

## Multi-Functional Material Hoist

### EN 12158-1:2001

- Machinery Directive  
2006/42/CE
- Mast climbing working platforms  
EN-1495:2009
- Electromagnetic compatibility directive  
89/336/EC
- Low voltage directive  
73/23/EC
- Safety of machinery – electrical equipment of machines –  
part 1: General requirements  
EN 60204-1

## Multi-Functional Material Hoist (Rack & Pinion)



### OPTIONAL FUTURE

Concrete Bucket (Tilting Type)	300 Litres / 0.3 Cubic Meter
Rebar Carrier	12 Mtr Lg. (Horizontal)
Floor Selection	Yes
Load Cell	Yes (Optional)

### GENERAL DATA

MODEL	SMH100	SMH150
Gross Load	1000 kg.	1500 kg.
Gear Rack Module	5	5
Speed	30 Mtr./ Min.	30 Mtr./ Min.
Height	150 Mtr.	150 Mtr.
Mast section	Square 450 mm x 450 mm x 1.5 Mtr. Round tube Ø60mm x 4.5 Thk.	Square 450 mm x 450 mm x 1.5 Mtr. Round tube Ø60mm x 4.5 Thk.
Rectangle Cage. (Inside)	2.0 (L) x 1.2 (W) x 1.2 (H) mtr.	2.0 (L) x 1.2 (W) x 1.2 (H) mtr.
Wall tie interval	6 Mtr.	6 Mtr.
Cable Guide Interval	6 Mtr.	6 Mtr.
Safety Device	SSD 1000	SSD 1000

### ELECTRICAL DATA

Motor power	2 x 6.9 KW	2 x 9.5 KW
VFD	15 KW	22 KW
Power supply	400V (±5%) – 50Hz	400V (±5%) – 50Hz
Control Voltage	24 VDC	24 VDC

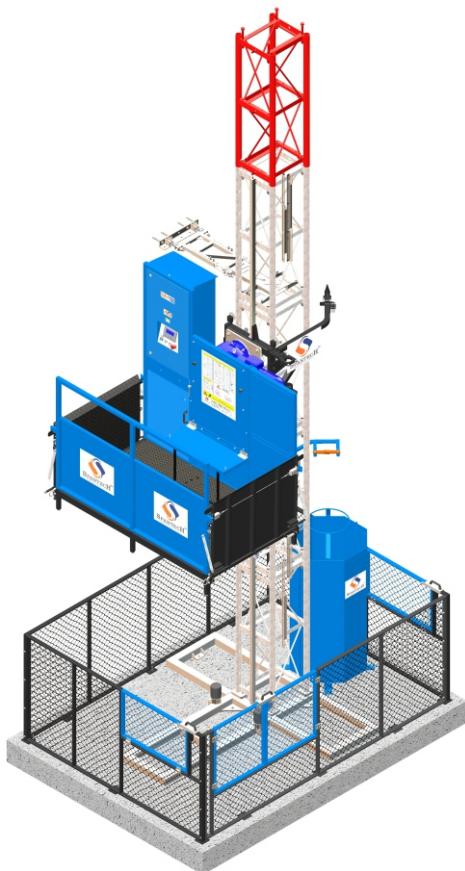
### STANDARD ELECTRICAL SAFETY

Interlocking devices on cage doors, enclosure doors,
Top / Bottom limits
Over travel final limits for top / bottom ends
Erection platform interlocking device
Cable jam protection device
Rebar unit position limit
Top, bottom and emergency stops
Rack searching device
Emergency stop (on car, control boxes, Base panels...)
Power supply main switch
Safety device actuating detector

### STANDARD MECHANICAL SAFETY

2 Motor with gearbox and electromechanical brakes
Safety device
Floating motor plate
Bottom mechanical stops with buffers
Anti slippery floor
Motor protecting cover
Hand release break for Emergency reach to nearest below floor.

