

Elevator wire rope tension automatic
equalization device split independent rope
pulley unit specification

SEIN international co.,Ltd

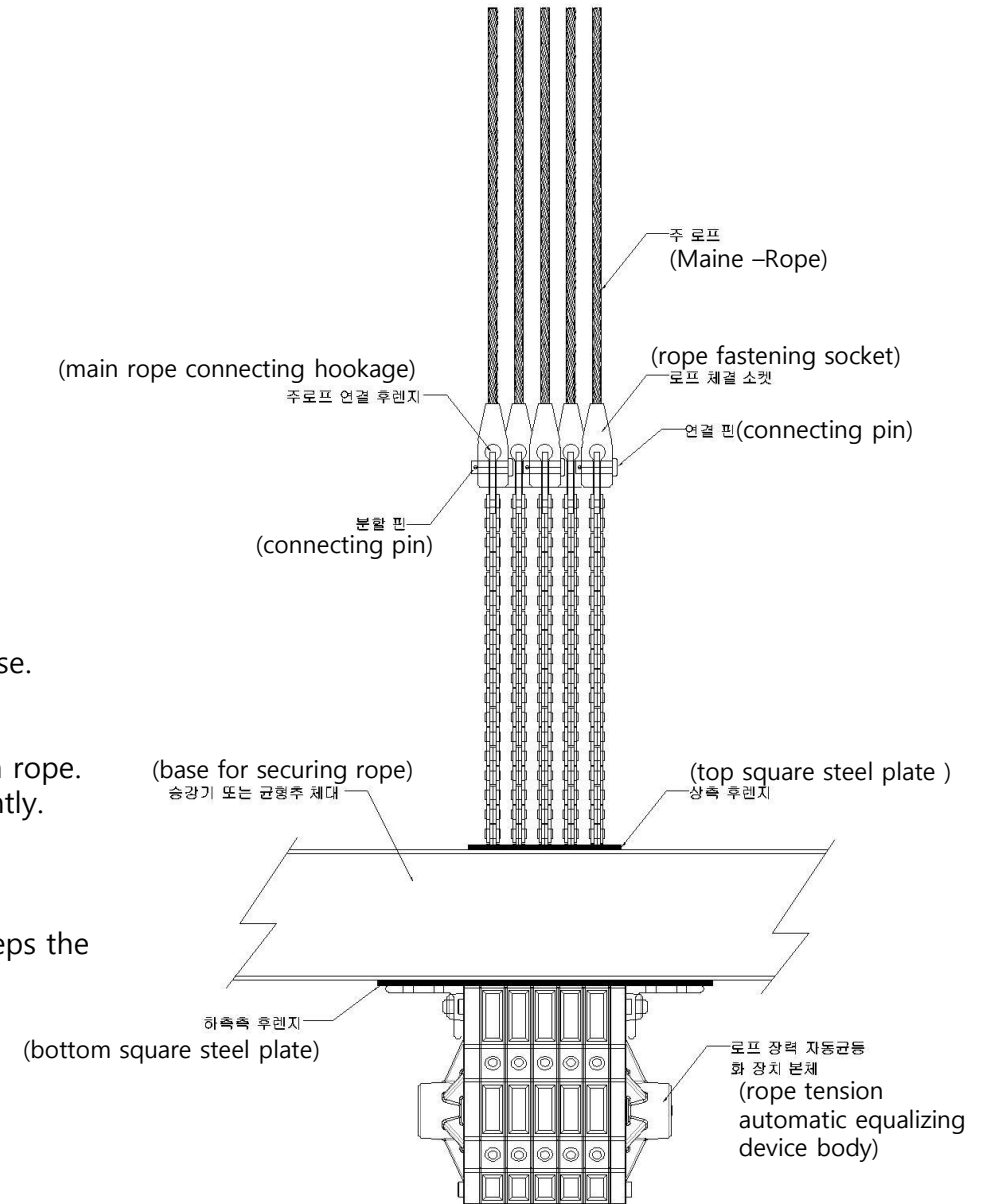
1. Specification for elevator wire rope tension autocompatibility device

product specification

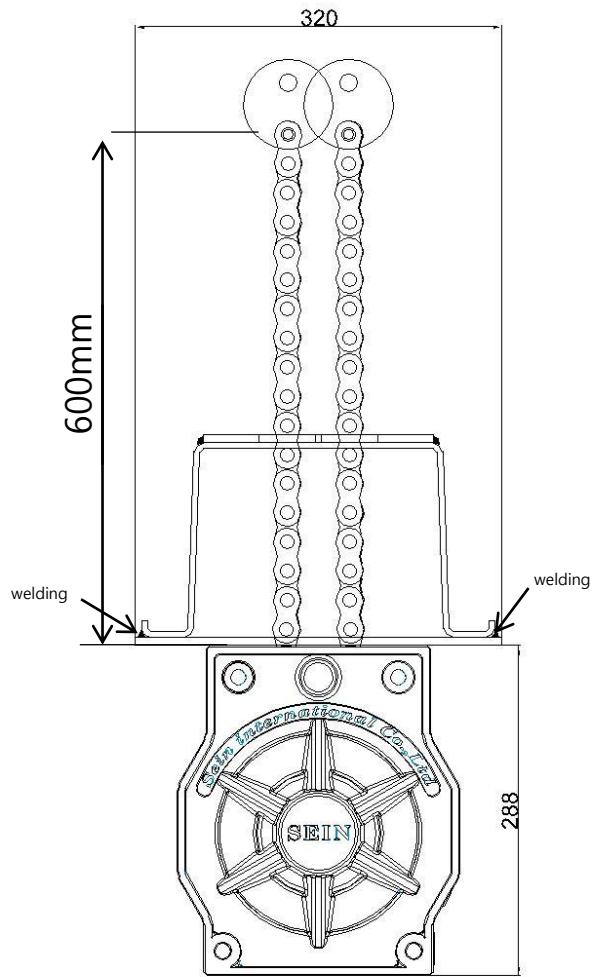
product specification

Elevator Wire Rope Tension Automatically Equivalent Unit :

