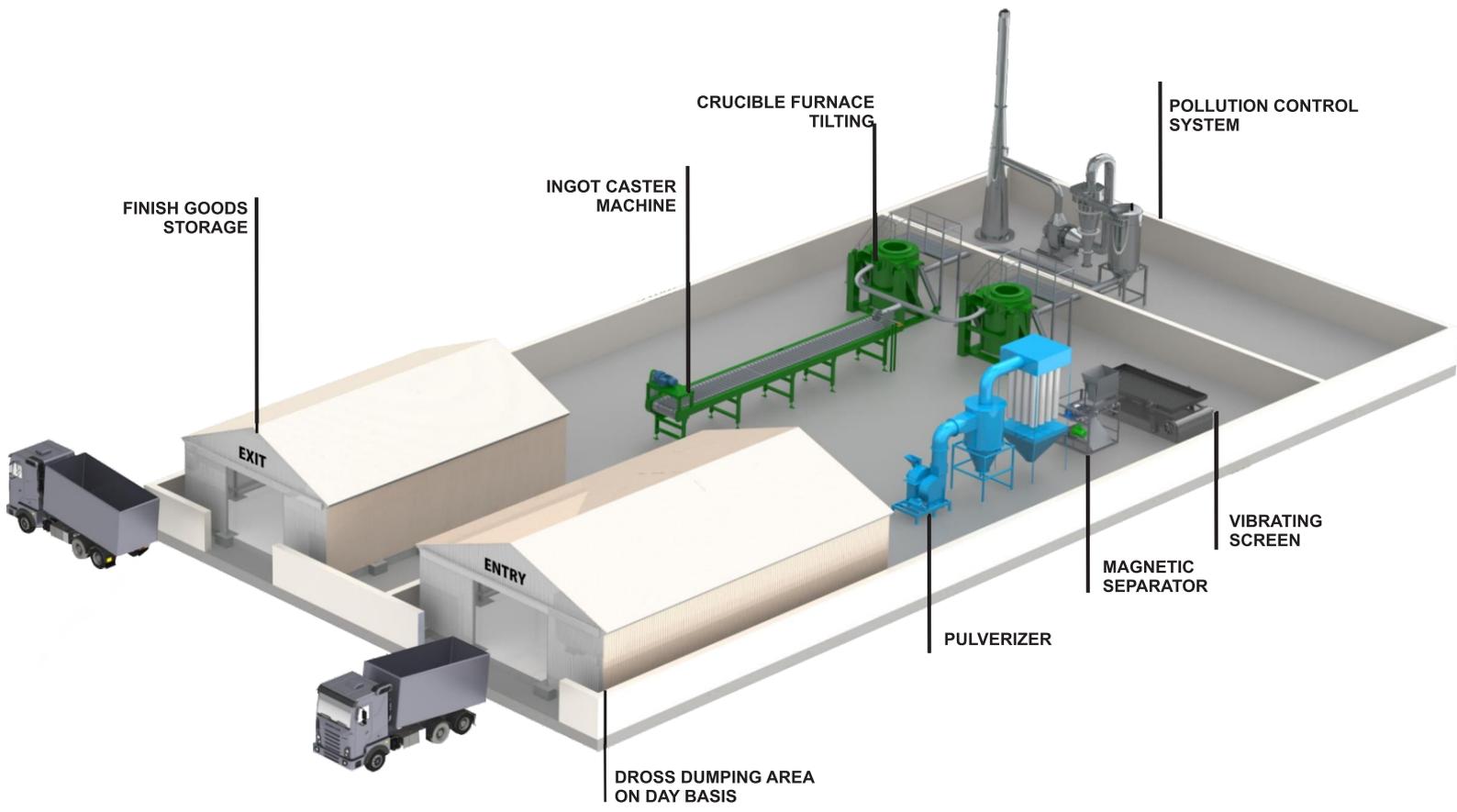
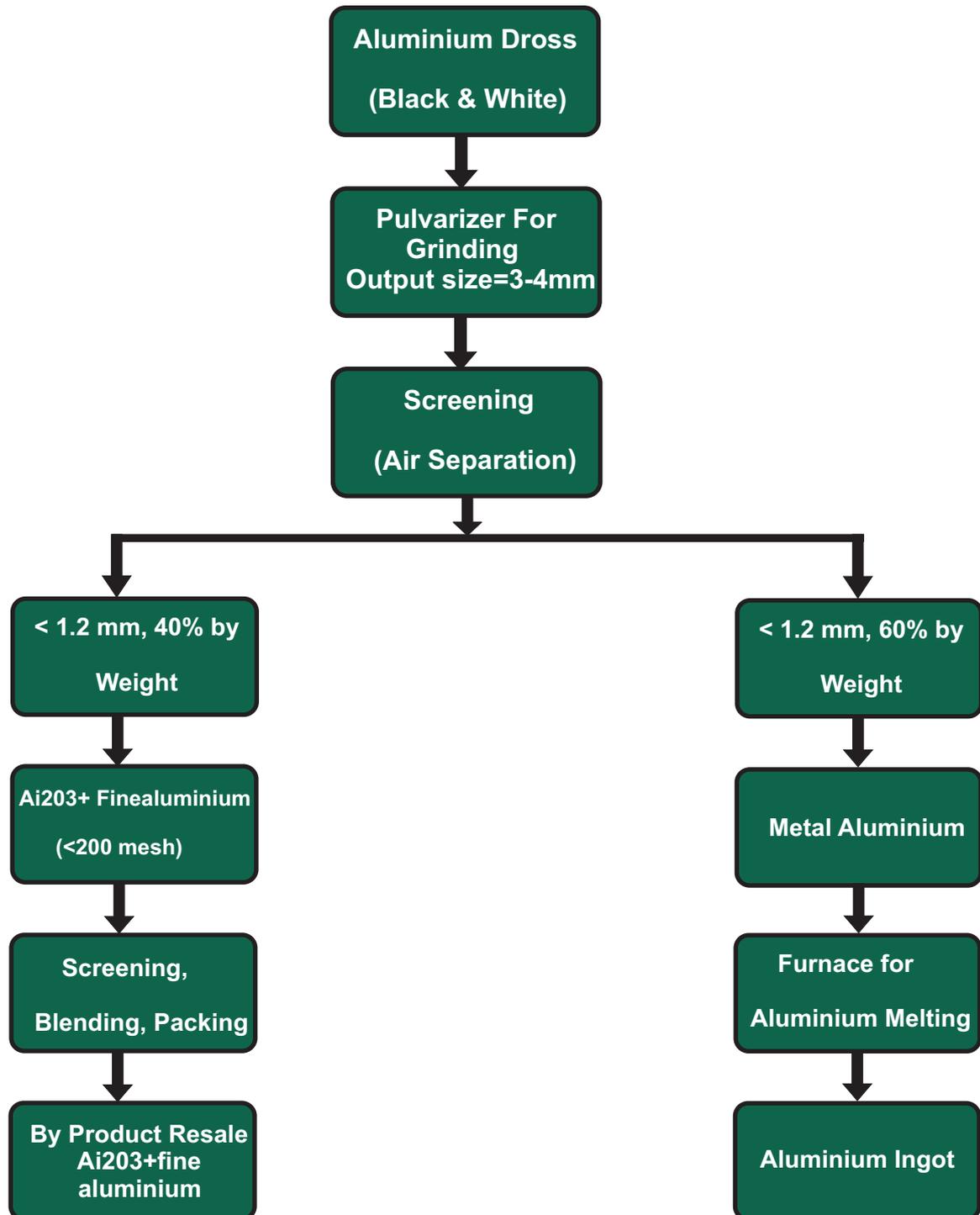


