

ELECTRIC HOISTS
ELECTRIC OVERHEAD CRANES
JIB CRANES
GOODS LIFTS
CONICAL ROTOR SQUIRREL
CAGE INDUCTION MOTORS



**LIFTING SOLUTIONS** 



### **HOIST-O-HIND**; Lifting Solutions since 1985:

We are a company dedicated for past 25 years in the field of engineering with an immense experience in Designing and Manufacturing of quality products like Electric Wire Rope Hoists, E.O.T. Cranes and other Material Handling equipments. HOIST-O-HIND is known for its products which are researched and developed under one roof.

Key feature of our success is our Electric Wire Rope hoists which are exclusively manufactured by us, has incorporated all features unique to world renowned make of "HOIST-O-MECH" Hoists. Our conical rotor motor is 100% failsafe, along with our electro-mechanical conical disc type brake which are one of the most unique and salient features of our Hoists.

Industrial giants Like BHEL, Vedanta group, Viraj Profiles Ltd, Nitin Castings, India Gov Ordinance factory and many such company's are our premium and valued customers being served for years. Our hoists are exported to many countries. Our dedicated and quality services ensure and reward us with repeat orders from such reputed clients.

Our Team at HOIST-O-HIND is dedicated with commitment to offer you the best services right from research and development to designing up to commissioning of all our products, thus ensuring long life of the products.

### **Quality Services:**

HOIST-O-HIND quality systems are integral to all operations. Procurement, manufacturing, administration and product service functions are conducted within a comprehensive quality assurance system. As a result HOIST-O-HIND's manufacturing facilities and technical manual meet all quality standards.

Documentation control is key component of HOIST-O-HIND overall quality system. The requirements of material certificates, testing, drawing and other essential data are clearly identified and documented as per quality systems of ISO 9001/ 2008 certification.



#### Certifications::





# PRODUCT RANGE: Cranes:

Hoist-o-hind is a renowned manufacturer of high quality of various type of Cranes. These cranes are made in accordance with international quality standards ensuring high resistant to vibrations. These state of art cranes are durable, robust and reliable. Since these are made out of class A raw materials like crane and hoist duty motors and other electrical components, therefore, these cranes function flawlessly. We lay special stress on design of the cranes to be such that they are easy to use and user friendly. Our cranes have high quality brakes, and are very resistant to rust.



#### **Double Girder Cranes:**

Up to 50 ton Capacity
Tailor Made end carriages
Twin drive (geared brake motors)
Sturdy Hoisting crabs
Conical Rotor Hoists
100 % fail proof Brakes
Panels with genuine Siemens switches
VVF (Ac) drives for Soft Start (optional)
Remote Control (optional)
Desired DSL Systems.

### **Single Girder Cranes:**

Up to 20 ton Capacity
Tailor Made end carriages
Twin drive (geared brake motors)
Sturdy Hoisting crabs
Under Slung Conical Rotor Hoists
100 % fail proof Brakes
Panels with genuine Siemens switches
VVF (Ac) drives for Soft Start (optional)
Remote Control operation (optional)
Desired DSL Systems.





#### **Jib Cranes:**

Up to 5 ton Capacity Both 180° to 360° turning radius for the Jib Arm Motor driven radial Arm Motorised Trolley Hoist on the arm. 100 % fail proof Brakes





### **Hoists:**

Hoist-o-hind is a renowned manufacturer of hoists with a wide range of lifting capacity varying from 0.25 tons to 50 tons.

All Hoists are confirmed to class II duty as laid down in IS 3938/1983. Hoists confirming to class IV as per IS 3938/1983 also can be supplied on request.

#### **Hook Blocks:**

Hook blocks (Lower block assembly) and Idler Pulleys (Upper block assembly) can be designed and manufactured as per requirements. It ranges from 1 ton to 50 tons. The hook can be forged in mild steel, C45 & EAN Materials. Test-certificates can issue for all kinds of hooks. The pulleys can be made from CI casting and also Mild steel.



#### (Crabs:

Crabs can be supplied as standard units or can be custom made. They offer maximum advantages when working in open. These crabs can have single or twin hoist units as required. The driving arrangement can either be with hand-geared or motor driven type. Micro speed arrangement in hoisting can be provided if required.



### **End Carriages:**

We manufacture motorised end carriages for Single girder & Double girder cranes. The design and fabrication is done according to the span of the crane and gantry.



