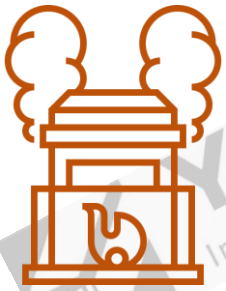
Aluminum Slab Casting Process



Furnace Loading

Aluminum Ingot, A00: Al >90.00%

Alnatively, Liquid Aluminum + Ingot

Alloy Additives (Intermediate Alloy)

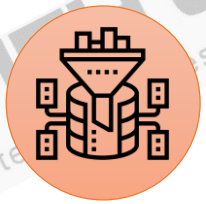


Heating & Smelting

Smelting Temperature 700°C ~ 770°C

Furnace Temperature appr. 1200 °C

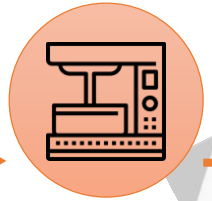
Add Base Metal, like Zn, Cu



Slag Off

Remove Impurities

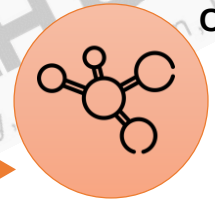
Add Base Metal, like Mg or Be



Mixing

Alloy Elements Evenly Distributed

Temperature Balanced

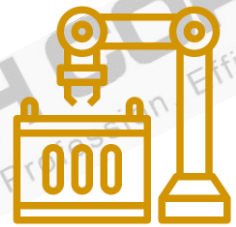


Composition Adjustment

Sampling & Testing

Filling, (Intermediate Alloy)

Diluting, (Intermediate Alloy)



Refining

Gas Refining

or Flux-refining



Turning Furnace

Holding Furnace



Slag Off

Remove Dross

Remove Inclusions



Degassing Treatment

Degas H2 & other Gas

Test the Content of H22



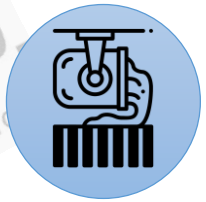
Composition Confirmation

Final Confirmation



Temperature Control

Test & Adjust Temperature



DC Casting

Casting Slabs

Liquid to Solid



Homogenized

High Temperature : 450°C ~ 615°C

Duration : 10 ~ 40 hours

Eliminate or Reduce Segregations

Improve Subsequent Formability



Surface Treatment

Cutting & Sawing & Milling

Take 5 ~ 30mm off



Quality Check

Chemical Composition

Metallurgical Quality

Metallographic Structure



Slabs

Ready for Hot Rolled