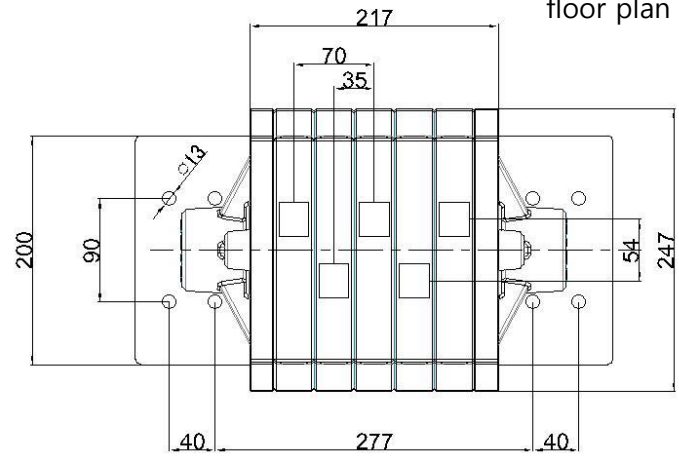
- . main rope connecting hookage
Link chain of rope tension automatic equalization device and main rope.
- . bottom square steel plate
Weld the unit to the underside of the rope fixing base.
- . top square steel plate
Install and weld a square steel plate to reinforce the fixing base on top of the fixed base.
- . automatic equalizing device body
The gears inside the unit interact with each other to equalise the load applied to each rope.
And the chain of the scabbard is wound around each pulley and operates independently.
- . characteristics of a device
 1. Even if one of the ropes is broken, the remaining unbroken rope is a device that keeps the tension under control.
 2. When the main rope is stretched, The distance that can be corrected is 600mm.



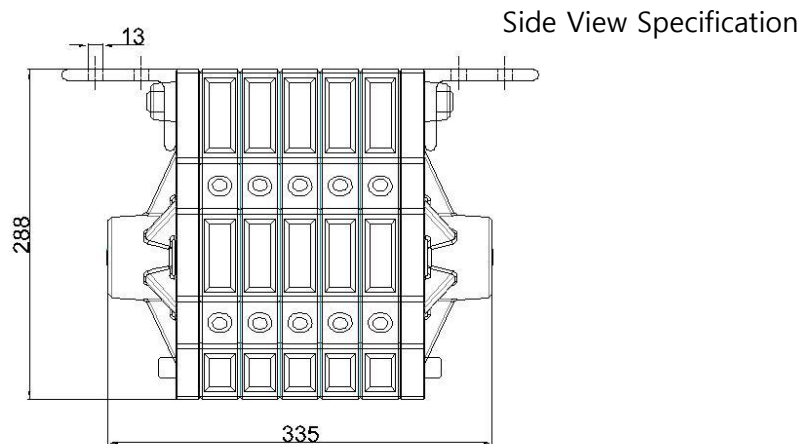
apparent dimensions of product



1 : 1 rope type-assembly diagram



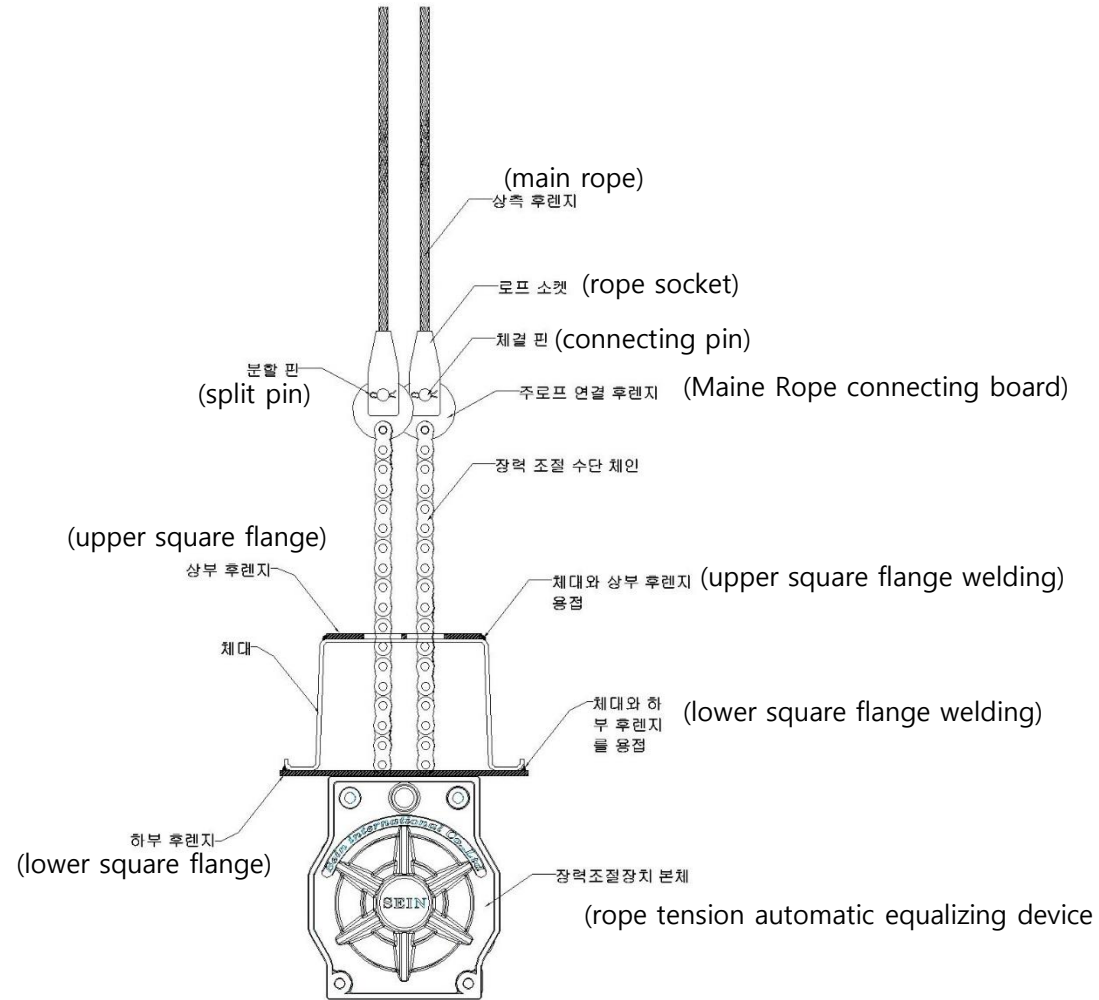
floor plan specification



Side View Specification

product installation

1. Before installing the main body of the tensioning device, attach the traction device, such as the chain block, from the machine room to the body, and install the double safety device on the outside wall, respectively..
2. Remove existing bolts and springs.
3. Insert the body of the tensioning device into the lower part of the hitch.
4. In this case, first protrude the tensioning method chain to the upper part of the body and then tighten the main rope connecting flange to the end of the chain.
5. Weld a square flange installed on the top of the hitch..
6. Remove all power from the lift operator before starting all welding, preventing damage to the electromagnetic wave due to high current induced EM backflow.
7. Inserting the main rope connection flange into the ropesocket of the main rope, inserts the connecting pin and secures it with a split pin.
8. Slowly release the safety rope and auxiliary device towed by the chain block and adjust the rope socket to a certain height..

