# How CHAENG to make high-quality ball mill trunnion

The trunnion shaft is an important part of the ball mill, to bear the entire load of the mill body and the grinding media during operation, and continuously works under the action of alternating stress. Ball mill trunnion requires good overall mechanical properties, no contraction cavities, shrinkage, air hole, sand inclusion, and other casting defects.

A scientific and rational process plan can improve the overall quality and increase the production efficiency. The key to ensuring the quality of castings is to determine a correct set of process solutions.

According to the working environment and operating characteristics of ball mill trunnion, CHAENG uses cast steel materials ZG230-450, and continuously optimizes the production process.



# Process of CHAENG ball mill trunnion

#### Simulation, modeling

Before casting, CHAENG use InteCAST CAE software to carry out digital simulation of the casting process. Through numerical simulation technology, the process analysis and quality prediction of the product forming process are completed.



### Pouring, heat treatment

Perform the spectral analysis on the sample of hot metal. After qualified, start pouring according to the principle of "low temperature and quick casting", and the pouring time and temperature shall be recorded.



### Finishing, flaw detection

Finally, cut the pouring riser and burr etc. CHAENG has professional mechanical polishing teams and large-scale blasting apparatus, which can effectively improve the appearance quality of ball mill cover, to meet customer's requirements on surface finish. Moreover CHAENG take use of advanced detection equipment for non-destructive testing to ensure the internal quality.

The ball mill trunnion made by CHAENG has in accordance with the above process has high hardness and strong impact resistance, which ensures the stability under long-time operation and prolongs the service life.

CHAENG can customize 5-30 tons/piece ball mill trunnion according to drawings, welcome to visit us!

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