

CONTROL AND REGULATION DEVICE FOR SAFEGUARDING A CONVEYOR DEVICE, CONVEYOR DEVICE AND CRANE UNIT

ABSTRACT

The present invention concerns a control and regulation arrangement for protection of a conveyor (1), whereby in the following by "conveyor" is to be understood at least a hoisting or crane device, which is particularly designed to assure a safe reaction to overloading. To execute such protection, a brake apparatus (11, 18) is provided to act upon said conveyor (1) under government of overload sensor (29). Should the loading approach a predetermined threshold, a signal is emitted from the overload sensor (29), which is transmitted to a speed sensor (23, 24), thereby limiting the speed of conveyance. Simultaneously, the control (25, 30) transmits a signal to the brake equipment (11, 18) to the effect that the conveyor (1) is blocked and thus the object in transport (16) is removed from endangerment. Upon the receipt of a subsequent signal that a load relief state is to be established, the control (25, 30) frees the conveyor (1) to the extent, that the conveyor (1), in keeping with the existing weight of the object in transport (16), assumes said load relief state and thereby the action of braking on the conveyor (1) becomes relaxed in accord with the speed signal of the sensor (23, 24), so that the object in transport (16) moves toward a safely aligned position at a constant speed.

The described embodiment of the invention also includes a conveyor (1) with right and left twin hoisting devices provided with duplicate control and regulation arrangements.

Figure 1.