# Multi-Functional Material Hoist (Rack & Pinion)



**STANDARD MATERIAL CAGE**

## MAIN MANUFACTURING FEATURES

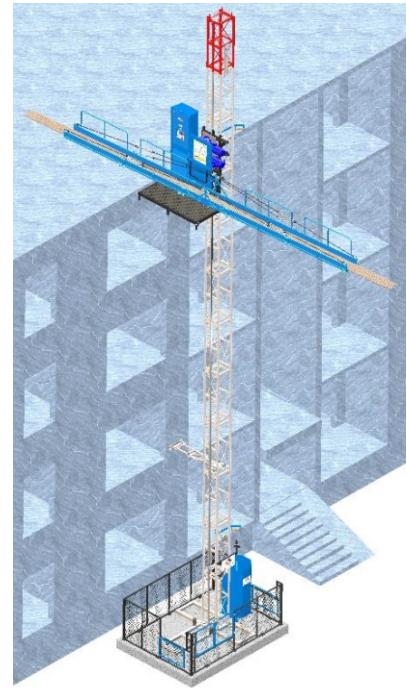
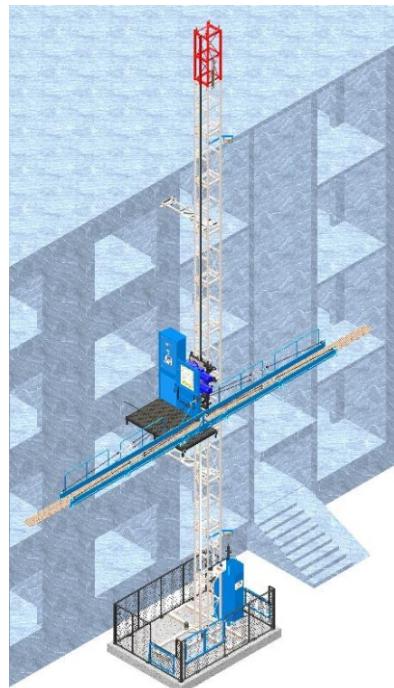
Hot dip galvanized	Mast Sections, Base Frame, Wall Tie.
Quick change mode.	Material cage mode. Rebar Carrying attachment mode.
Powder coated finish	Material Cage structure, Cable arm, Cable guide, Ground Enclosure.
Anti rust zinc plating on machined parts	All guide rollers, rack rollers, pins, and spring etc.
Erection Crane	Electrical operated jib crane.

The SPANTECH SMH100 / SMH150 is designed to offer the most cost efficient vertical transport solution on site and is delivered in three phase 1000 kg / 1500 kg capacity with configuration.

The SPANTECH SMH unit has Multi-Functionality, and can be used for either to transport construction material or TMT bars.

**It's flexible, robust and simple design makes it suitable for all vertical access, Whether it is new construction or building of refurbishment.**

**Safety is paramount** in all SPANTECH machines. The **Multi-Functional material hoist** conform to the **latest safety standards** and **over speed safety devices** which not only ensure safety of the operator but also prolong the working life of the machine.



**HORIZONTAL REBAR CARRYING ATTACHMENT  
( OPTIONAL )**

## Multi-Functional Tower Hoist (Rack & Pinion)



### STANDARD MATERIAL CAGE (RECTANGLE)

- **SPANTECH Rack & pinion Tower Hoist** is designed to offer the most cost efficient vertical transport solution on site and is delivered 1000 KG & 1200 KG Gross capacity with three phase brake motor.
- **SPANTECH Tower Hoist** unit has Multi-Functionality, and can be used for either to transport construction material, TMT bars, & concrete also.
- **It's robust and simple design makes it suitable for all vertical access, including direct to buildings for new construction or refurbishment work.**
- **Safety is paramount** in all **SPANTECH** machines. The **SPANTECH Tower Hoist** conform to the **latest safety standards IS 12466 : 2012** which not only ensure safety of the operation but also lays down requirements for capacity, construction, performance and testing of Hoist.
- **European Centrifugal Safety Device** shall be provided to cater high end safety against free fall of machine.

### IS 12466:2012 - BUILDER'S HOIST – GENERAL REQUIREMENTS

This standard lays down requirements for capacity, construction, safety, performance and testing of single and double platform hoists with or without tilting bucket for use in high rise structures and buildings.

### GENERAL DATA

MODEL	SRTH100	SRTH150
Gross Load	1000 kg.	1200 kg.
Net Load	750 KG.	1000 KG.
Gear Rack Module	5	5
Speed	30 Mtr./ Min.	30 Mtr./ Min.
Height	120 Mtr.	120 Mtr.
Mast section	Square 500 mm x 400 mm x 1.5 Mtr. L 50x50x6 mm Angle	Square 500 mm x 400 mm x 1.5 Mtr. L 50x50x6 mm Angle
Wall tie interval	6 Mtr.	6 Mtr.
Cable Guide Interval	6 Mtr.	6 Mtr.
Rect. Cage. (Inside)	1.5 (L) x 0.8 (W) x 0.7 (H) mtr.	1.5 (L) x 0.8 (W) x 0.7 (H) mtr.

