# **Products Application**





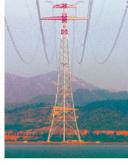
















## **CE Certificate**







## CM/X°

### **CNBM International Corporation**

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# **Construction Hoist C€**







China National Building Materials (Group) Corporation (CNBM), which is established in 1984, is one largest state-owned group corporation of building & mechanical materials with a total asset of 35 billion USD and a staff of more than 130,000.

CNBM International Corporation, which is one leading subsidiary of CNBM Group, specializes in the design, manufacture construction machinery like Construction Hoist etc. And we have passed CE, ISO 9001:2000 quality certificate and certified by all relevant authorities.

### The key functional areas of CNBM are:

- Research and Development (R&D)
- Our own systems of production engineering.
- Production design from the concept to the engineering details.
- Technical experts with great experience in the sector.
- Continuous development of new solutions and products adapted to the requirements of our clients.
- Definition and initiation of the required technical assistance
- Methodology and project procedure administration in compliance with current guidelines.

#### Production

- On-premises assembly and 100% product testing prior to shipment.
- Production planning controlled by advanced administration systems.

### Commercial and marketing aspects

- Putting the client first
- Extensive worldwide commercial network.
- CNBM has a clear aim to create and develop long-lasting and mutually beneficial relations with our clients. CNBM offers the client outstanding quality of service, continuous improvement together with constant support to assist the client's development and growth

#### Service

At CNBM we consider it impossible to do business without offering the best service. The principle aim of CNBM is to offer the best product while, at the same time, maintaining the highest level of customer service.

This is established by means of a network of distribution points with the ability to maintain and improve on these principles of client satisfaction.

#### Our Service Branch

CNBM INTERNATIONAL CORPORATION U.A.E BRANCH

CNBM INTERNATIONAL CORPORATION K.S.A BRANCH

CNBM INTERNATIONAL CORPORATION IRAN OFFICE

CNBM (U.S.A) CORPORATION

CNBM INTERNATIONAL (RUSSIA) CORPORATION

CNBM INDIA CORPORATION

CNBM NIGERIA CORPORATION

CNBM UKRAINE BRANCH

CNBM VIETNAM COMPANY LIMITED

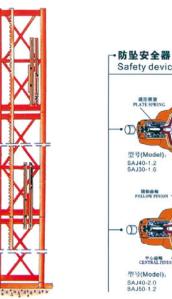
UNDER CONSTRUCTION OTHER PLACES

### CNBM International Corporation

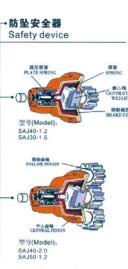
# Safety Devices for the Hoist

### The products of our company are reliable with a whole set of safety devices. Mainly include:

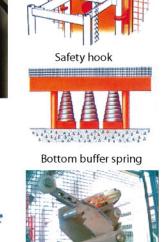
Top and bottom limit, cage door electrical and mechanical interlock safety device, landing door electrical and mechanical interlock safety device, anti-exceeding top device, safety hook, bottom buffer spring, anti-overload device, etc. The products are consistent with China National Standards; also reach Hong Kong COP Standards and Europe EN Standards.



Top and bottom limit device







Anti-overload device

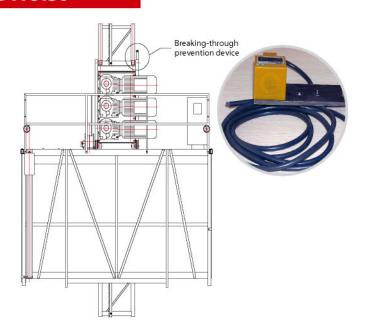
Electrical and mechanica interlock device

### Selectable Devices for the Hoist

Safety device



Automated landing and calling device



# **General Building Hoist**

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The general building hoist manufactured by our company have the features as good quality, long life, wide application range and convenient for maintenance. The gearing adopts imported bearing, enameled cable, and oil seal. The electric parts adopt products from world renowned manufactures such as Schneider, Siemens, and LG. The racks and pinion adopts special material and heat-treatment technique, which prolong the life of these parts. The steel structure uses quality steel from famous domestic manufacturers. The surface of the structure can apply paint-spray, parkerizing baking finish or hot galvanizing processing according to users requirements. The cage can be produced and decorated by aluminum molded board, punched-plate or figured aluminum board.