#### **Goods Lifts:**

Goods lift are designed and manufactured as per requirements from 500 kgs to 5000 kgs. Stainless Steel & MS Sheet Metal cages.
Sturdy and long life Collapsible Gates / Shutters.
Floor & Door Limit Switches for safer Operation.
Electronic panels with indicators (optional)



Panels for cranes & Goods lift are designed and manufactured & tested by us. Panels with VVF (AC) drives of ABB, Yaskawa are used to control the speed of the motor. Panels are made as per requirements. Genuine switches From branded companies like Siemens, Telemecanique , BCH & L&T are used for manufacture of panels



#### **Geared Brake Motors:**

Geared Brake Motors are used for Cross travel and Long travel in hoists and cranes. These motors are available in a variety of speed and different Horse powersThe Geared brake motor consists of 3 parts i.e. conical squirrel cage motor, gear box & integral brake. The motors have very high efficiency and are very compact. Flange mounted and foot mounting options available.

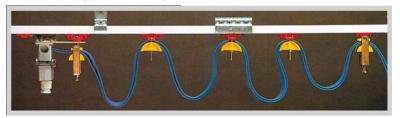
### **DSL Systems:**

DSL Systems are used for electrical transmission in industrial EOT cranes. DSL systems are latest and very innovative way for supplying electricity to the hoist or the over head traveling equipment.

### **Shrouded Type DSL Systems**

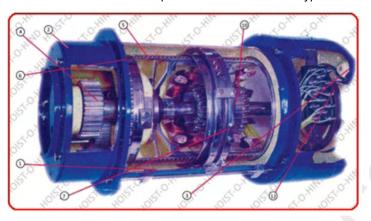


## **Festoon Type DSL Systems**



#### **Special Highlights of our hoists are:**

- 1) Special < Quick Brake > adjusting system takes only few minutes to adjust thus reducing the down time.
- 2) Trolley is so designed that it is adaptable to wide range on I beam Sizes
- 3) Built-in safety limit switches control top and bottom position of the hook
- 4) Hoist motors are designed for 'F' class insulation which is superior to class 'A' 'E' and 'B' types of insulations.



#### **Motor:**

The motor (10) is three phases squirrel cage, conical rotor type working on 440 volts. 50 c/sec. A.C. supply. This motor is specially designed for hoist and crane and is insulated by class 'F' type of insulation according to B.S.: 2613. The starting and stalling torques of this motor are 220% and 290% of the full load torque. The motor is rated at 40% ED.

#### **Brake**

The axial movement of the rotor is one of the characteristics of the conical rotor type of motor. This characteristic is taken advantage of in the actuation of the brake. When the motor is started the rotor (11) is axially pulled into the magnetic centre of the stator and the brake is released. As soon as the current is cut off the brake spring (9) presses the brake disc (12) against the cover and the brake is applied. The braking torque is 100% above the motor torque at the rated load.

The maintenance and adjustment of the brake us very simple due to <Quickbrake> system and can be done without removing any part. The brake disc and brake end cover (3) are both made of high grade cast iron and the brake lining is of 'Ferrodo' type.

#### Gear Box:

The gear box (2) is made out of high grade cast iron. The precision spur gears (4) are machined from alloy steel and are fitted with ball/needle roller bearings. The gear box is filled with grease.

#### Rope Drum:

The rope drum (5) is rolled welded and precision machined. This rope drum is supported on large diameter roller bearings (6) on both ends and the drive is through internal gears. The ample drum diameter ensures the best possible working condition for the wire rope.

#### Rope Guide:

The rope guide (7) is made of high grade cast iron. The rope tightener (8) is built-in in the rope guide itself. This rope guide moves on the drum like a nut and prevents the rope from overriding and loosening.

#### Rope:

Generally 6 x 37 construction fibre core, pre-formed type, ungalvanised wire rope is supplied. (Galvanised and steel core wire ropes can also be supplied, if specifically asked for.)

#### Main Housing:

All hoist parts are enclosed in the main housing (1) thus forming a better looking integral unit. The main housing like the rope drum is also of rolled and welded construction, equipped with mounting bracket.

#### **Limit Switches:**

Every hoist is providing with built-in limit switches (16) to control the top and bottom position of the hook. Tappets (13 & 15) can be adjusted to any position in between the range provided. These limit switches are actuated by the rope guide.

#### **Control:**

The hoist is controlled by a pendant push button station. Supply to the pendent push button is of 110 volts as per IS specification.

### Micro speed:

All hoists can be fitted with a micro speed attachment which reduces the hoisting speed to 1/10 th of the main hoisting speed. The micro speed attachment works independent of the load and main hoist. There is a separate control for the micro speed. This arrangement is invaluable in the handling of bulky, heavy and delicate loads.