### ELECTRICAL DATA

Motor Power	1 x 6.9 KW	1 x 9.5 KW
VFD	7.5 KW	11 KW
Power Supply	400V (±5%) 50 Hz	400V (±5%) 50 Hz

### OPTIONAL FUTURE

Concrete Bucket ( Tilting Type )	300 Litres / 0.3 Cubic Meter
Rebar carrier	7 Mtr Lg. (Horizontal)
Erection Crane	Manual Type
Floor Selection	Yes
Load Cell	Yes (Optional )

### SAFETY FUTURE

Power fail safe brake motor
European design Safety Device
Cage doors limit switch
Top limit switch
Bottom limit switch
Over travel final limits for top / bottom ends
Rack searching limit
Emergency stop (on car control boxes & Remote pendant)
Power supply main switch
Safety device actuating detector
Full Covered Gear box & Motor.
Hand release break for Emergency reach to nearest below floor.

## Multi-Functional Tower Hoist (Rack & Pinion)

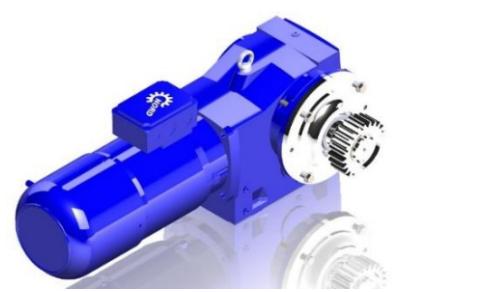


### Electrical Control Panel

- Schneider, Finder etc primum and reliable make switch gears.
- L&T / Schneider / Mitsubishi make VFD.
- Colour HMI display for easy of operation and maintenance.
- HMI & push button based operation.
- Fully automatic & Manual mode of operation.
- Encoder based floor selection system.
- Optional Overload protection system.
- Provide all required safety elements.
- IP 55 degree of protection.
- Clean and easy panel wiring with proper markings on cables for better traceability which reduce breakdown time.

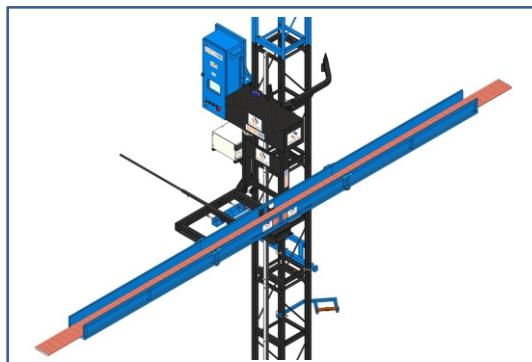
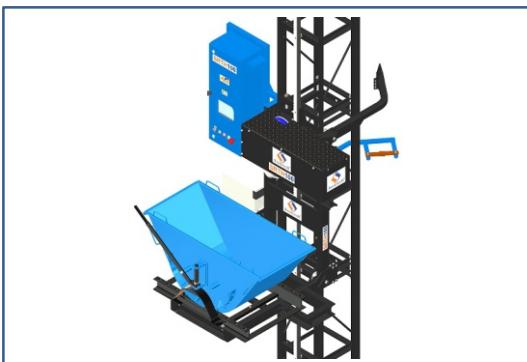
### Centrifugal Safety Device

- European design safety device is a mechanical unit used to **protect against** accidental free-fall.
- **Automatic reset:** The procedure to reset the brake consists only in raising the hoist a few centimetres. The brake returns to its operative without the need of any manipulation.



### DRIVE UNIT

Type	Rack & Pinion
Gear Box	<b>Nord Germany</b> Design Heli Bevel Geared Motor with Electromagnetics brake with maximum power efficiency which reduce operating power of machine.
Location	Mount on Carriage unit



### Concrete Bucket (Optional)

Type	Tilting type
Capacity	300 Ltr.

- Special design tilting type bucket to carry concrete.
- Robust 2.5mm thk. MS sheet bucket design.
- Self locking spring return locking arrangement.
- Easy tilting operation. Powder coated surface finish.