### **Technical Data of General Building Hoist**

		Туре	Payload (kg)	Lifting speed (m/min)	Motor power (kw)	Safety device
		SC100	1000	33	2×11	SAJ30-1.2
±	Ħ	SC120	1200	33	2×11	SAJ30-1.2
	eigi	SC160	1600	33	2×11	SAJ30-1.2
	No counterweight	SC200	2000	33	3×11	SAJ40-1.2
ist	nn	SC250	2500	33	3×11	SAJ50-1.2
Single cage hoist	000	SC270	2700	33	3×15	SAJ50-1.2
cag	Z	SC300	3000	33	3×15	SAJ50-1.2
gle		SC320	3200	33	3×15	SAJ50-1.2
Sin	Ħ	SCD200	2000	33	2×11	SAJ40-1.2
	reig	SCD250	2500	33	2×11	SAJ50-1.2
With	counterweight	SCD270	2700	33	2×15	SAJ50-1.2
	unc	SCD300	3000	33	2×15	SAJ50-1.2
	ŏ	SCD320	3200	33	2×15	SAJ50-1.2







		Туре	Payload (kg)	Lifting speed (m/min)	Motor power (kw)	Safety device
		SC100/100	2×1000	33	2×2×11	2×SAJ30-1.2
	Ħ	SC120/120	2×1200	33	2×2×11	2×SAJ30-1.2
	eig	SC160/160	2×1600	33	2×2×11	2×SAJ30-1.2
	erw	SC200/200	2×2000	33	2×3×11	2×SAJ40-1.2
hoist	No counterweight	SC250/250	2×2500	33	2×3×11	2×SAJ50-1.2
o ho	000	SC270/270	2×2700	33	2×3×15	2×SAJ50-1.2
cage	Ž	SC300/300	2×3000	33	2×3×15	2×SAJ50-1.2
Twin		SC320/320	2×3200	33	2×3×15	2×SAJ50-1.2
_≥	Ħ	SCD200/200	2×2000	33	2×2×11	2×SAJ40-1.2
	eigl	SCD250/250	2×2500	33	2×2×11	2×SAJ50-1.2
With counterweight	Vith	SCD270/270	2×2700	33	2×2×15	2×SAJ50-1.2
	unt	SCD300/300	2×3000	33	2×2×15	2×SAJ50-1.2
	0	SCD320/320	2×3200	33	2×2×15	2×SAJ50-1.2

#### Remark:

- The recommended cage dimension (L×W×H)(m): 2.0×1.0×2.5, 2.5×1.0×2.5, 2.5×1.3×2.5, 3.0×1.5×2.5, 3.2×1.5×2.5, 3.8×1.5×2.5, 4.0×1.5×2.5, 4.2×1.5×2.5 etc. We can also manufacture cages of other size according to the user.
- The cage and the door material can be aluminum molded board, punched-plate, figured aluminum board or other type according to your requirements.
- The mast and the tie-in surface can adopt paint-spray, or hot galvanizing processing.









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# **Frequency Conversion Building Hoist**



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To serve the increasing demand for highrise construction, we developed the high speed VF hoist, with a max. lifting speed of 96m/min.

It has the following features:

- 1. Adopts the most advanced VF speed control device and microcomputer programmable logic controller.
- Stepless speed control helps eliminate the concussion during start up and braking, steady the operation process, and ensures automated leveling.
- 3. Adopts open loop V/F control; the speed control precision can reach  $\pm 2 \sim 3\%$ . Realizes accurate low speed positioning of the hoist and avoids slipping during downward stopping of hoist.
- 4. The VF system has current-restriction function, ensuring a small current when motor start up and reducing the concussion to power supply. It reduces the energy consumption and mitigates effects to on site electric equipments.
- 5. The steadiness during running mitigates concussion to mechanical parts, reduces wears of rack, pinion and the brake and prolongs the spare parts' life.
- 6. The VF system also has the over voltage protection, low voltage protection, overcurrent, overload and anti-stalling protection functions.
- 7. The system applies the special software for hoists developed by our company, making the operation more safe and reliable.