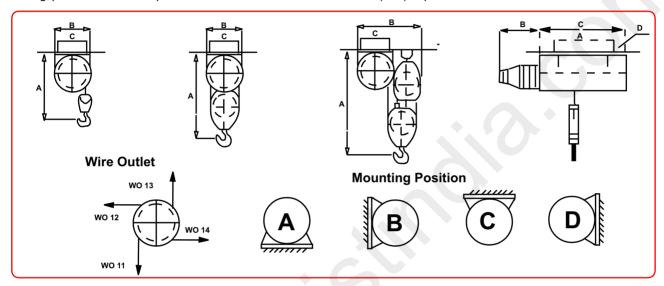
#### **Testing:**

Every hoist unit before dispatch is tested at 125% of the rated load capacity on single fall of rope. Only after all the components pass the rigorous inspection tests, the hoist is approved for dispatch.

### **Type of Electric Hoists:**

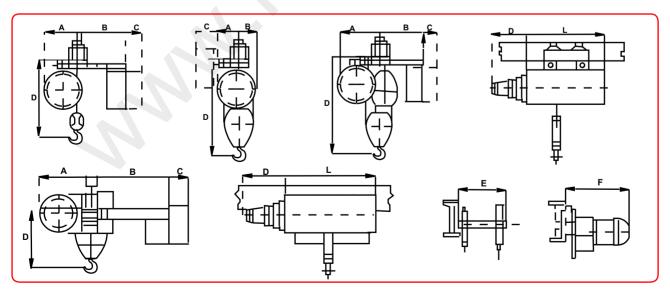
#### **Fixed mounted Hoist:**

These are available in all types of mountings. E.g. floor mounted, ceiling mounted, wall mounted etc. They use for loading and unloading transportation vehicles, through floor hatches or outside the wall, and for serving production machinery. When ordering, please state in what position the hoist is to be mounted and wire (WO) required.



#### **Hoist with Trolley:**

Hoists can be equipped with trolley for horizontal traveling. The trolley is fabricated from components bolted and welded together and carried by traveling wheels supported on ball bearings. Smaller loads can be moved with a push type trolley whilst the hand chain or motor driven should be used for heavier loads. The drive motor is of squirrel cage type with built-in brake. The motor drives one or more of the trolley wheel's gear rim. Wherever there are limitations to the available head room (dimension H), short head room trolley can be supplied (refer figure IV above)

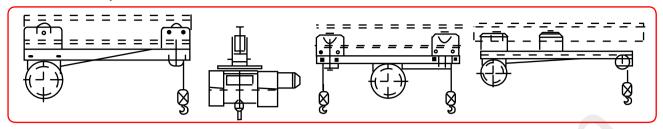


#### **Hoist on flexible Trolley:**

Where the trolley has to negotiate a cured track, or the material movement is from one bay to another, this type of arrangement fulfils the requirement. The minimum radius of curvature the flexible trolley can negotiate is 1.5 meters.

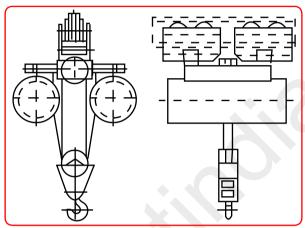
### **Extended Trolley:**

These are particularly required when the load is bulky or for handling material from furnaces / chemical baths. This trolley can also be provided with two hooks to deal with loads like paper rolls, logs etc. When the loads go beyond the overhead track, an outrigger type extended trolley is indispensable. These are used for loading on and unloading form ships in stream. Driver's cabins can also be built with the trolley.



### **Twin Hoists on Monorail Trolley:**

For exceptionally high heights of lofts this arrangement is very useful. It also the option of two hoisting speeds. The maximum height of lift is 73 m for a load of 5 tones, for 228 twin hoists.



# **Hoists With External Motors:**

### Salient Features of our Hoists:

Manufactured in ISO 9001:2000 Certified Company Assured quality and Interchangeability of parts.

Easily Accessible separate brake, motor, drum gear box and panel unit

Rope drum rolled from MS 2062 grade plates accurately machined

Unique and Sturdy rope guide arrangement Prevents rope slackening and easy change rope

Precision CNC Machine Cut Case-Hardened Alloy Steal gears Noiseless Operation Longlife

Fail Safe Electro magnitic Brake. Trouble free operation and ease of adjustment

Heavy Duty Class IV Robust Design Smooth operation even in toughest of application



### Works & Head Office:



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