Actuating element for a safety gear

Description

The invention relates to a device for activating and deactivating a safety gear of a lift cage during assembly of a lift installation.

During assembly of a lift installation there is these days increasing use of the roof of the lift cage by engineers as a work platform. This is particularly so in the case of assembly of lifts without scaffolding. In that regard, the cage during assembly of the installation is suspended at a chain hoist or comparable lifting device which is in turn attached to the shaft head. With the help of the chain hoist the cage is moved by the lift engineer in the shaft to the position desired by the engineer and the lift engineer can subsequently carry out his or her work from the cage roof during the installation.

If one or more lift engineers are now present on the cage it has to be ensured that the cage does not move in undesired manner in the shaft. In particular, it has to be ensured that in the case of failure of the chain hoist the cage does not crash down in the shaft. At the same time, however, it has to be possible for the engineer to move the cage without problem to the place, which is desired by the engineer, for carrying out the necessary work.

In order to realise this it is, for example, proposed in EP 1 254 070 to mount movable hooks on the lift cage, which hooks can be brought by way of a cable by an engineer into a position in which they hook into brackets, which are used for fixing the guide rails, or detent there. The hooks are brought by the engineer into the detent position when the engineer works on the cage roof. They can be released with the help of the cable so that they do not engage in the corresponding fastenings for the guide rails. The engineer can subsequently move the cage. The disadvantage in that regard is that the fastening elements for the guide rails are, in certain circumstances, mounted relatively far apart in the shaft. Thus, the engineer can assume only certain positions in the shaft with the cage, namely those in which the hooks are in the vicinity of the fastening elements. In other positions the cage would, in the case of failure of the chain hoist, drop a relatively large distance before the hooks engage in the fastening elements, which could lead to risk to the engineer.

Patent claims

1. Device for activating and deactivating a safety gear of a lift cage during assembly of a lift installation,
wherein the device comprises an actuating element (1, 1') provided for the purpose of being attached to a cage (30),
wherein the actuating element (1, 1') in a first position (P1) so acts on the safety gear (40) that the safety gear is activated,
wherein the actuating element (1, 1') when actuated by an engineer can be brought into a second position (P2) in which it does not exert any action on the safety gear (40) and
wherein the device comprises a housing (40) which receives the actuating device (1, 1') such that the actuable area of the actuating device is limited by projections or edges of the housing (4) which protrude beyond the actuating element.

2. Device according to claim 1, wherein the actuating element (1, 1') in the first position (P1) so acts on a speed limiter cable (50) that the safety gear (40), which is connected with the speed limiter cable, is activated.

3. Device according to claim 1 or 2, wherein the actuating element (1, 1') has a cut-out (11) within which the speed limiter cable (50) can be guided.

4. Device according to any one of the preceding claims, wherein the actuating element (1, 1') comprises clamping jaws which fix the speed limiter cable (50) when the actuating element (1, 1') moves towards the first position (P1) and which release the speed limiter cable (50) when the actuating element (1, 1') moves towards the second position (P2).

5. Device according to one of claims 2 and 3, wherein the device comprises an abutment element (2) for the actuating element (1, 1'), wherein the abutment element (2) is so fixable to the speed limiter cable (50) that the actuating element (1, 1') in the first position (P1) exerts a vertically upwardly directed force (F1) on the abutment element (2).

6. Device according to claim 5, wherein the actuating element (1, 1') has counter-bearings (12) for positioning the abutment element (2).

Actuating element for a catching device

Description

The invention relates to a device for activating and deactivating a safety gear of a lift cage during assembly of a lift installation.

During assembly of a lift installation there is these days increasing use of the roof of the lift cage by engineers as a work platform. This is particularly so in the case of assembly of lifts without scaffolding. In that regard, the cage during assembly of the installation is suspended at a chain hoist or comparable lifting device which is in turn attached to the shaft head. With the help of the chain hoist the cage is moved by the lift engineer in the shaft to the position desired by the engineer and the lift engineer can subsequently carry out his or her work from the cage roof during the installation.

If one or more lift engineers are now present on the cage it has to be ensured that the cage does not move in undesired manner in the shaft. In particular, it has to be ensured that in the case of failure of the chain hoist the cage does not crash down in the shaft. At the same time, however, it has to be possible for the engineer to move the cage without problem to the place, which is desired by the engineer, for carrying out the necessary work.

In order to realise this it is, for example, proposed in EP 1 254 070 to mount movable hooks on the lift cage, which hooks can be brought by way of a cable by an engineer into a position in which they hook into brackets, which are used for fixing the guide rails, or detent there. The hooks are brought by the engineer into the detent position when the engineer works on the cage roof. They can be released with the help of the cable so that they do not engage in the corresponding fastenings for the guide rails. The engineer can subsequently move the cage. The disadvantage in that regard is that the fastening elements for the guide rails are, in certain circumstances, mounted relatively far apart in the shaft. Thus, the engineer can assume only certain positions in the shaft with the cage, namely those in which the hooks are in the vicinity of the fastening elements. In other positions the cage would, in the case of failure of the chain hoist, drop a relatively large distance before the hooks engage in the fastening elements, which could lead to risk to the engineer.

Patent claims

1. Device for activating and deactivating a safety gear of a lift cage during assembly of a lift installation,
wherein the device comprises an actuating element (1, 1') provided for the purpose of being attached to a cage (30),
wherein the actuating element (1, 1') in a first position (P1) so acts on the safety gear (40) that the safety gear is activated,
wherein the actuating element (1, 1') when actuated by an engineer can be brought into a second position (P2) in which it does not exert any action on the safety gear (40) and
wherein the device comprises a housing (40) which receives the actuating element (1, 1') such that an actuable area of the actuating element is limited by projections or edges of the housing (4) which protrude beyond the actuating element.

2. Device according to claim 1, wherein the actuating element (1, 1') in the first position (P1) so acts on a speed limiter cable (50) that the safety gear (40), which is connected with the speed limiter cable, is activated.

3. Device according to claim 1 or 2, wherein the actuating element (1, 1') has a cut-out (11) within which the speed limiter cable (50) can be guided.

4. Device according to any one of the preceding claims, wherein the actuating element (1, 1') comprises clamping jaws which fix the speed limiter cable (50) when the actuating element (1, 1') moves towards the first position (P1) and which release the speed limiter cable (50) when the actuating element (1, 1') moves towards the second position (P2).

5. Device according to one of claims 2 and 3, wherein the device comprises an abutment element (2) for the actuating element (1, 1'), wherein the abutment element (2) is so fixable to the speed limiter cable (50) that the actuating element (1, 1') in the first position (P1) exerts a vertically upwardly directed force (F1) on the abutment element (2).

6. Device according to claim 5, wherein the actuating element (1, 1') has counter-bearings (12) for positioning the abutment element (2).