### Technical Data of Frequency Conversion Building Hoist (Middle speed)

		Туре	Payload (kg)	Lifting speed (m/min)	Motor power (kw)	Safety device
	+2	SC100	1000	0 ~ 60	3×11	SAJ30-1.4
	No counterweight	SC120	1200	0 ~ 60	3×11	SAJ30-1.4
	We	SC160	1600	0 ~ 60	3×15	SAJ30-1.4
Carrier .	ter	SC200	2000	0 ~ 60	3×15	SAJ40-1.4
oist	JI C	SC250	2500	0 ~ 60	3×18.5	SAJ50-1.4
e h	Ö	SC270	2700	0 ~ 60	3×18.5	SAJ50-1.4
Single cage hoist	ž	SC300	3000	0 ~ 60	3×22	SAJ50-1.4
<u>e</u>		SC320	3200	0 ~ 60	3×22	SAJ50-1.4
ing	JH.	SCD200	2000	0 ~ 60	2×15	SAJ40-1.4
S	Singl With counterweight	SCD250	2500	0 ~ 60	2×18.5	SAJ50-1.4
		SCD270	2700	0 ~ 60	2×18.5	SAJ50-1.4
		SCD300	3000	0 ~ 60	3×15	SAJ50-1.4
		SCD320	3200	0 ~ 60	3×15	SAJ50-1.4
		SC100/100	2×1000	0 ~ 60	2×3×11	2×SAJ30-1.4
	igh	SC120/120	2×1200	0 ~ 60	2×3×11	2×SAJ30-1.4
	We	SC160/160	2×1600	0 ~ 60	2×3×15	2×SAJ30-1.4
	ter	SC200/200	2×2000	0 ~ 60	2×3×15	2×SAJ40-1.4
Twin cage hoist	No counterweight	SC250/250	2×2500	0 ~ 60	2×3×18.5	2×SAJ50-1.4
P P	Ö	SC270/270	2×2700	0 ~ 60	2×3×18.5	2×SAJ50-1.4
age	ž	SC300/300	2×3000	0 ~ 60	2×3×22	2×SAJ50-1.4
n		SC320/320	2×3200	0 ~ 60	2×3×22	2×SAJ50-1.4
$\geq$	t t	SCD200/200	2×2000	0 ~ 60	2×2×15	2×SAJ40-1.4
	h	SCD250/250	2×2500	0 ~ 60	2×2×18.5	2×SAJ50-1.4
	Twi With counterweight	SCD270/270	2×2700	0 ~ 60	2×2×18.5	2×SAJ50-1.4
	T T	SCD300/300	2×3000	0 ~ 60	2×3×15	2×SAJ50-1.4
	00	SCD320/320	2×3200	0 ~ 60	2×3×15	2×SAJ50-1.4
3	O	3CD320/320	2/3/200	000	2/3/13	2/3/130-1.4

#### Remark:

- 1.The recommended cage dimension (L×W×H)(m): 2.0×1.0×2.5, 2.5×1.0×2.5, 2.5×1.3×2.5, 3.0×1.5×2.5, 3.2×1.5×2.5, 3.8×1.5×2.5, 4.0×1.5×2.5, 4.2×1.5×2.5 etc. We can also manufacture cages of other size according to the user.
- 2. The cage and the door material can be aluminum molded board, punched-plate, figured aluminum board or other type according to your requirements.
- The mast and the tie-in surface can adopt paint-spray, or hot galvanizing processing.
- 4. Both domestic and imported driving systems are available.



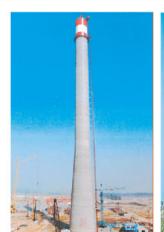


# **Curved and Inclined Building Hoist**

General building hoist can not meet the demand of material and personnel transportation for some buildings with special exteriors, as the cooling tower of power plant, of which the building shaping a hyperbola along the tower wall.

