

Abstract

The application provides a medium-carbon low-alloy steel material, a conveying pipe, a preparation method for the medium-carbon low-alloy steel material and a concrete pump truck. The medium-carbon low-alloy steel material which is made up of the following chemical components in percentage by mass: C: 0.55-0.60%, Mn: 0.80-1.40%, Si: $\leq 0.3\%$, Cr: 0.2-0.4%, Ni: 0.2-0.4%, P: $\leq 0.020\%$, S: $\leq 0.020\%$, Ti: 0.04-0.10%, V: 0.05-0.15%, Re: 0.001-0.003%, and the balance being Fe. On the basis of controlling the contents of principal chemical components C, Mn, Si, Cr and Ni, and by means of utilizing micro-alloying elements Ti, V and Re and controlling the amounts of each used, the goal of improving the toughness and wear resistance of the material is improved, and consequently the impact resistance of the conveying pipe formed from said material is improved and wear and tear on the pipe is mitigated.

Fig 1