

*Safety first, quality plus, reliability ever...*

# SB ENGINEERS



# PROFILE

## WELCOME TO SB ENGINEERS

“SB Engineers” is a one of the fastest growing manufacturer and supplier of Material handling equipments such as “EOT Cranes, Electric Wire Rope Hoist, Gantry Crane, Jib Crane, Under slung Crane, Winch, Transfer Trolley, Goods lift / Cage hoist, Flame proof hoist and cranes” etc.

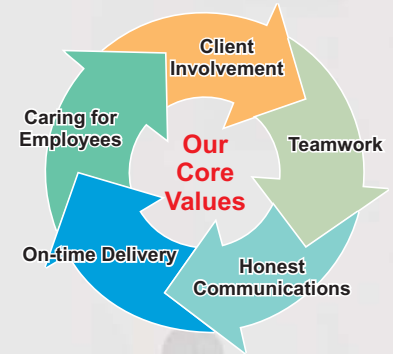
The company is run by young and dynamic team backed by experienced strategists and our products are mfg. as per IS standards and highly reliable. Every crane manufactured by “SB CRANES” is designed to meet individual customer requirements and working in a large variety of Industries across India and abroad.

### VISION :

We envision ourselves to be one of most trusted and admired “CRANE MANUFACTURING COMPANY” in the nation by providing quality products to our valued customers at all times.

### MISSION :

To develop & maintain successful long term business relationship & to provide high quality products and ensuring total customer satisfaction. We strive to achieve it through continuous improvement in products, upgrading the manufacturing system with technological development and delivering superior quality products at all cost.



## QUALITY POLICY

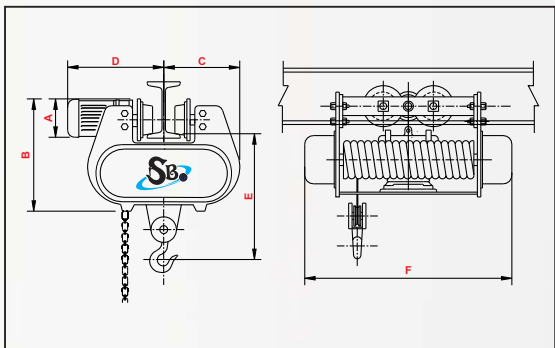
**“The cornerstone of our success lies in a proactive management & excellent product quality”**

We are committed to provide the best quality products to achieve customer's satisfaction, because we not only want to provide our customer's satisfaction but also we want to build-up a healthy & longer relationship with our clients. Our equipment are Tested according to Cranes IS provisions. We also commit to implement, Maintain and continuously improve quality management system and also commit to fulfill all applicable statutory and regulatory requirements. We ensure you of our competitive and reasonable rates coupled with reliable and efficient working of our products.

## PRODUCT RANGES

### ELECTRIC WIRE ROPE HOIST

#### TECHNICAL SPECIFICATIONS OF “SB” WIRE ROPE HOISTS



S.W.L. Kgs	Lift Mtr.	No. of Falls	Wire Rope Dia.	Speed M/Min		Motor HP		Dimensions (mm)						Wt. kgs
				Hoisting	CT	Hoisting	CT	A	B	C	D	E	F	
500	6	2	8	4.0	18	1.0	0.25	180	460	300	400	580	720	150
1000	6	2	8	4.0	18	1.5	0.25	180	460	300	400	580	720	180
2000	6	2	10	3.5	15	3.0	0.50	200	690	400	500	650	1050	400
3000	6	2	12	3.5	15	5.0	1.00	200	700	400	500	750	1050	500
5000	6	4	12	3.5	15	7.5	1.00	200	730	500	600	950	1100	550
7500	6	4	14	3.0	15	10.0	1.00	250	950	620	690	1450	1700	1150
10000	6	4	16	3.0	12	12.5	1.50	250	950	620	690	1450	1700	1200
15000	6	4	20	2.0	12	15.0	2.00	300	1100	750	900	1750	1900	1650

**NOTE :** Special requirements like higher lift, low headroom, compact dimensions hoist will be offered on request. We reserve the right to changes any technical specifications without prior notice.



#### SALIENT FEATURES:

- ◆ Capacities from 250 Kgs to 15000 Kgs.
- ◆ Rugged construction conforming to IS 3938
- ◆ Shafts mounted on anti friction bearings
- ◆ Totally enclosed gearbox with precision machine cut gears and pinions
- ◆ Rope drums made from seamless pipe
- ◆ Assembly facilitating easy maintenance
- ◆ TEFC squirrel cage motors with high starting torque to work on 415V, 3Ph, 50Hz power supply

- ◆ Disc type/Shoe type Electromagnetic brakes for hoisting & cross travel motions
- ◆ Limit switches for upper and lower limits for safe operation
- ◆ Safety latches on hook
- ◆ Hook supporting on thrust bearings for 360 Degree swivel
- ◆ Micro speed for hoisting and cross travel shall be provided if required
- ◆ Overload protection device if required
- ◆ Radio Remote Control through operation if required
- ◆ Flame proof hoist (FLP) also manufacture.



#### Electric operated Winch:

##### SPECIFICATIONS :

- ◆ **Pulling Capacity: Up to 30Ton**
- ◆ **Wire Winding: Up to 1000 Mtr.**
- ◆ **Speed :** on customer's request

##### Applications :

Winch is used for pulling heavy loads, erecting Pillars and Poles, Tensioning Electric Lines. It is also used for vertical lifting loads.

#### SB Transfer Trolley :

Available with us are premium quality electrically operated transfer trolleys ranging from **10 ton to 100 tons** in capacity. These can run on rails for inter bay transfer of materials, using the electrical power supplied through cable drum or drag chain.