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To solve this problem, our Institute of Building Mechanization of China Academy of Building Research developed the first curved building research in developing the first curved building hoist in China. The track of this building hoist is in





curved shape and parallel to the exterior of the building. The floating leveling mechanism ensures the level of cage while the hoist is moving along the curved line.

The inclined building hoist is applied in construction of buildings with an inclined exterior.

The curved and inclined building hoists are widely used in construction of chimneys, water towers and bridges.

#### **Technical Data of Curved and Inclined Building Hoist**

	Туре	Payload (kg)	Lifting speed (m/min)	Motor power(kw)	Adaptable angle
	ccoco	600	33	1×11	-8°~+21°
Curved Building	SCQ60	600	0~60 (VVVF)	2×11	-8-~+21-
Hoist	CC0120	1200	33	2×11	100 . 250
	SCQ120	1200	0~60 (VVVF)	2×15	-10°~+25°
	500100/100	2,4000	33	2×2×11	
	SCQ100/100	2×1000	0~60 (VVVF)	2×3×11	
Inclined Building	500160/160	2,400	33	2×2×11	
Hoist	SCQ160/160	2×1600	0~60 (VVVF)	2×3×15	
	CC0200/200	2,,2000	33	2×3×11	
	SCQ200/200	2×2000	0~60 (VVVF)	2×3×15	





### Remark:

- 1. The recommended cage dimension  $(L\times W\times H)(m)$ :  $2.0\times 1.0\times 2.5$ ,  $2.5\times 1.0\times 2.5$ ,  $2.5\times 1.3\times 2.5$ ,  $3.0\times 1.3\times 2.5$ ,  $3.2\times 1.5\times 2.5$  etc. We can also manufacture cages of other size according to the user.
- 2. The cage and the door material can be aluminum molded board, punched-plate, figured aluminum board or other type according to your requirements.
- 3. The mast and the tie-in surface can adopt paint-spray, or hot galvanizing processing.
- 4. Both domestic and imported driving systems are available.

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### **Double-pillar Heavy-duty Building Hoist**

We have developed double-pillar Heavy-duty Building hoist to client's requirements. This Building hoist requires small space and can transport large and heavy goods; it is useful in department stores, hospitals and parking lots.

### **Technical Data of Mini Building Hoist**

Туре	Payload (kg)	Lifting speed (m/min)	Motor power (kw)	Safety device
SCE300	3000	5~10	2×2×4	SAJ50-0.5
SCE500	5000	5~10	2×2×4	SAJ30-0.5
SCE800	8000	5~10	2×2×7.5	SAJ50-0.5

#### Remark:

- 1. The recommended cage dimension (L×W×H)(m): 3×2.5×5, 5×4×3.2, 3×3×2.4 etc. We can also manufacture cages of other size according to the user.
- 2. The cage and the door material can be aluminum molded board, punched-plate, figured aluminum board or other type according to your requirements.
- 3. The mast and the tie-in surface can adopt paint-spray, or hot galvanizing processing.
- 4. Both domestic and imported driving systems are available.



# **Multifunctional Building Hoist**

The multifunctional building hoist is a kind of hoist which has multifunction of transporting personnel, steel bar, and concrete. In China this product was initially invented by our Institute and passed appraisal organized by China Ministry of Construction in 2001. It is also a patent product and successfully applied to some dozen projects of power station high chimney and cooling tower construction. It has replaced the old technique of transporting material by huge jib crane and rope windlass, maintance work easily and saved a lot of equipments. This method increases safety and efficiency during work.

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#### **Technical Data of Multifunctional Building Hoist**

Туре	Payload (kg)	Lifting speed (m/min)	Capacity of lifting steel bar (kg)	Capacity lifting concrete (m³)
SC200/200	2×2000	33	2×600	2×0.7
3C200/200	2X2000	0~60 (VVVF)	2x600	2x0.7

#### Remark:

- 1. The recommended cage dimension  $(L\times W\times H)(m)$ : 2.0×1.0×2.5, we can also manufacture cages of other size according to the user.
- 2. The cage and the door material can be aluminum molded board, punched-plate, figured aluminum board or other type according to your requirements.
- 3. The mast and the tie-in surface can adopt paint-spray, or hot galvanizing processing.
- 4. Both domestic and imported driving systems are available.

