

ABSTRACT

LIFTING MACHINERY OF TWO REEL DIFFERENTIAL TYPE FOR TWO 40 FEET CONTAINER SHORE CRANE

The invention relates to a lifting machinery of two reel differential type for two 40 feet container shore crane, comprising: a motor, a reductor and its high speed brake, reels and reel brakes; wherein at least one motor is provided; a planetary differential reductor is used as the reductor connected to the motor output end, the planetary differential reductor has a high speed input shaft, a low speed output shaft and a differential project shaft; the high speed input shaft connects to the motor output shaft, at least one high speed brake is provided on the high speed input shaft; two four project rope reels connect to two low speed output shaft; at least one reel brake is provided on each reel; and the lifting machinery comprises a differential shaft brake consisting of at least two differential shaft brakes provided on two differential project shaft; the revolution of the two differential project shaft of the planetary differential reductor is controlled by the two differential shaft brakes so that power of the planetary differential reductor may be distributed so as to achieve the synchronous operation of two hanger tools or the operation of single hanger tool , meeting the loading and unloading requirement, increasing the loading and unloading efficiency of the container crane by more than 60%.