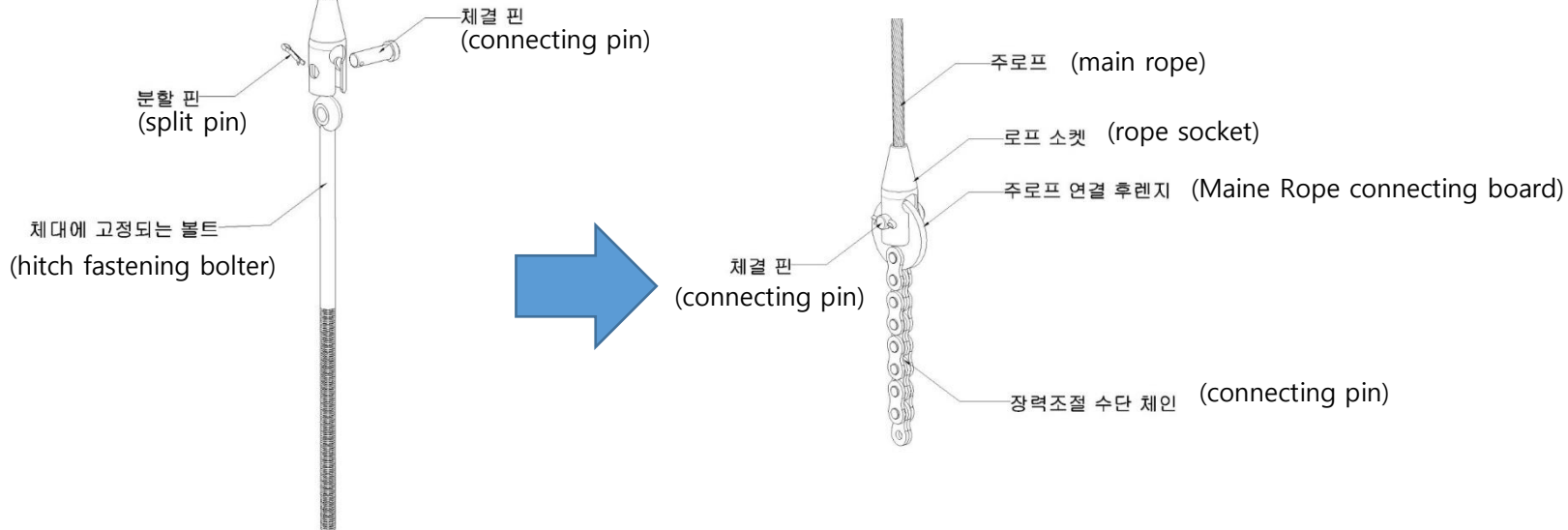


Connecting the main rope to the unit

Continue to use the existing rope socket.
Remove the existing bolts and connect the main rope
connecting the flange to the existing rope socket.

(Example of installation)

설치
예

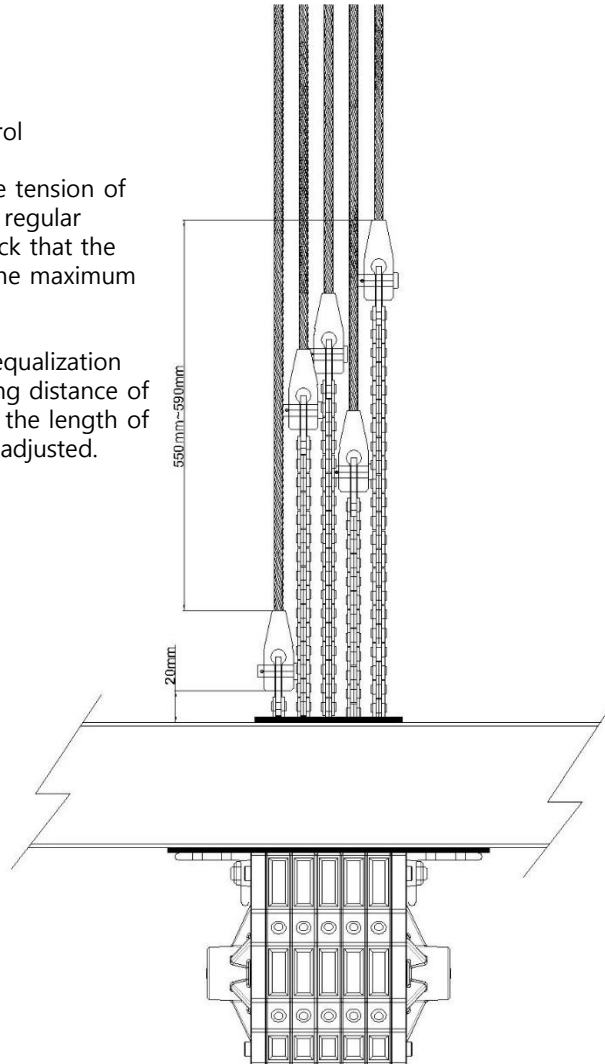


Inspection and maintenance of the device

Main rope check and rope control

. It is not necessary to adjust the tension of the rope from time to time, but regular inspection of the lift should check that the end of the main rope exceeds the maximum limit.

. If the rope tension automatic equalization device exceeds the corresponding distance of 600 mm as shown in the figure, the length of the main rope must be cut and adjusted.



2. split independent rope pulley

a general outline

A device applied to a 2:1 rope-type elevator that allows individual pulleys to rotate independently so that individual rope movements can be operated freely as much as the tensile changes of individual ropes while the individual rope is wound to the independent pulley.

