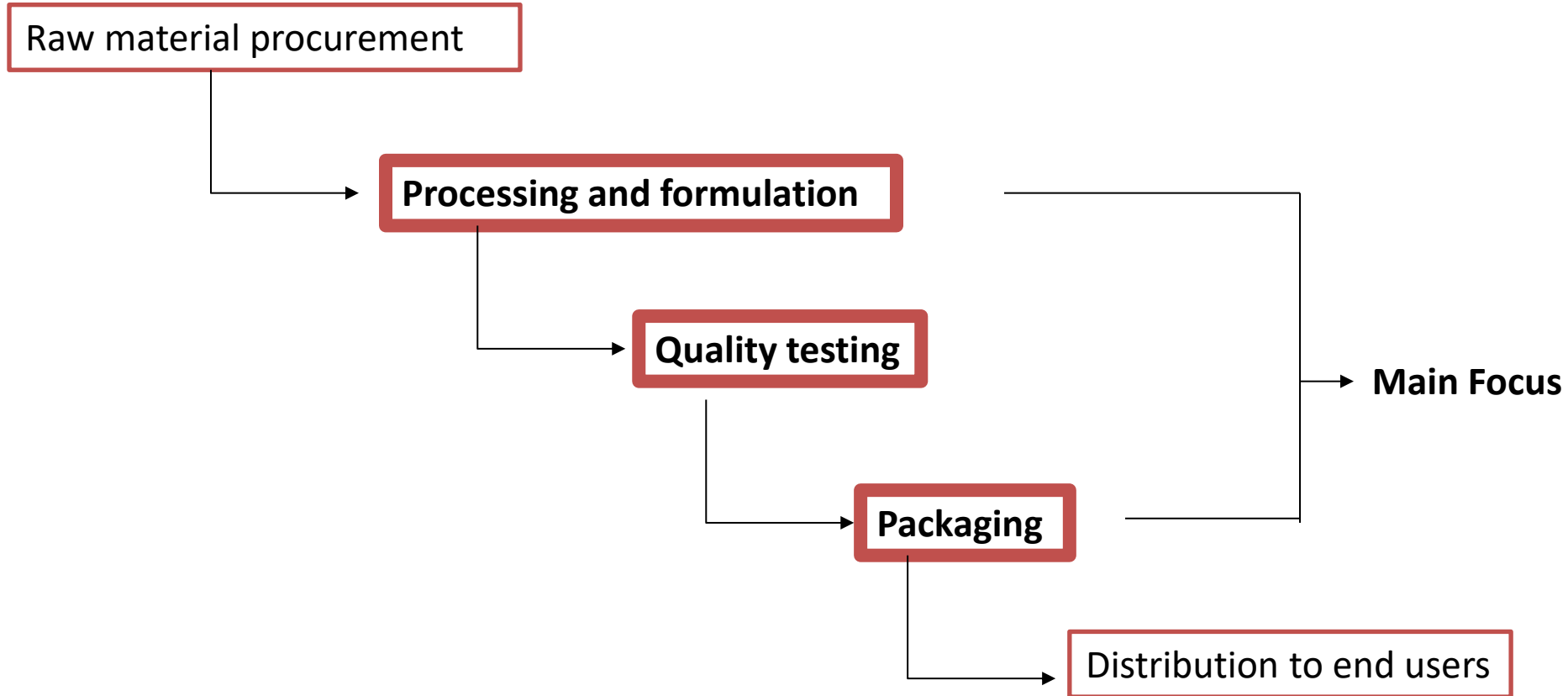
SOME OF OUR RECENT EXPORTS



SOME OF OUR RECENT EXPORTS



Pesticide Manufacturing Process



FORMULATION TYPES

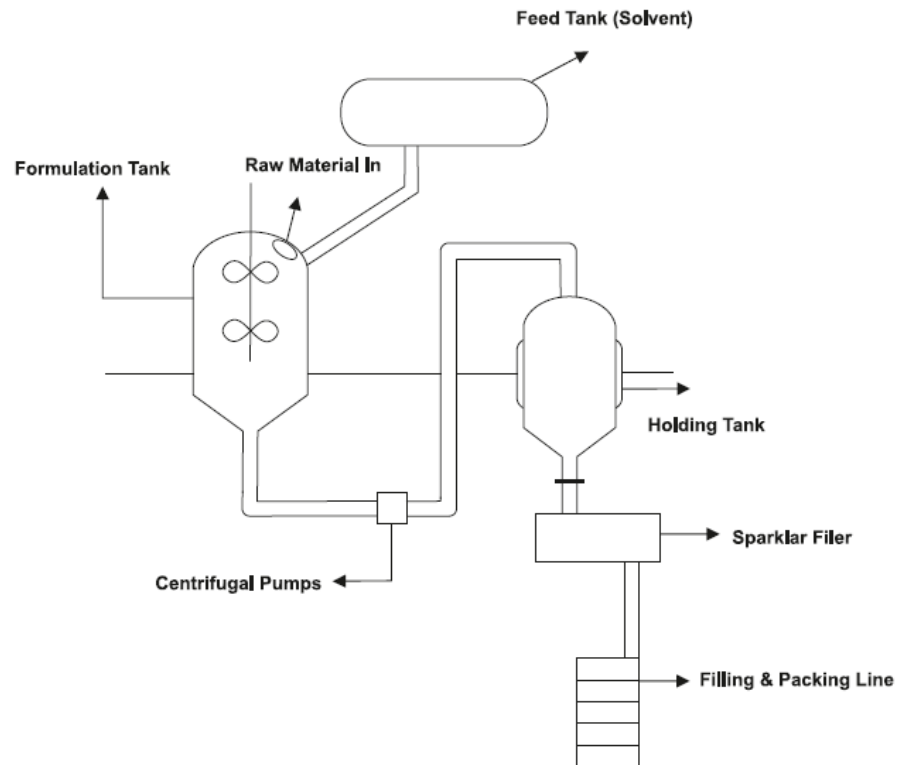
	Formulation	Description
1	EC: Emulsifiable Concentrate	Contain an oil-soluble liquid active ingredient, a petroleum-based solvent, and an emulsifier (mixing agent).
2	SL- Soluble Liquid	Pesticide is dissolved in water or a water-soluble organic solvent. To enhance the efficiency and efficacy of the spray mixture.
3	SC: Suspension Concentrate	The suspension concentrates (SC) formulation consist of Stable dispersion of micronized active ingredient in water.
4	WP/SP: Wettable / Soluble Powder	WP formulation the active ingredients are applied to finely ground talc or clay particles. SP formulations look like wettable powders. However, when mixed with water, soluble powders dissolve readily and form a true solution.
5	WDG: Wettable Dispersible Granules/WG/SG	WGs are a solid, non-dusty granular formulation which disperses or dissolves when added to water in the spray tank to give a fine particle suspension.



EMULSIFIABLE CONCENTRATE (EC)