The elevating platform, to meet the requirements for chimney and other special building construction. The company has developed multifuncational hoist related products.





# **Hydraulic Jacking Bridge**

YDQ26x25-7 hydraulic jacking bridge is a joint invention by our Institute of Building Mechanization of China Academy of Building Research It is used in cooling tower construction together with the multifunctional hoist. It can provide adherence to the hoist, as well as platform for storing and horizontal transporting of steel bar and concrete.



### The main features are as follows:

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- 1. The bridge body and the level bridge are well shaped structure with good rigidity and precise stress.
- 2. The hydraulic jacking method ensures safety and convenience during the operation of the bridge.
- 3. The operation scope can be adjusted according to the construction procedure of the building.
- 4. At the top of the bridge there is a minor downward-slew tower crane, which is used for the lifting of steel bar and materials.
- 5. To ensure the safety during operation, it is installed with sensitive lifting, slewing, range-changing, torque limiting mechanisms, and front-rear bridge torque alarms.

· I	tem	Parameters	Remark
variable range of ahea	variable range of ahead bridge Length		
Width of pass way of t	the previous bridge	2.5m	
Part of the ahead brid	lge allows evenly load	200kg/m	
Ahead bridge allow m	ost heavy outside load	7000kg	Outside carries the moment of force the sum total not to be bigger than 95tm
Rear bridge size (L×W)		11m×3.4m	
Capacity of hopper of concrete		2×1 m³	
Max. using height		150m	
	Mast section	1.65x1.65x2.5m	
	Working range	2~20m	
Parameters of top	Rated Lifting capacity	500~1000kg	
tower crane	Hoisting	7.5/32m/min	
	Trolleying	14.5m/min	
	Slewing	0.296r/min	









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# Mini Building Hoist

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The mini building hoist is a minor vertical transportation machine.

It is designed on the basis of Mesh Driving Principle of Pinion and Rack and mainly applied in industrial and civil constructions, tower cranes, harbor machinery, power transmission towers, bridges, television towers, chimneys, boilers, tunnels for the transportation of construction and maintenance personnel and materials.





#### Remark:

- 1. Recommended car dimension (L×W×H)(m): 1.0×0.75×2.2, 1.5×1.0×2.2 etc. We can also manufacture cages of other size according to the user.
- 2. The cage and the cage door material can be aluminum molded board, punched-plate, figured aluminum board or other type according to your requirements.
- 3. The mast and the tie-in surface can adopt paint-spray, or hot galvanizing processing.
- 4. Both domestic and imported driving systems are available.



### **Technical Data of Mini Building Hoist**

Type	Payload (kg)	Lifting speed (m/min)	Motor power (kw)	Safety device
5540	400	33	1×11	SAJ30-1.2
SC40	400	0~60 (VVVF)	1×15	SAJ30-1.4
5550	600	33	1×11	SAJ30-1.2
SC60	600	0~60 (VVVF)	1×15	SAJ40-1.4
5500	000	33	1×11	SAJ40-1.2
SC80	800	0~60 (VVVF)	2×11	SAJ40-1.4

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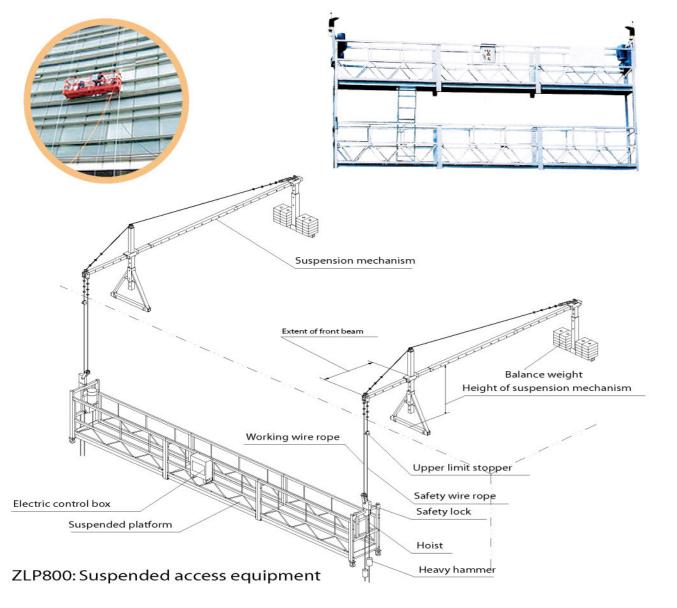
# **Suspended Platform**