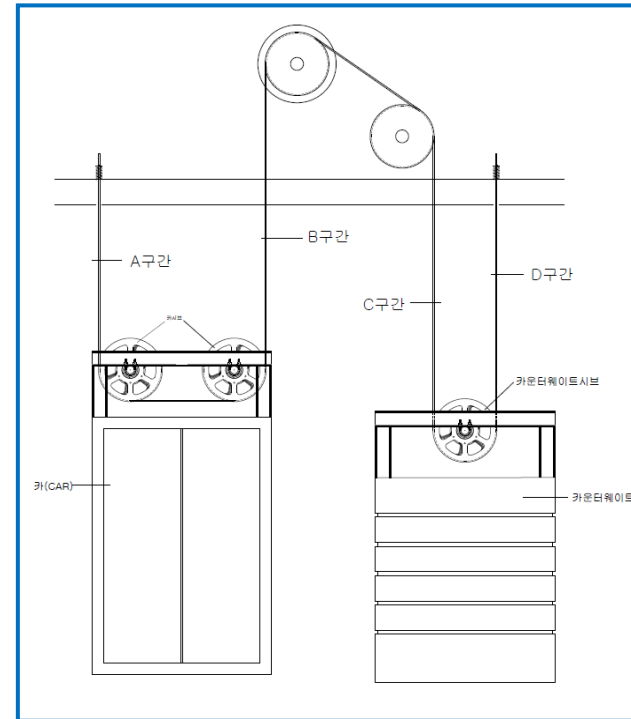
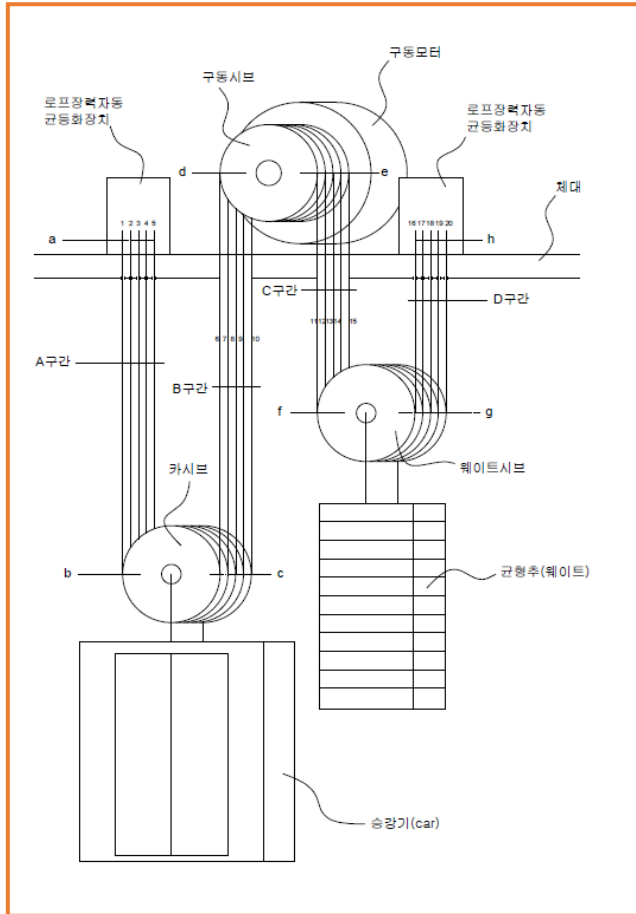
2 : 1 When the rope pulley is independent and does not move freely in a rope trap

Section A and Section D are sections where tension can be adjusted with rope tension automatic equalization device.

Section B and section C are sections where the rope is trapped due to integral pulley and therefore tension cannot be adjusted.

The section where the rope in Section B and the rope in Section C can break up when a rope transfer car occurs due to side wear on the drive pulley.

Therefore, the tension between B and C sections cannot be adjusted.



L-Type 2 : 1 Rope Method

The need for independent rope pulley segmentation

Effect

a steady ride

"Divided independent rope pulley" not only prevents the rope from breaking apart in the 2:1 rope tightening method for elevators from being reliably lifted, but also has the effect of securing the long life span of the wire by allowing the movement of each rope as freely as the tensile change of each rope is made by the amount of each rope with each rope wound in the suspended sheet.

economic saving

The cost of replacement due to rope breakage is significantly reduced and has a good economic and incidental effect.

device need

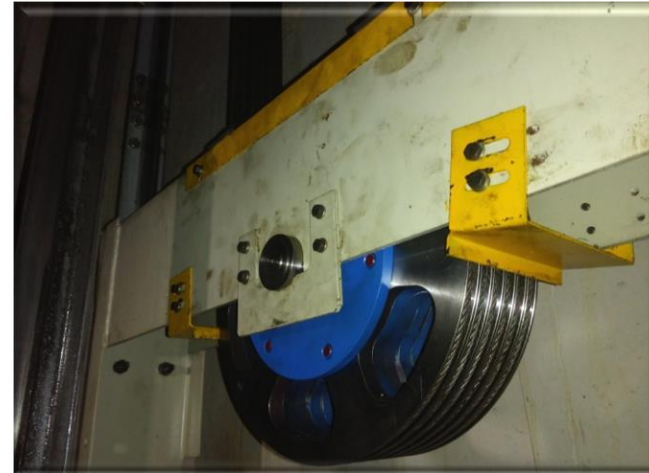
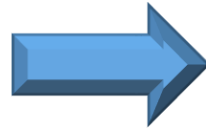
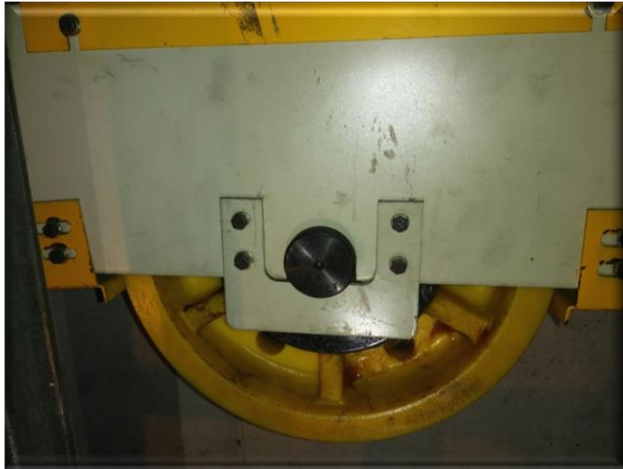
All of the two-to-one lifts have parallel sections that cannot control the tension of the rope, and this section can be seen as an irreversible section, and all of his two-to-one lifts have problems. Vibration due to these problems is not resolvable by tension control.