WORKING FLOW CHART OF EC

EC



IMAGES OF EC EQUIPMENTS

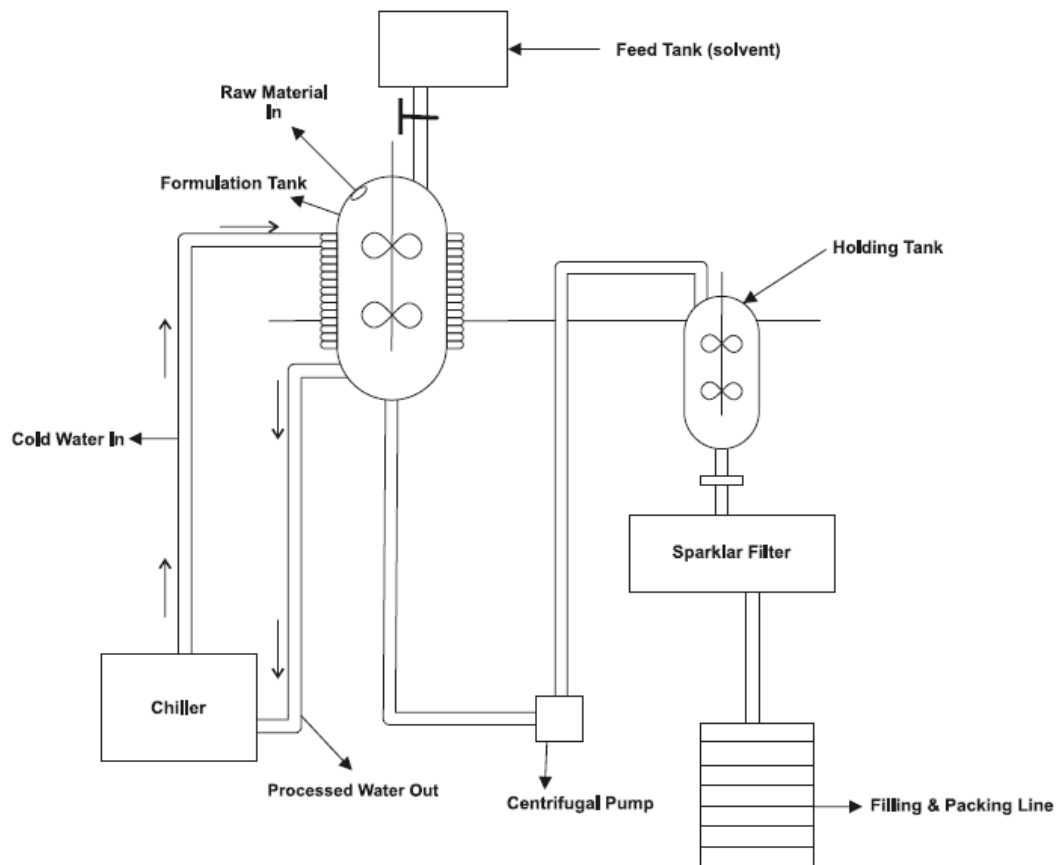




**SOLUBLE LIQUID
(SL)**

SL

WORKING FLOW CHART OF SL





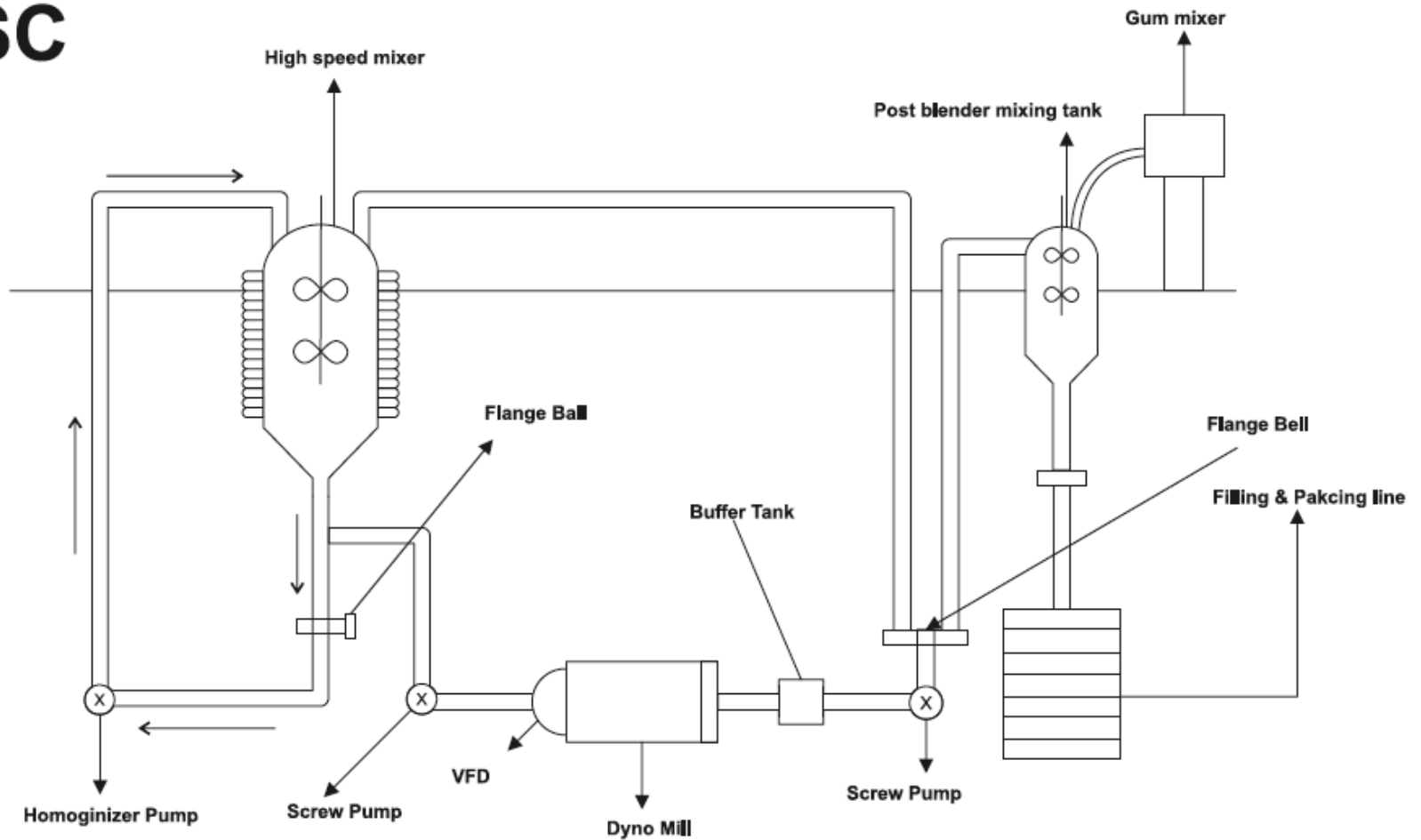
EQUIPMENTS OF SL PLANT

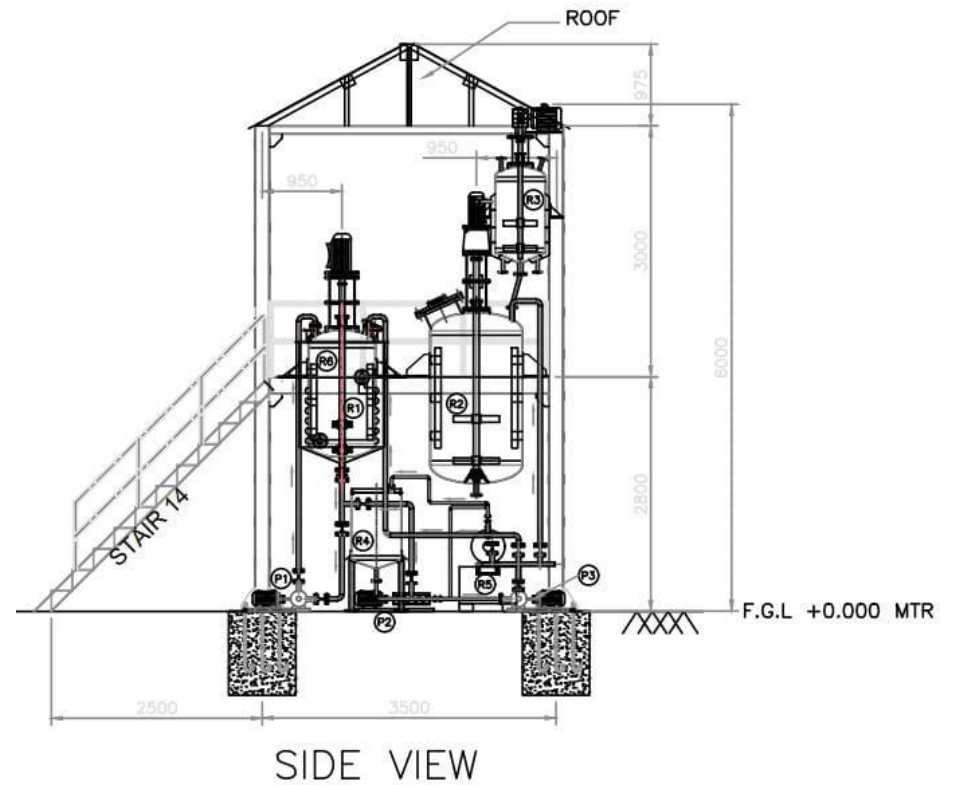


**SUSPENSION
CONCENTRATE/
SC
FORMULATIONS**

WORKING PLANT OF SC FORMULATION

SC





EQUIPMENTS OF SC PLANT

SC PLANT



Crop Safe
PESTICIDES INDIA PVT LTD



HIGH SPEED MIXER SC PLANT



HIGH SPEED MIXER SC PLANT

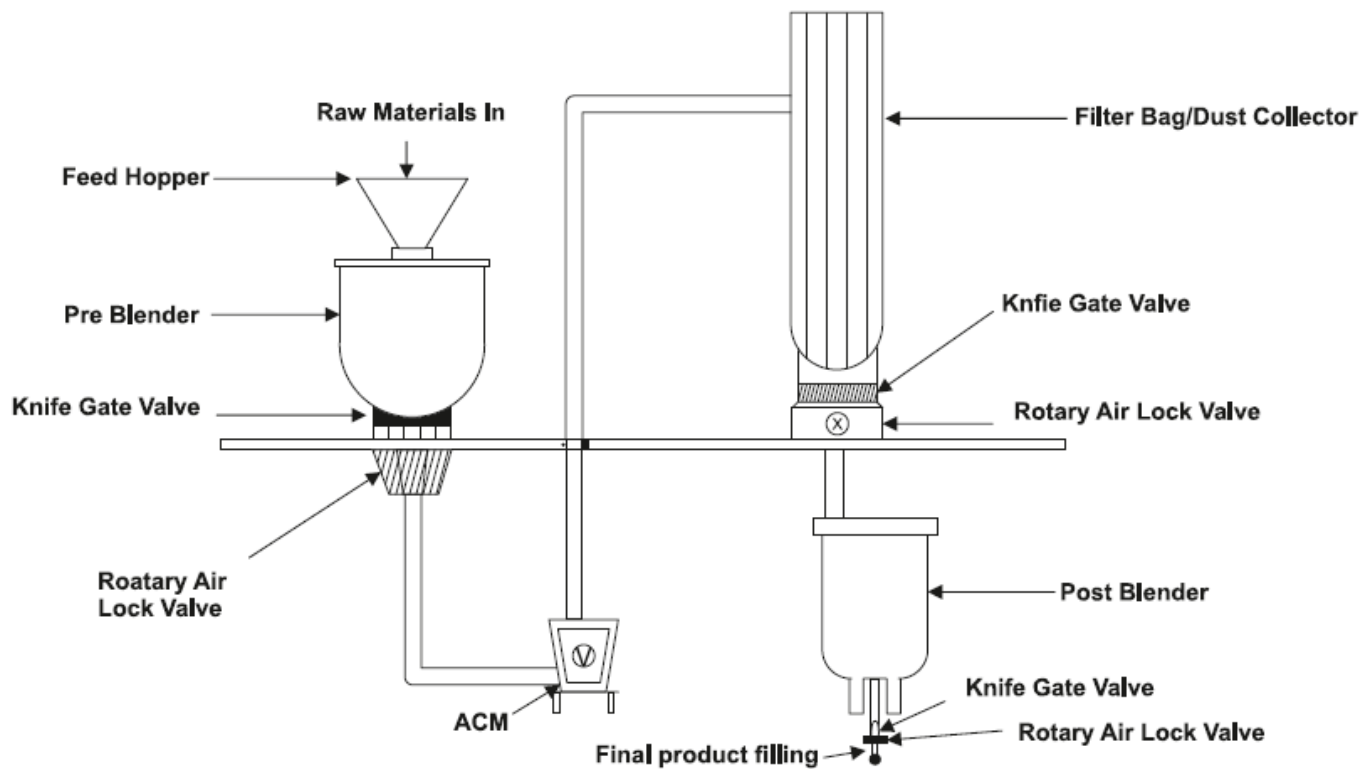


WETTABLE/SOLUBLE POWDER (WP/SP)

WORKING OF WP/SP FORMULATION

SP

ACM 30 (Air Classifying Mill)



WP/SP FORMULATION CAN BE MANUFACTURED USING EITHER:

1. AIR CLASSIFIER MILL (ACM)

An Air classifier mill (ACM) is a high-speed mechanical impact mill with an integrated dynamic air classifier used to grind dry materials into fine powders, typically ranging from 10 to 200 microns.

Raw material enters the mill through the feed inlet

- A **high-speed rotating rotor (with hammers or pins)** hits the particles
- Particles are broken into smaller sizes
- Air is drawn through the mill, carrying the particles upward
- A **classifier wheel** separates particles based on size
- Fine particles** pass through → collected as final product
- Coarse particles** are rejected → sent back for further grinding
- Fine powder is collected in a cyclone or filter system.

3D IMAGE OF WP/SP PLANT



An Air Classifying Mill (ACM) is an industrial, screenless impact mill that combines grinding and precise particle classification into one step, producing fine to ultra-fine powders.

OR BY:

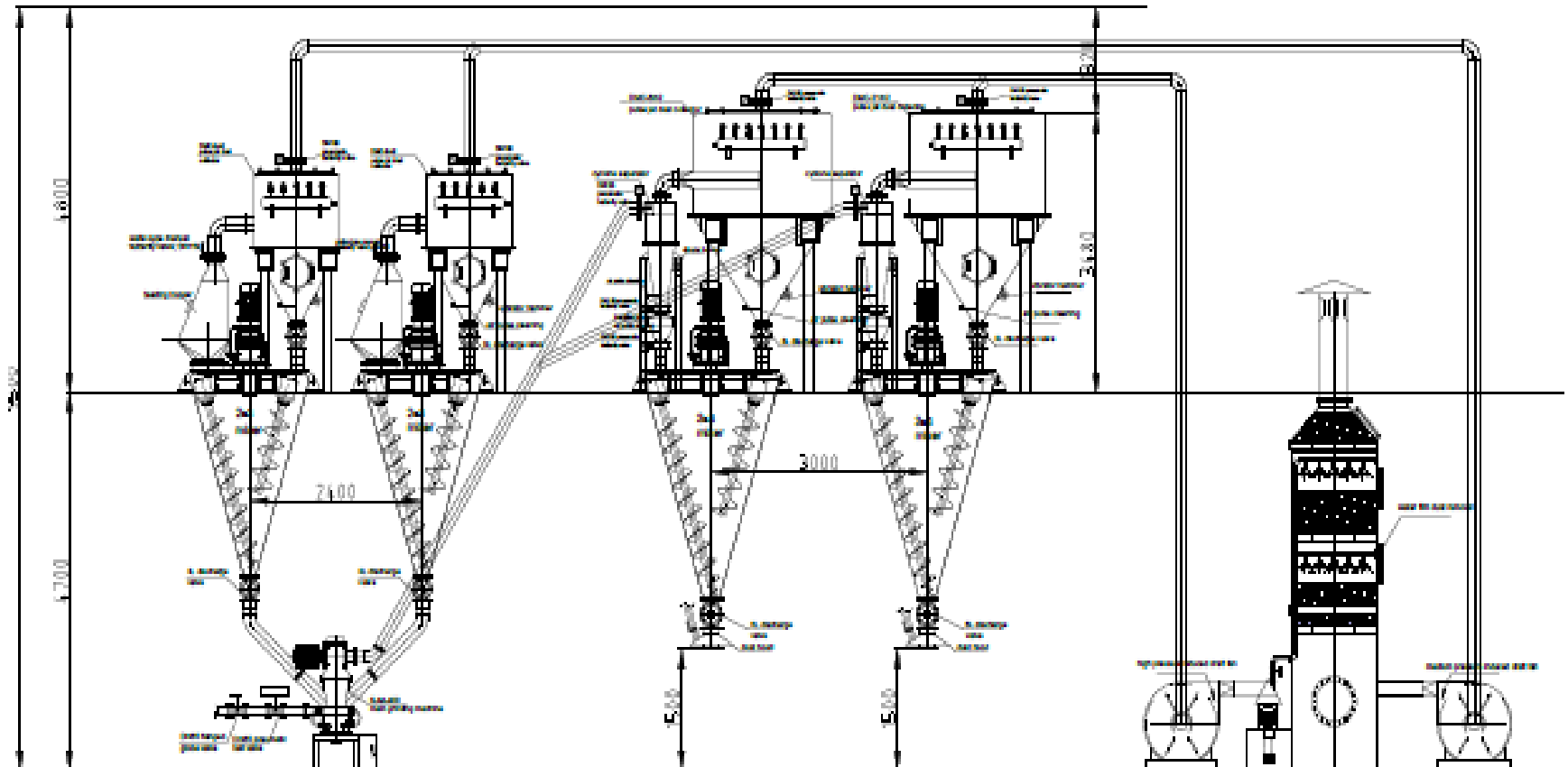
2. JET MILL

A jet mill is a type of grinding machine used to reduce particles into very fine powder using high-speed air instead of mechanical grinding parts.

Compressed air (or steam) is injected at very high speed

- This creates a **vortex (circular motion)** inside the mill
- Particles collide with each other at high velocity
- These collisions break them into **micron-sized particles**
- Fine particles are collected, while larger ones continue grinding

JET MILL



A jet mill is a type of grinding machine used to reduce particles into very fine powder using high-speed air or gas, instead of mechanical grinding parts.

Grinding Jet Mill is of two types:

- Spiral Type Jet mill
- Fluid Bed Opposed Type Jet Mill



EQUIPMENTS OF WP/SP PLANT



WG/SG
Wettable/Soluble
Granules



EQUIPMENTS OF WG PLANT



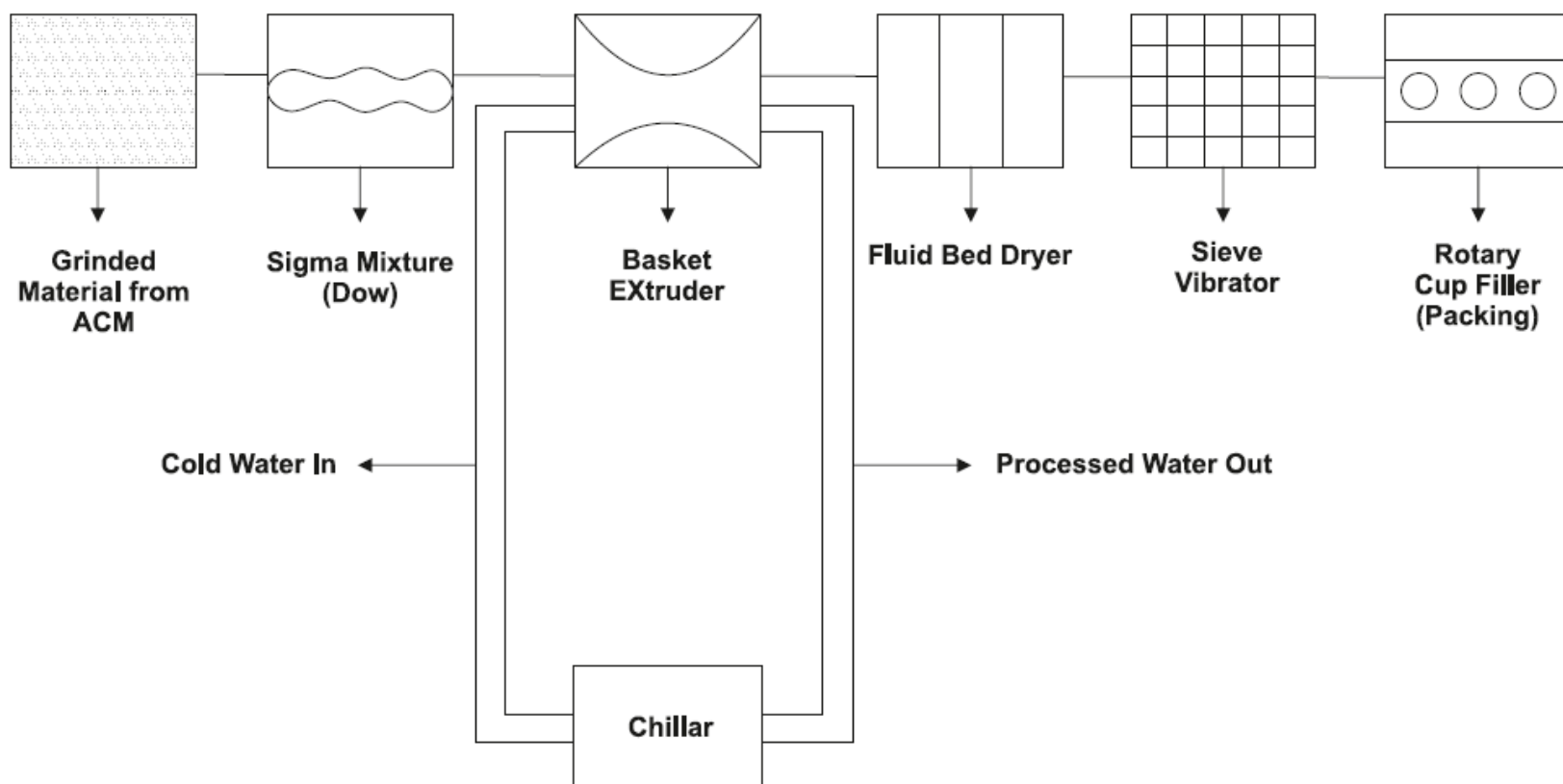
EQUIPMENT OF WG PLANT



Water Dispersible Granules (WDG)

