INTERDEPENDENCE BETWEEN COOLING RATE MICROSTRUCTURE AND ROTATIONAL SPEED OF THE MOLD ON AL-CU CENTRIFUGAL CASTING

Theerthesha B D, Vijay kumar, Tejas R, Mounesh, NitteMeenakshi Institute of Technology, Yelahanka, Bangalore, India

Centrifugal casting is one of the most excellent casting process in production of cylindrical and symmetrical parts like tubes, cylinder liners and bushes. In centrifugal castings solidification rate is faster but still solidification depends on various process parameters like, die wall temperature, pouring temperature of the molten metal, wall thickness of the die and also rotational speed of the die. The present work is focused on producing cylinders at different rotational speed and compare cooling rate microstructure and rotational speed of aAl-4%Cu composite. The light weight, fuel efficient excellent mechanical, chemical and casting characteristics of Aluminium and copper alloys have more demand in automobile and aerospace industries.