Therefore, the "division independent rope pulley" allows each rope pulley to move freely, so that each independent seat consisting of multiple shifts of rope can be freely moved in the driving seat, and thus the tension equalization control device can be adjusted..

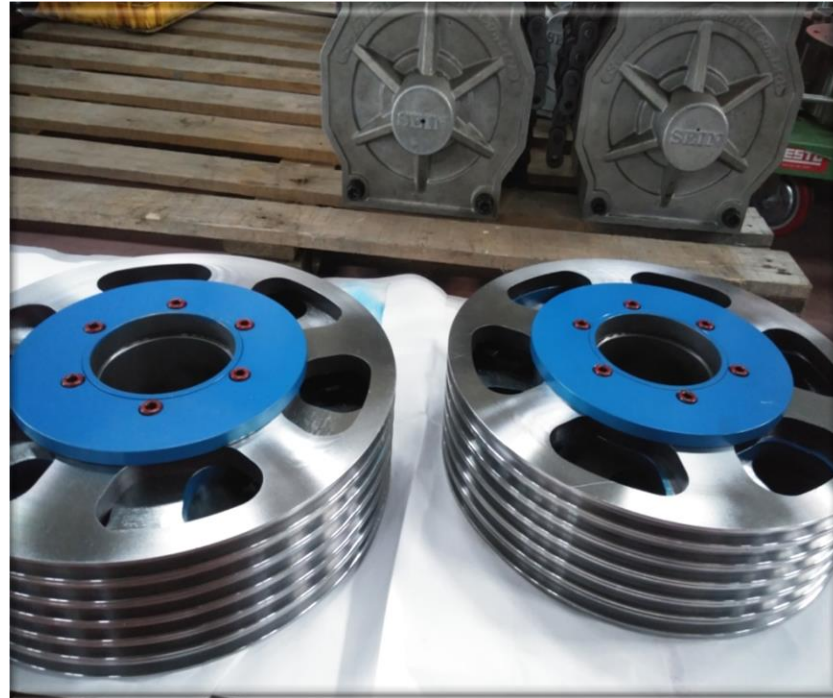
efficiency of maintenance

It not only eliminates misunderstanding about the vibration of elevator cars that result in the technicality and work performance of maintenance, but also allows maintenance companies to expect efficiency of their work.

Replace with a split pulley from an integral pulley



split independent rope pulley physical appearance



Rope pulley assembled as split independent

Example of installing split independent rope pulley on count and car body



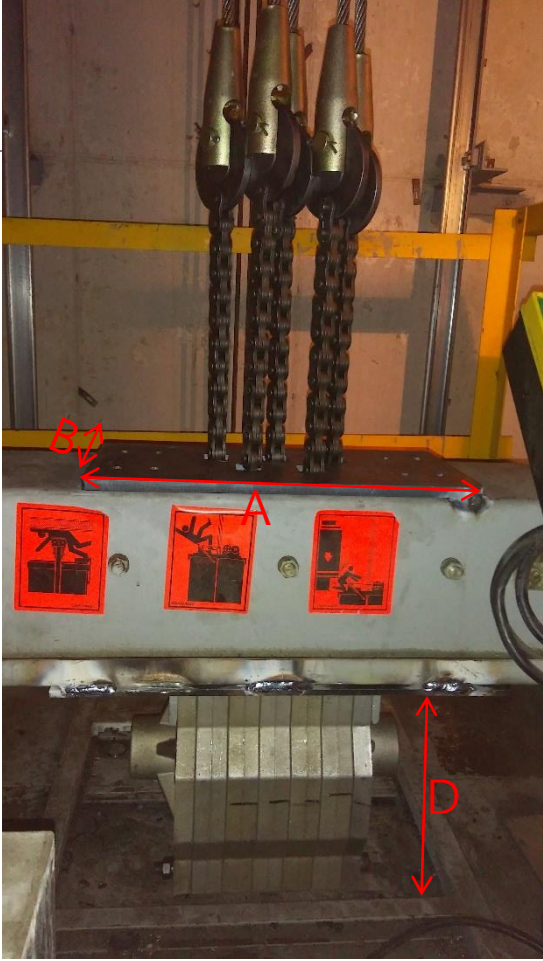




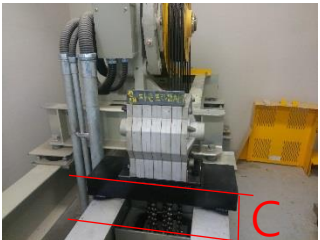

Weight side "divided independent rope pulley" installation example



Example of installing a "division independent rope pulley" on top of an L-type lift car

Specification for off-the-shelf products to know before installing elevator rope tension automatic equalization device

분 류	구 분	참 조	구 분	참 조	
1. rope-mounting method elevator classification	1:1 rope connection type rope hitch dimension	P19 P21 Painting11	2:1 rope type The dimensions of rope hitch in a system with a mechanical room		2:1 rope type The dimensions of rope hitch in a system without a mechanical room
Inspection Item	A:rope hitch Upper length	P16 A	A:beam-to-beam gap	P16 A	
	B:rope hitch upper width	P16 B	B:Voltors Installation Plate Specification	P16 B	
	C:rope hitch lower longitudinal length	P19 C	C:Is it possible to install □ steel on non-clinical parts alongside the bolt installation part?	P16 C P18 Painting5	
	D:rope hitch and car height	P16 D			
2. coupling pin diameter dimension		P20 Painting 9 Painting 10			
3. rope diameter	example) ∅8mm, ∅10mm, ∅12mm, ∅14mm, ∅16mm				
4. rope quantity	example) rope quantity display 4-line (4-bone) rope type, 5-line (5-bone) rope type, 6-line rope type...				