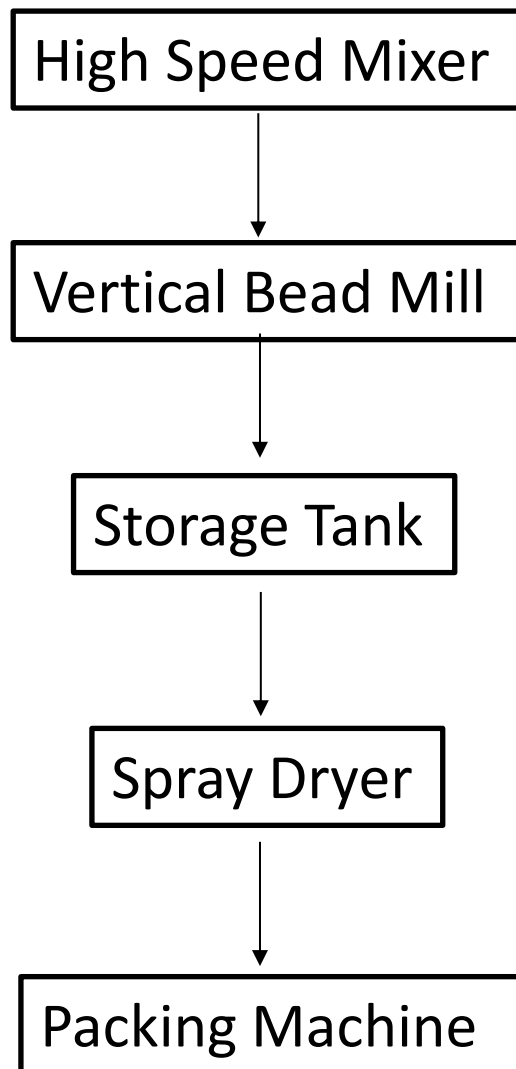
WORKING FLOW CHART WDG

WDG



SULPHUR 80% WDG

MANUFACTURING PROCESS OF SULPHUR





High Speed Mixer



Reactor Vessel



Spray Dryer



Storage Vessel

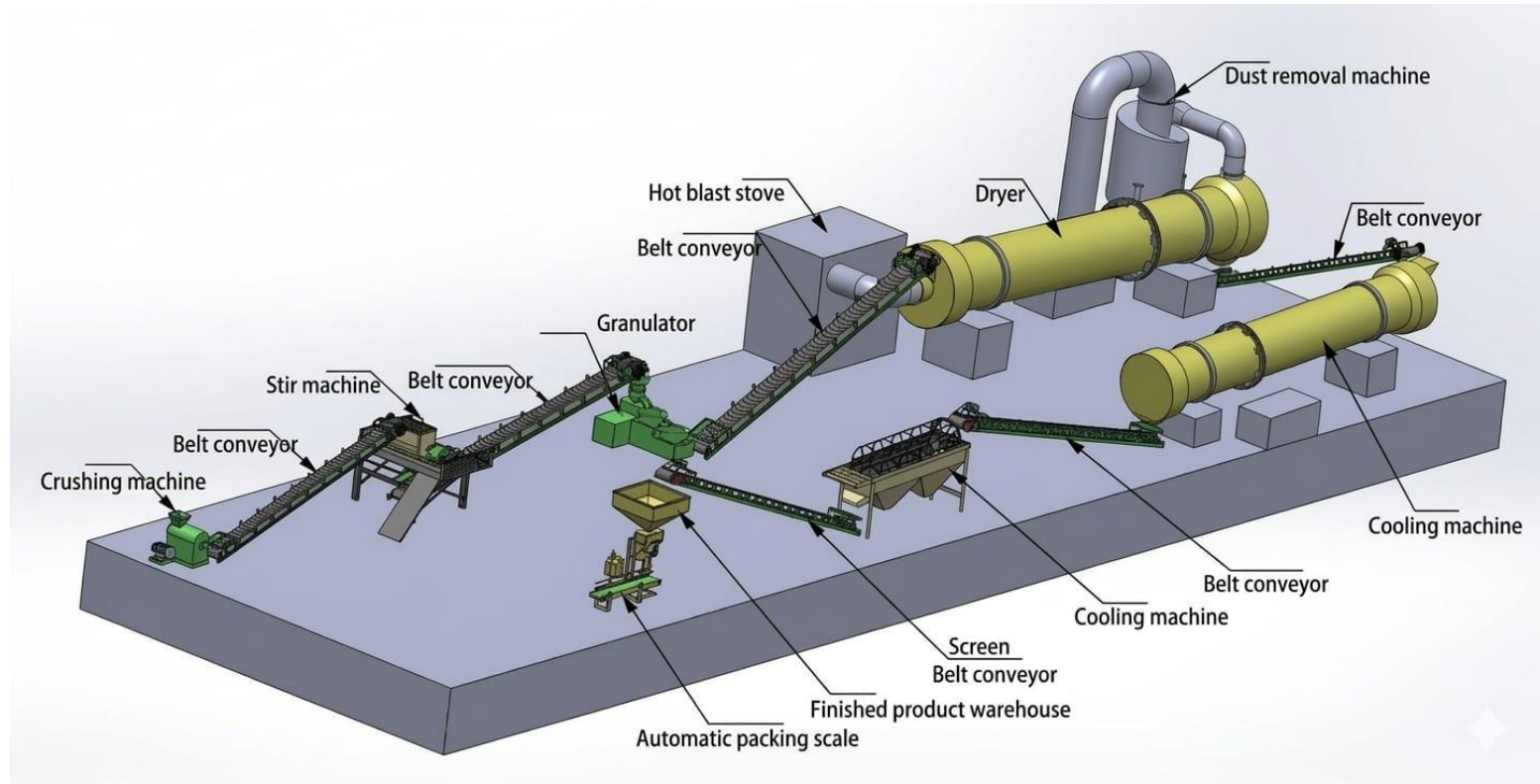


Vertical Bead Mill



Homogenizer Pump

FERTILIZER PRODUCTION LINE



ORGANIC FERTILIZER PRODUCTION LINE

- Fermentation Machine
- Crusher
- Batching Equipment
- Mixer
- Granulator Rotatory/Disk Granulator
- Rotary Dryer
- Bio based Burner
- Packing Machine



Granulator



Crawler Type Fermentation Machine



Mixer

COMPOUND FERTILIZER PRODUCTION LINE

- Crusher
- Batching Equipment
- Mixer
- Granulator Rotatory/Disk Granulator
- Rotary Dryer
- Bio based Burner
- Packing Machine



Packing Machine



Batching Equipment



Crusher

Organic fertilizer production lines and compound fertilizer production lines can also be integrated into a combined production line, offering a more efficient and versatile solution for fertilizer manufacturing.

FERMENTATION MACHINE-COMPOST TURNER



Crawler Type Fermentation Machine



Groove Type Fermentation Machine

PACKAGING MACHINES

AUTOMATIC POWDER FILLING & PACKAGING MACHINE

- Material Feeding
- Powder Conveying
- Weighing & Measuring
- Bag/Form Preparation
- Filling Process