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Suspended Platform is mainly used in high-rise and multi-floor building outer wall construction and decoration (such as plastering, bricking, and painting), glass curtain wall installation and cleaning. Also could be used in ship craft construction, elevator installation, inspection and maintenance work for oil stores, high tank bodies, chimneys, bridges and dams.

This equipment is easy to operate and movable, It is a convenient and reliable choice for you.





### Main technical parameters

	Mod	del	ZLP500	ZLP630	ZLP800A	ZLP800B	ZLP1000A
Rated capacity		500kg	630kg	800kg	800kg	1000kg	
	Rated s	speed	9~11m/min	9~11m/min	8~10m/min	8~10m/min	8~10m/min
	Platform	length	5m	6m	7m	7m	7m
	Steel	rope	8.3mm 4×31SW+Fc-8.3	8.3mm 4×31SW+Fc-8.3	8.6mm 6×19+IWS-8.6	8.6mm 4×31SW+Fc-8.6	8.6mm 6×19+IWS-8.6
	Rat	ted lifting force	4.9kN	6.17kN	7.84kN	7.84kN	9.8kN
		Power	1.5kW×2	1.5kW×2	2.2kW×2	1.8kW×2	3.0kW×2
Hoist	Motor	Voltage/frequency	380V/60Hz	380V/60Hz	380V/60Hz	380V/60Hz	380V/60Hz
	MOTOL	Speed	1420rpm	1420rpm	1420rpm	1420rpm	1420rpm
		Brake force moment	15Nm	15Nm	15Nm	15Nm	30Nm
Cofotulosk	Permiss	sion force of impact	30kN	30kN	30kN	30kN	30kN
Safety lock	Lock	king Cable Angle	3°~8°	3°~8°	3°~8°	3°~8°	3°~8°
	Fron	t beam overhang	1.3m~1.7m	1.3m~1.7m	1.3m~1.7m	1.3m~1.7m	1.3m~1.7m
Suspension mechanism	Height adjustment		1.365m~1.925m	1.365m~1.925m	1.365m~1.925m	1.365m~1.925m	1.365m~1.925m
The Charmolli	Weight		310kg	310kg	310kg	310kg	390kg
	Counter	weight	750kg	900kg	1000kg	1000kg	1300kg

Note: For any Special designed suspended platform, it could be realized by CNBM research department as per clients' requirements!





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<u>15</u>

# **Construction Hoist**

## **Building Hoist's Parts**

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Item	Name	ltem	Name
1	Contactor(Schneider, 110A)	25	Motor(China)
2	Relay(Schneider)	26	Reducing device(China)
3	Drop test operate box	27	Drive system(Germany SEW)
4	Limit switch(Schneider)	28	Cable wheel
5	3-phase	29	Guide wheel for cable trolley
6	Operate handle	30	Mast section
7	Electric magnet	31	Tie-in
8	Brake disc	32	Buffer spring
9	Armature	33	Rack
10	Adjusting unit	34	Safety device
11	Brake pieces	35	Breaking-through prevention device
12	Coupling	36	Cable guide frame
13	Nylon coupling	37	Rack wheel
14	Fan	38	Transformer
15	Worm and worm wheel	39	Anti-overload device
16	"J"shape bolt	40	Landing door
17	Bearing	41	Automated landing and calling device
18	Oil seal	42	Air-brake
19	Circularity bolt	43	"U"shape bolt
20	Roller	44	"V"shape bolt
21	Cable joint	45	Cable 3×16+1×6
22	Rubber pad	43	Cable 3×16+1×10
23	Pinion	46	Cable 3×25+2×10
24	M24 screw	40	Cable 3×25+2×16

## **Building Hoist's Parts**



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