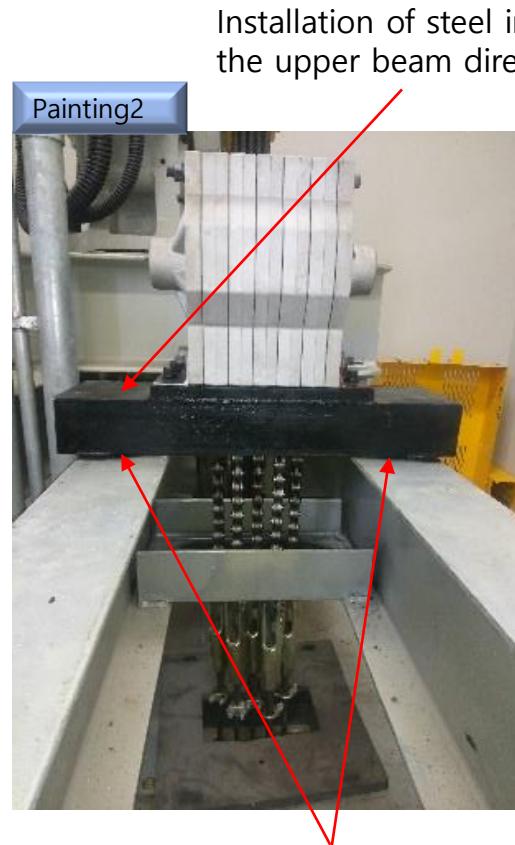
<p>1. rope-mounting method elevator classification</p>	<p>1:1 rope connection type rope hitch dimension</p>		<p>2:1 rope type The dimensions of rope hitch in a system with a mechanical room</p>		<p>2:1 rope type The dimensions of rope hitch in a system without a mechanical room</p>
<p>Inspection Item</p>	<p>A:rope hitch Upper length</p>		<p>A:beam-to-beam gap</p>		
	<p>B:rope hitch upper width</p>		<p>B:Volts Installation Plate Specification</p>		
	<p>C:rope hitch lower longitudinal length</p>		<p>C:Is it possible to install □ steel on non-clinical parts alongside the bolt installation part? (P3 Reference)</p>		
	<p>D:rope hitch and car height</p>				

2:1 rope type

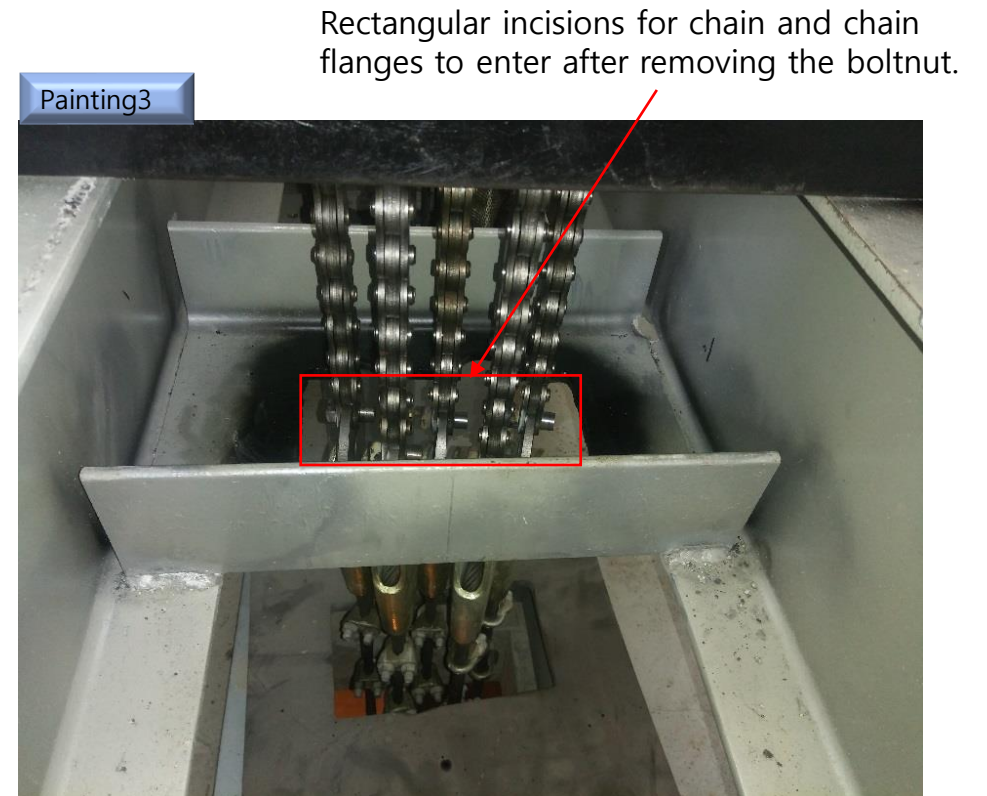
The dimensions of rope hitch in a system with a mechanical room
– installation at the top of the beam



Use existing clasps or ropesockets and pins as they are.



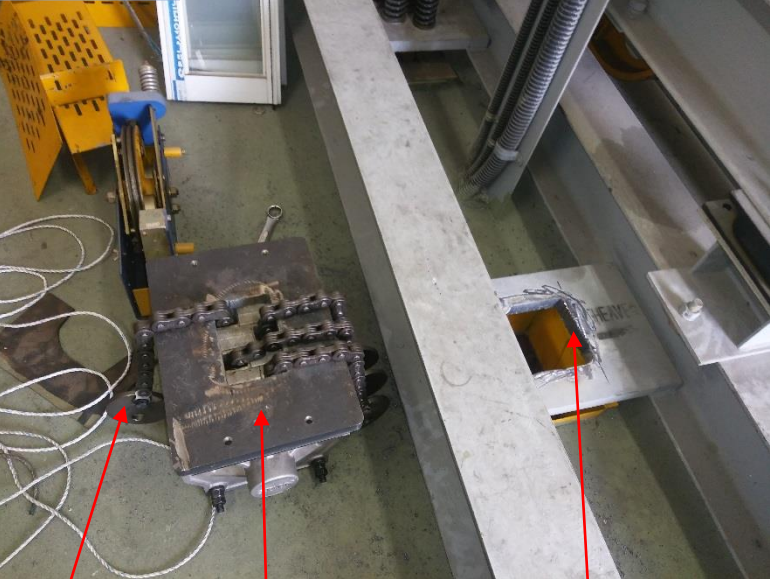
Welding the upper part of the beam



an elevator with a 2:1 rope machine room– Install the device after installing an auxiliary 20t weld on the lower flange of the beam.

