## The main role of heat treatment in the large girth gear of rotary kiln

The large girth gear is a key component on the rotary kiln. It requires good comprehensive mechanical properties and tooth surface wear resistance to ensure stable operation of the rotary kiln. When the metallurgical factors such as smelting and pouring are determined, the metallographic structure becomes the decisive factor in the mechanical properties of the workpiece, and the chemical composition and heat treatment process are crucial for the formation of metallographic structures in various parts of the large girth gear.



It is well known that different heat treatment methods and different heat treatment parameters have different effects on the mechanical properties of the material, thus affecting the performance, practical life and failure mode of the large girth gear. Therefore, it is necessary to control the heat treatment process of the large girth gear very well. Generally speaking, in order to prevent deformation of the heat treatment, the gear blank is subjected to normalizing or quenching and tempering after rough machining, and has the following three functions:

1. The large girth gear is heat-treated, so that the large girth gear structure is optimized, the hardness is improved, and the wear resistance and impact resistance of the product are greatly enhanced;

2. Eliminate residual stress and soften the steel for cutting.

3. Refine the grains and improve the structure to improve the mechanical properties of the steel.



The above is the main role of the heat treatment of the large girth gear introduced by CHAENG. As a professional casting manufacturer of rotary kiln and large girth gear, CHAENG can provide customers with a series of services and complete solutions from blank casting to finished products. At present, CHAENG products cover a wide range, mainly including ball mills, rotary kiln, vertical mills, coal mills, crushers, etc. in the building materials industry; rolling mills, slag pots in the metallurgical industry.Welcome customers to come to consult, CHAENG will serve you wholeheartedly.

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