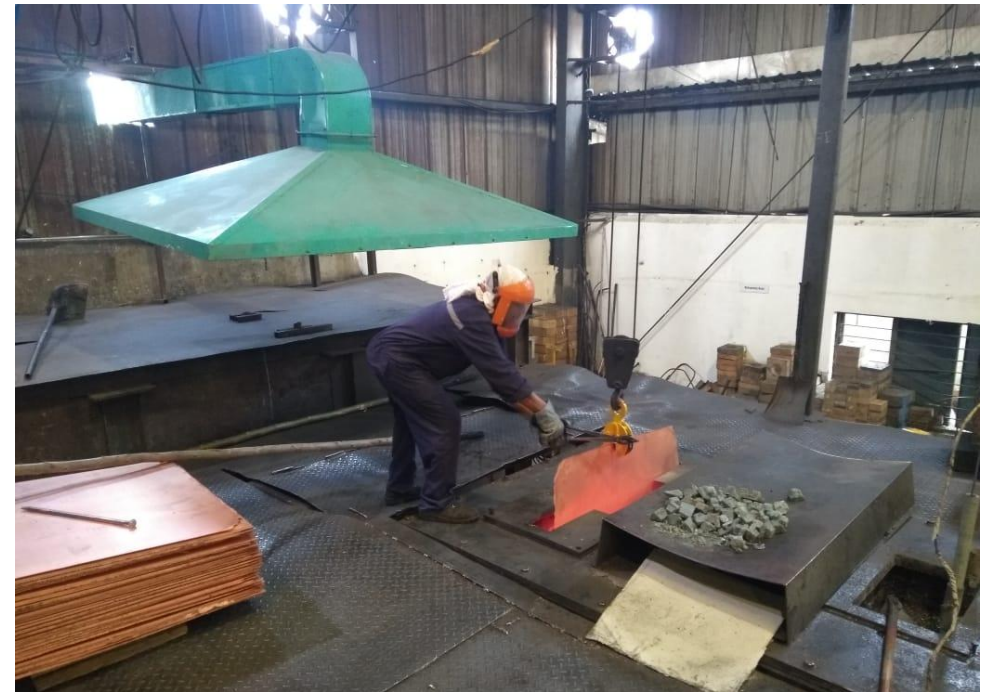


MANUFACTURING FACILITY

- State of the art manufacturing facility which employs **Cast and Roll technology** to get a range of products, that is LWC, PCC and Straight Tube.
- Manufacturing machineries and process :-
 - CONTINUOUS CASTING FURNACE**
 - The raw material used for casting is **LME grade Cathode** which is cast into mother tubes for rolling and redrawing process.
The mother tube copper grades is-
 - Cu-DHP with composition of
Copper (Cu) 99.9% - Phosphorus - 0.015 - 0.040%



ii. **SURFACE MILLING** – The mother tube of OD 90mm and ID 42mm is milled to remove surface oxides and inclusions.



iii. **PLANETRARY ROLLING** – The mother tube after milling is then rolled in planetary rolling mill to obtain 50 mm x 45 mm size to get internally sound cold drawn tubes with reduction of 90% in cross section of the tube.



iv. **COMBINED DRAWING** – In this operation the tube is further drawn to OD 33mm x ID 30mm by cold drawing operation.



v. **SPINNER DRAWING OPERATION** – The tube is further redrawn on spinner block which is a High Speed Drawing operation having a speed of 700 Mtrs per minute to get obtain desired final tube size with multiple die passes.



vi. **LEVEL WINDING , STRAIGHTENING AND PANCAKE COILING** – The coils are placed in baskets and then based on requirement level wound coils, 50ft pancake coils or straight tubes are made.

vii. **ANNEALING** – The copper tubes are then annealed in **Bell type vacuum annealing furnace** to required specifications and tempers.

- ✓ **JIS H3300 –Cu DHP – O – Soft, ½H –Half hard and H- Hard.**
- ✓ **ASTM - B68, B75 & B280- O60 (Soft annealed) , O50 (Light annealed), H80 (Hard) and H55 (Light Drawn)**



Eddy Current tested LWC / Jumbo Coils are wound and weight 100 kg approximately.