- Inspection & Quality Check
- Discharge & Collection
- Cartooning & Final Packaging



AUTOMATIC LIQUID FILLING & PACKAGING MACHINE



**Turntable
Machine**



Liquid Filling Machine



**Rotatory Screw
Capping**



Induction Sealing



**Double side
Labelling**

ROBOTIC PALLETIZER FOR BAG CARTON BOX FOR PACKAGING LINE



Robotic Palletizer for Carton Box Packaging



Robotic Palletizer for bags Packaging

BOTTLE SHRINKING WRAPPING MACHINE



PROJECT DELIVERY

Crop Safe offers the following value additions-

- Plant Design
- Complete machinery set up
- Commissioning of machinery setup
- Complete technical knowledge of machinery maintenance.
- Training of Man power for process, formulation, Quality control, handling of equipments and maintenance.
- Formulation process/recipes including Quality control SOP.
- Assist with the Supply Chain & procurement of raw material (Technical, Adjuvant, Solvents etc.)
- Assist trouble shooting in process and formulations.

EMBRACING THE FUTURE OF AGRICULTURE

- ✓ The integration of creative machinery formulations is propelling agriculture into A new era of sustainability and productivity.
- ✓ Let's harness this momentum to cultivate a brighter, more efficient future for agriculture.





Thank You