

ABSTRACT

The present application relates to the technical field of non-oriented silicon steel, and particularly provides non-oriented silicon steel for a high-speed motor and a manufacturing method therefor. The chemical components of the non-oriented silicon steel for a high-speed motor are as defined in the description, wherein the thickness of a finished product is 0.20-0.30 mm, and the grain size of the finished product is 80-100 μm . The manufacturing method for the non-oriented silicon steel for a high-speed motor comprises: performing smelting and casting into a continuous casting billet, and performing cooling, heating, hot rolling, normalizing, pickling, cold rolling, annealing and coating treatment on the continuous casting billet. On the basis of the chemical components and the process design of the whole process, the present application improves the strength and also reduces the high-frequency iron loss $P_{1.0/1000}$ by means of resistivity control, inclusion control, texture control, grain size control and the like, the smelting cost is low, the production process is simple, the production cost is low, and the application requirements of a high speed, a small size and high efficiency of a high-speed motor are satisfied.

No Figure