### Rebar Carrier (Optional)

Type	Horizontal
Capacity	500 Kg. 7 Mtr. Long

- Special design modular type tray design .
- Robust MS tube structure covered with MS sheets for tray.
- Swivel unit design with Anti friction bearing for effort less pulling of long bars.
- Powder coated surface finish .

### SPECIFICATION

MODEL	STH100	STH150
Gross Load	1000 kg.	1200 kg.
Net Load	750 KG.	1000 KG.
Wire Rope	12 mm ( 6 X 36 )	12 mm (6 X 36 )
Speed	30 Mtr./ Min.	30 Mtr./ Min.
Height	120 Mtr.	120 Mtr.
Motor Capacity	10HP (7.5 KW) Brake Motor	12.5HP (9.3 KW) Brake Motor
Mast section	Square 500 mm x 400 mm x 1.5 Mtr. L 50x50x6 mm Angle	Square 500 mm x 400 mm x 1.5 Mtr. L 50x50x6 mm Angle
Wall tie interval	6 Mtr.	6 Mtr.
Rectangle Cage. (Inside)	1.25 (L) x 0.71 (W) x 0.6 (H) mtr.	1.25 (L) x 0.71 (W) x 0.6 (H) mtr.



**STANDARD MATERIAL CAGE  
(RECTANGLE)**

### SAFETY FUTURE

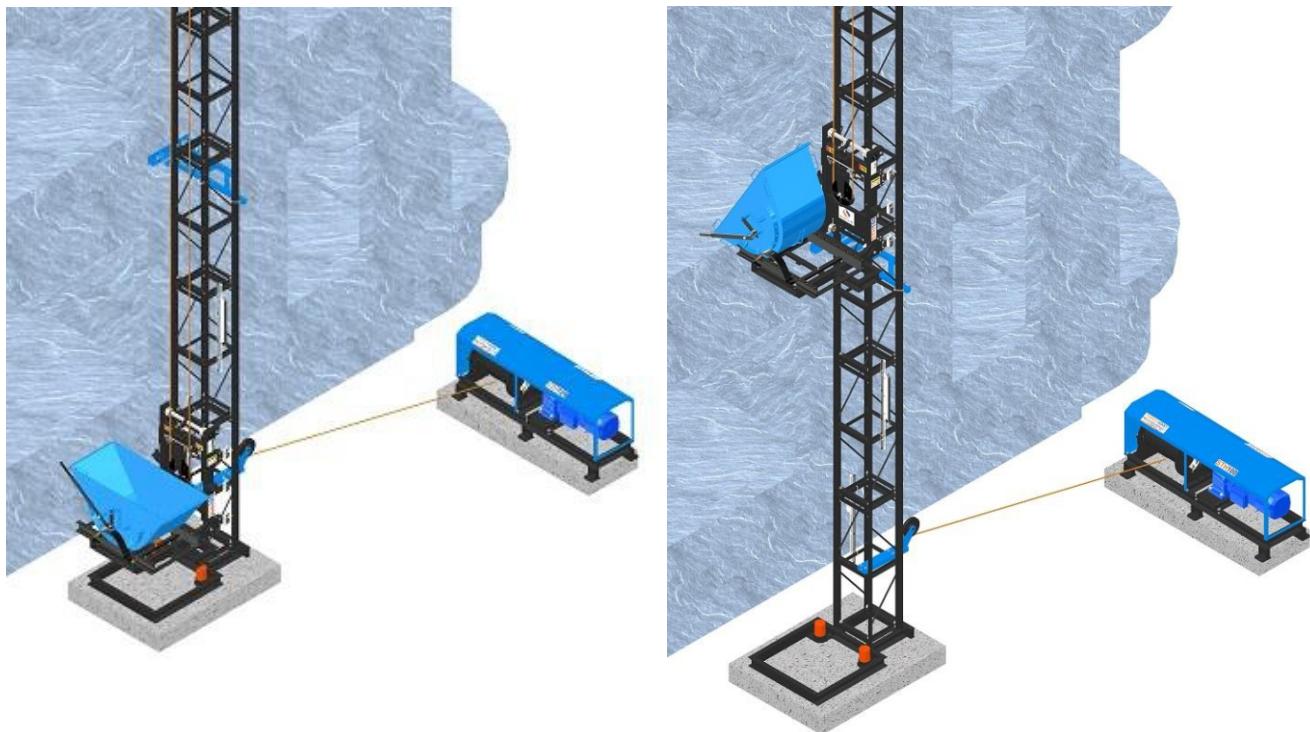
Power fail safe brake motor
Top limit
Bottom limit
Safety Brake
Full Covered Wire Rope Drum
Full Covered Electrical motor and Gear box.