A structure that cannot be installed by raising a □-shaped steel on the top of the beam.

Painting4



Maine Rope connecting board
Reference P5)

20t Rectangular Board

square cut, where the bolt and spring are installed. The connecting board allows for passage.

Painting5



20t weld on both sides of the flange.

20t square flange

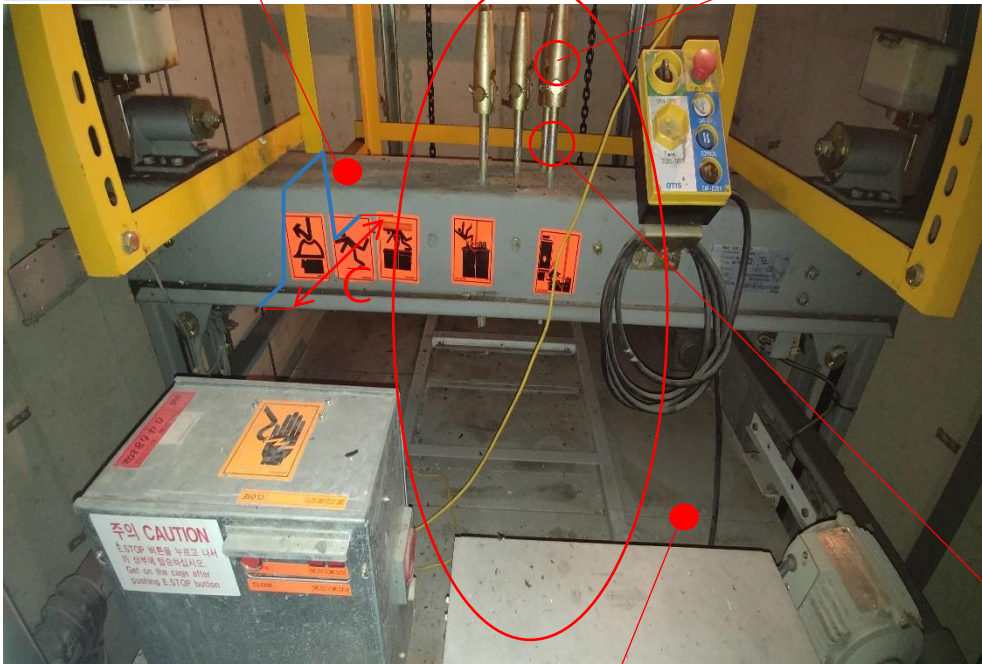
Painting6



1 : 1 Before and After installing the rope elevator

The rope socket uses an existing thing

Painting7

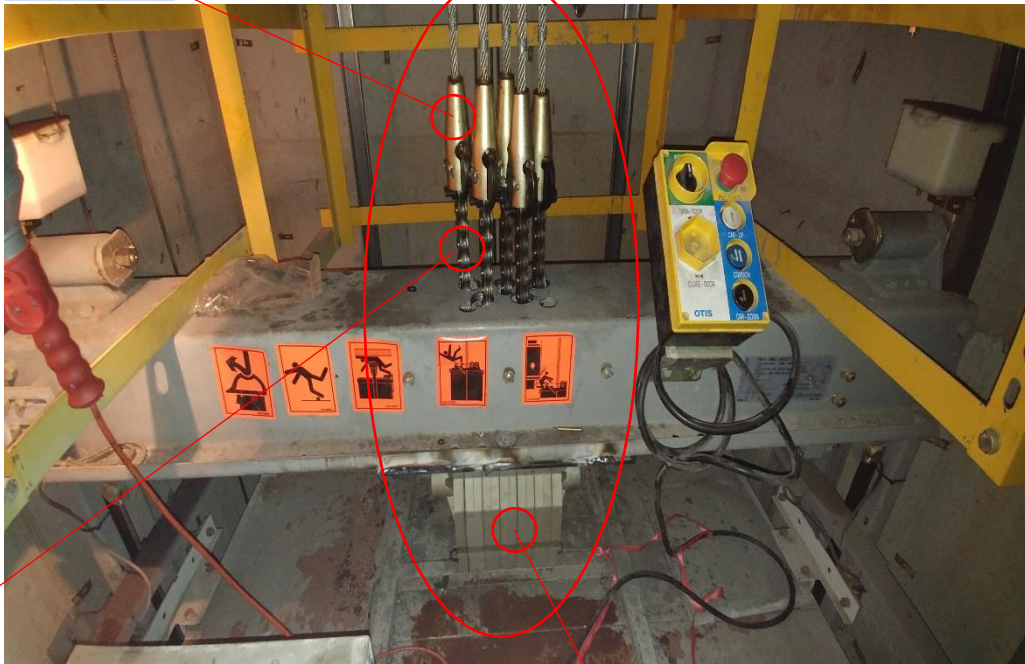


rope hitch

elevator car



Painting8



rope tension automatic equalizing device

Remove the bolts and springs and replace them with equalizer

You need to know the diameter of the connecting pin.

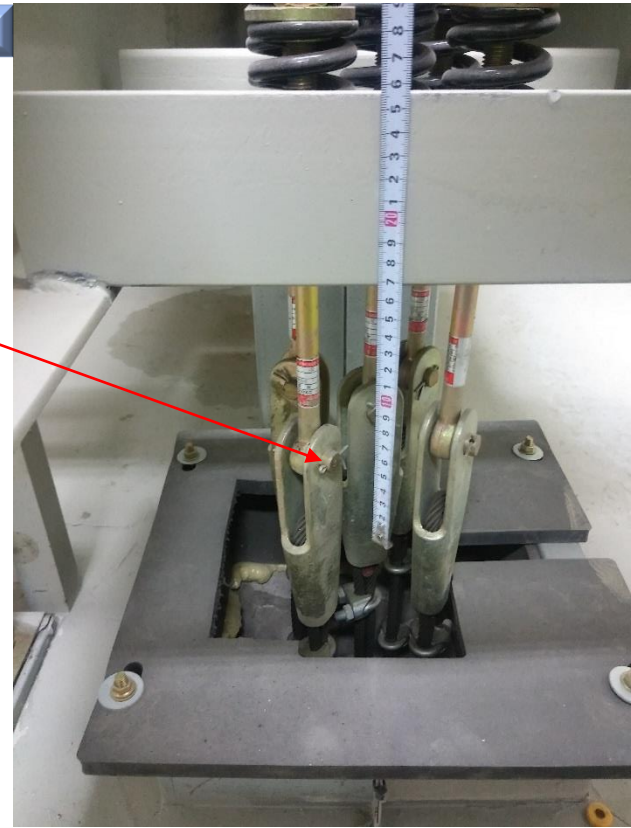
Diameter of the pin connecting the bolt to the rope connection ?

