

ABSTRACT

Disclosed is a safe locking control apparatus for a tower crane, comprising a PLC
5 controller, a lifting encoder, a luffing encoder, a height limit sensor, a luffing limit sensor, a
rotation limit sensor, a weight sensor, a safety monitoring display device and a video
monitoring device which are integrated on the basis of a CAN bus, the lifting encoder, the
luffing encoder, the height limit sensor, the luffing limit sensor, the rotation limit sensor and
the weight sensor being provided on a lifting hook. By means of devices such as the PLC
10 controller, the weight sensor, the lifting encoder and the safety monitoring display device
which are integrated on the basis of a CAN bus, early-warning and prompting before locking,
logic control of the locking process and the safe state of a device after being locked are
comprehensively controlled, ensuring the safety of the device before and after locking.

15 Fig 1 for publication