## ALUMINIUM COLD DROSS PROCESSING PLANT





## Parameters For Aluminium Cold Dross Processing Plant:

- 1] Plant Capacity-
  - 50T dross process / Month
  - 100T dross process / Month
  - 200T dross process / Month
- 2] Product- Refined aluminium ingot
- 3] Raw material- Aluminium dross.
- 4] Fuel consumption / IT dross process-75 kg @8700I/Nm<sup>3</sup>.

## Aluminium Cold Dross Processing Plant Includes,

- 1] Pulveriser
- 2] Magnetic
- 3] Vibrating Screen
- 4] Crucible Furnace / Rotary Furnace / As Per Raw Material
- 5] Automatic Ingot Casting Machine
- 6] Pollution Control System

### Pulveriser

- 1] Raw material to be pulverised enters the crushing chamber through the hopper. The impact of the hammers on the feed material against the liner plates reduces it into fine powder and separate aluminium particles and non - metal particles.



## MAGNETIC SEPARATOR

1) Based on the generation of magnetic forces on the particles to be separated, which are higher than opposing forces such as gravity or centrifugal forces. This principle is used to separate ferromagnetic particles from aluminium particles.



## VIBRATING SCREEN

1) Vibrating screen is a mechanical equipment that uses vibrating screen panels to classify the mixture which contain different particles according to particle size. For aluminium dross above 1.2mm particles can use for Conversion of molten aluminium.



## CRUCIBLE FURNACE / ROTARY FURNACE / AS PER RAW MATERIAL

1) Crucible furnaces are one of the simplest types of melting unit used in the foundry. The furnaces uses a refractory crucible which contains the metal charge. The charge is heated via conduction of heat through the walls of the crucible. The heating fuel is typically oil, gas. Crucible melting is commonly used where small batches of low melting point alloy are required.

Melting furnace capacity – 500 kg /batch

Melting rate /hr – 150 kg /hr

Operating temperature – 550 – 650 degreeC



## AUTOMATIC INGOT CASTING MACHINE

1) This machine is a combination of chain conveyor mechanism wherein casting mould normally fits on the chain. After completing process of refining / alloying, molten aluminium normally tap out at regulated pouring speed and it can be varied as per the requirement through VFD drive.



## AIR POLLUTION CONTROL SYSTEM

When dross can converted in aluminium, effluent gas containing dust, oxides of aluminium, alkaline metal.

For factory environment and employees health to get high end air pollution control system for furnace.

## DISCHARGE CHARACTERISTICS AS PER NORMS,

Dust - Trace Al<sub>2</sub>O<sub>3</sub>  
Outlet dust - 50mgm/Nm<sup>3</sup>  
Temperature - 70 -90 degreeC

## SYSTEM INCLUDES,

- a) Hood, ducting- Effluent gas travelling form furnace to chimney.
- b) Cyclone separator- Big & medium particle size to be settled.
- c) Bag filter & I.D. Fan- Final filtration of effluent gases to remove fine dust particles. and It is necessary driving force to convey gas from furnace to chimney..
- d) Chimney- The generated gases are passed to atmosphere after treatment of the effluent gases.