Painting9



1 : 1 rope-type elevator

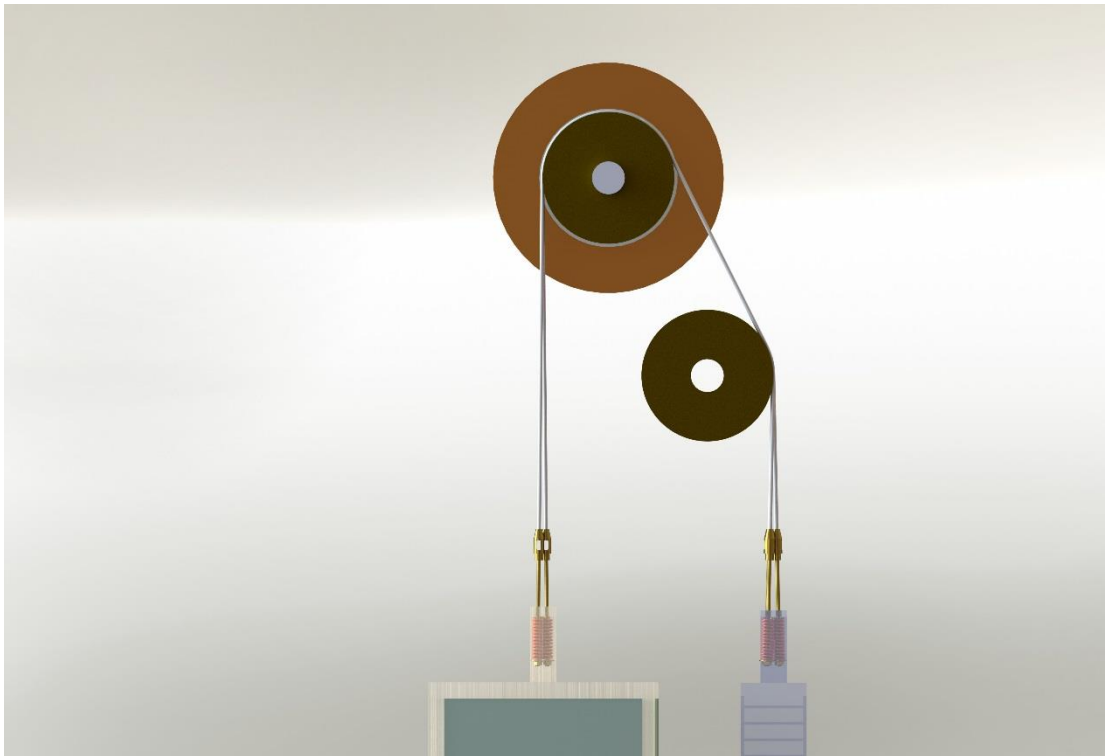
Painting10



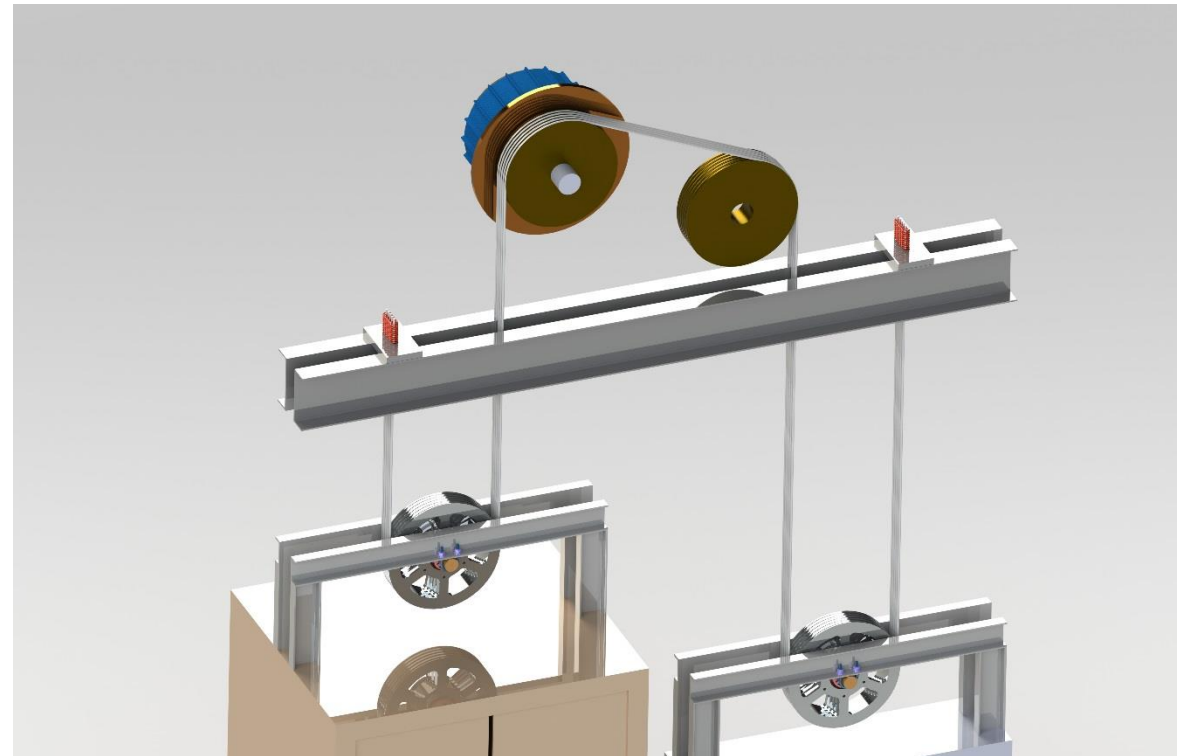
2 : 1 rope-type elevator

Categorizing the types of elevators according to the rope connection method.

1 : 1 rope-type elevator



2 : 1 rope-type elevator



Thank you.

SEIN international co.,Ltd