### OPTIONAL FUTURE

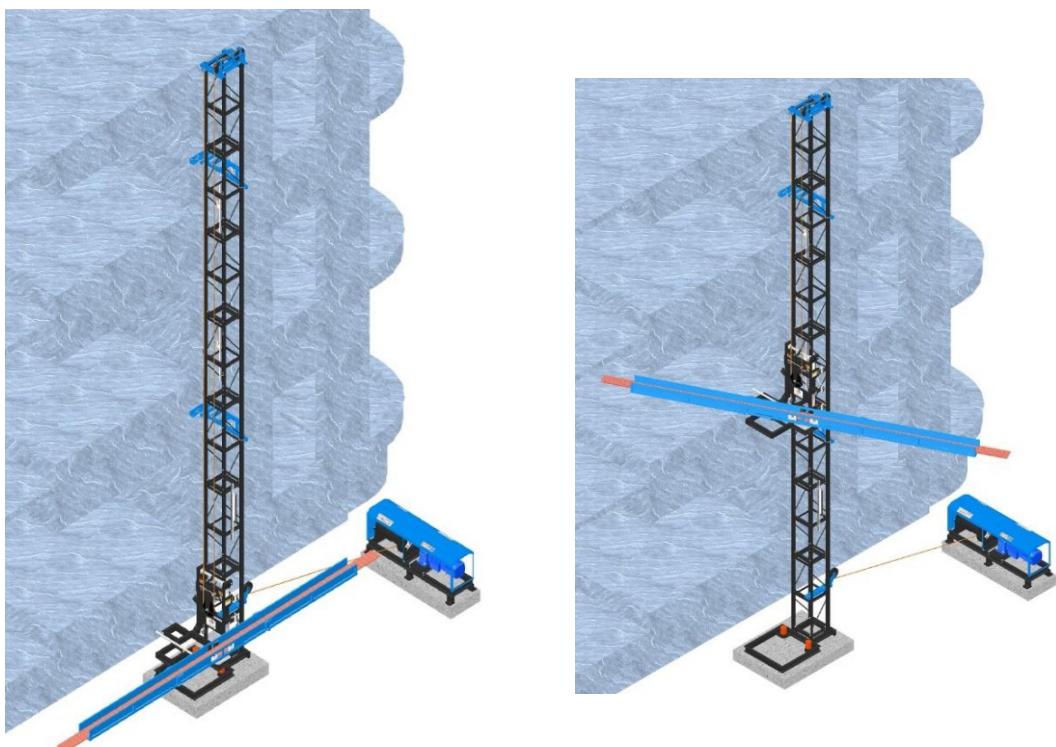
Concrete Bucket ( Tilting Type )	300 Litres / 0.3 Cubic Meter
Rebar carrier	7 Mtr Lg. (Horizontal)
Floor Selection	Yes (Optional)
Erection Crane	Manual Type

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- Safety braking of carriage shall be provided to cater wire rope failure.

## Multi-Functional Material Hoist (Wire Rope)



**CONCRETE BUCKET ( TILTING TYPE )  
( OPTIONAL )**



**HORIZONTAL REBAR CARRIER  
( OPTIONAL )**

# Engineering

Next Generation Solutions



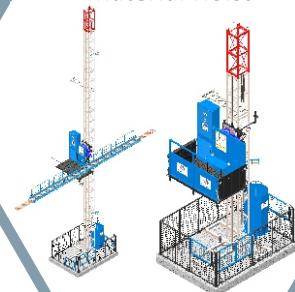
Bar Bending Machine



Passenger & Material Hoist  
(Rack & Pinion)



Rack & Pinion Multi Functional Material Hoist



TMT Ring Bending Machine



Ring Bending Machine



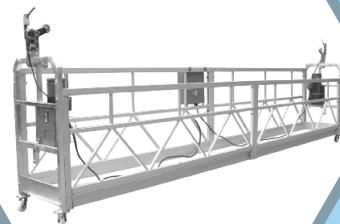
Multi-Functional Tower Hoist  
(Rack & Pinion)



Bar Cutting Machine



Rope Suspended Platform



Multi-Functional Tower Hoist  
(Wire Rope)



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