SPECIFICATION

LIFT CAGE FOR ELEVATOR

Technical Field

The present utility model relates to a lifting cage for elevator, in particular to transport people for medium rise buildings.

Background of the Utility Model

Elevators have become a vital part of modern buildings, facilitating vertical movement and improving accessibility for people. The primary element of an elevator system is the lift cage, also known as the elevator car or cabin. It serves the crucial role of safely and efficiently transporting passengers and goods between different floors. To ensure optimal performance and a seamless user experience, it is essential to comprehend the design, functionality, and safety features of lift cages.

In the past, elevators were mainly used for transporting goods in factories and warehouses before being adapted for passenger usage. Early lift cages were often simple platforms or boxes suspended by ropes or chains and operated manually through hoists. These basic systems had limited capacity and relied on human labor, resulting in slow and inefficient operations.

However, with advancements in technology and engineering, lift cages have undergone significant evolution. Present-day lift cages are meticulously designed with a focus on safety, comfort, and efficiency. They are constructed using robust materials like steel, aluminum, or a combination thereof to ensure structural integrity and withstand the demands of regular usage.

The interior of a lift cage is typically equipped with various features to enhance passenger comfort and safety. These include handrails or hand grips for stability, adequate lighting for visibility, ventilation systems for air circulation, and

control panels for selecting floors and operating the elevator. Moreover, advanced elevators may offer additional amenities such as mirrors, emergency communication devices, and even entertainment systems.

WO2006026872A2 discloses a lift cage which comprises a platform which is provided with a plurality of platform sections. Said cage is characterized in that a front-sided and a rear-sided platform section are arranged on a central platform section. The platform sections comprise connection points which are arranged on parallel, vertical planes, whereon said platform sections can be connected together by means of connection elements. In order to provide additional stabilisation for the cage platform, stable platform edge profiles are connected to the upper sides of all platform sections. Subsystems of the lift cage can be premounted in the platform sections. The invention also relates to a method for installing a lift wherein a cage platform is prepared in at least two separate platform sections, and the platform sections of the cage platform, which are delivered separately, are connected together by means of connection elements during mounting on the installation place.

Further, lift cages play a vital role in elevator systems by ensuring efficient, safe, and comfortable transportation. Through advancements in materials, technology, and safety features, they have evolved to meet the needs of modern buildings and enhance the overall elevator experience for passengers.

In conclusion, there is a need for a portable stable, and self-supporting cage lifter that can be easily deployed within an elevator shaft without permanent modification and that ensures safe and controlled lifting of an elevator cage.

Summary of the Utility Model

Accordingly, it is the primary object of the present utility model to eliminate the aforementioned problems that aim to create a safe space in elevators that

prevents people or objects from falling, ensuring their safety. At the same time, it improves the overall strength and stability of the elevator structure.

Another object of the present utility model is to introduce a lift cage for the elevator. The lift cage has a triangular base floor with vertical posts rising from each corner. This design adds stability and strength to the cage, making sure it can safely carry the weight of passengers or cargo while the elevator is in operation.

Furthermore, there is a need for a lift cage in elevators that includes panels attached to the sides of the triangular base floor to enclose the space. The cage also features a door with hinges, allowing for easy access and smooth opening and closing. This ensures that passengers can enter and exit the elevator safely and conveniently.

These, together with other objects of the utility model, along with the various features of novelty which characterize the utility model, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

For a better understanding of the utility model, reference should be had to the accompanying drawings and descriptive manner in which there is illustrated preferred embodiment of the utility model.

Brief Description of the Drawings

To facilitate understanding, references will be made to the herein below-described figures, in with:

FIG. 1 a perspective view of a lift cage for elevator according to the preferred embodiment of the present utility model,

FIG. 2 is another perspective view of a lift cage for elevator with an open door; and

FIG. 3 is a top view of a lift cage for elevator.

Detailed Description

Before explaining the present utility model in detail, it is to be understood that the utility model is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the utility model is capable of other embodiments and of being practiced or carried out in various ways. Also, it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

Referring now to the several views of the drawings wherein like reference numerals designate same parts throughout, there is shown the utility model for a lift cage for elevator generally designated as **100**.

As shown in the figures, said lift cage **100** for elevator, said lift cage **100** comprises of a triangular base floor **2**, plurality of vertical post **4** extending upwardly from every corners of the base floor **2**, a panel **6** secured to the two sides of the triangular base floor **2**, a door **8** pivotally secured to one of the vertical posts **4** by means of pair of hinges **10**, a support members **12** secured to the top end portion of the vertical posts **4**, a pair of hollow circular guide rings **14** secured to the vertical posts **4** adapted to guide the fixed cables **FC** when lifting the cage **100**, an intermediate support members **16** secured to the top end portion of the vertical posts **4** and the other end of the intermediate support members **16** are integrally connected to each other forming in a triangular shape. A longitudinal metal **18** secured to the intermediate support members **16** to move vertically by means of cable **C**.

Said panels **6** and door **8** having a rectangular frame **6a** and plurality of longitudinal bars **6b** spacedly secured to rectangular frame **6a** arranged in a

vertical manner. Also, the door **8** provided with a latch **20** to lock and unlock thereof.