##### Features :

- ◆ Easy to operate
- ◆ L block with high load bearing capacity
- ◆ Heavy duty
- ◆ Sizes to suit any part and weight

#### TRANSFER TROLLEY:



# EOT CRANE:

## SINGLE GIRDER EOT CRANE:



### SALIENT FEATURES:

**Design:** "SB CRANES" are designed & manufactured accordance with IS-807, IS-3177 & IS-4137 considering factor of safety in respect to appropriate class of duty.

**Duty:** SB cranes are designed for various class of duties:-

Class - I: light duty cranes for maintenance, warehouse operations.

Class - II: medium duty cranes for general engineering application and machine shop.

Class - III: heavy duty cranes for heavy machine & fabrication shop, paper mills, etc.

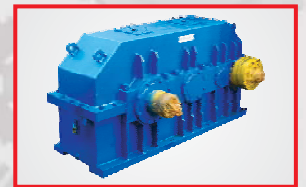
Class - IV: extra heavy duty cranes for continuous operation in steel mills and other heavy engineering purpose. .

**Crane Bridge:** Crane bridge girders are of plate box type / standard rolled steel joist / compound beams / castellated / lattice construction. All the main butt-weld joints of the web are strong and rigid structure thus 100% reliability of welded joints is ensured. The material of construction conforms to IS: 2062-1992.

**Motors:** The motors are used specially crane duty (S4) suitable for frequent starting, reversing & braking in accordance with IS-325. Motors are totally enclosed in dust proof & fan cooling (TEFC) construction, Sq. cage motors, insulation class F, IP54 protection, foot / flange/face mounted.

**Brakes:** Electromagnetic Single-dual AC disc type/electromagnetic shoe type/ EHT brakes are provided in all motions. These brakes are "FAIL to SAFE" type means automatically release when the motor circuit is on and applied when motor circuit is off. Dc brakes are also provided on request.

**Gear Box :** The entire gear boxes are made of accurate hob cut helical / spur gears & pinions having hardness 250 to 350 BHN made from carbon -alloy steel. All gears & pinions running on antifriction type ball / roller bearings in totally enclosed oil bath giving constant splash lubrication. The helical / Spur gear designed for adequate strength and optimum wear resistance for smooth operation & long life.



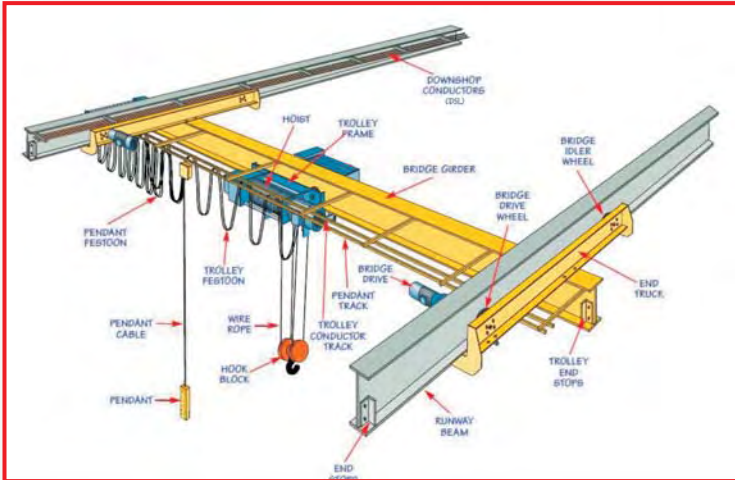
**Wheel assemblies :** Long travel wheels are straight treaded double flanged forged steel wheels. Wheels are supported on antifriction ball or double row self aligned spherical roller bearings in special blocks of 'L' type design ('l' type bearings) for easy maintenance.

**Electrical Panel :** Modular design, ease to install and maintain, reliable operation, fuse less circuitry, ducted wiring and compact terminals. Motor overload protection to prevent overloading.

**Limit Switch :** Safety limit switches for stoppers will be provided to prevent over traveling in all motions.

**Painting :** Two coats of primer before assembly & two coats of synthetic enamel after testing.

**UNDER SLUNG/UNDER HUNG TYPE CRANE:**



These under slung/Suspension Cranes are used in the areas where there is no option of the supporting steelwork beneath the floor. The track for such cranes is held by the roof structure or by the pillars. These cranes required less space and run on the lower flange of the crane runway. This flange is placed directly on the ceiling and is highly profitable in terms of judicious use of space. We manufacture these in compliance with the requisite industry standards.

**OPTIONAL FEATURES:**

- ◆ Variable speed through VVF Drive
- ◆ Soft starter
- ◆ Slipring motors
- ◆ Wireless Radio Remote control operated
- ◆ Shrouded DSL system for power feeding
- ◆ Flameproof cranes

**SHROUDED BUS BAR SYSTEM:**

Shrouded Bus bar systems are used for the electrification of mobile equipment. Shrouded Bus bar is a safe, economical and low maintenance way to solve mobile electrification requirement. Systems can be designed to accommodate 60 to 1200 Amp.



**DOUBLE GIRDER OVERHEAD CRANE:**

The double girder cranes are generally used when heavy loads and wide spans are required. Double girder cranes consist of two torsion-free box girders and load lifted by crab which is running on top of two girders.

**Manufacturing Range:**

- ◆ Capacity : Up to 100 Ton
- ◆ Span: Up to 35 Mtr.
- ◆ Lift : Up to on customer's request

**SALIENT FEATURES :**

- ◆ Amply proportioned main girders of box section fabricated from IS: 2062 plates that ensure maximum rigidity with a minimum dead weight.
- ◆ Modular design, covering a very wide operating range. The systems are designed for ease of installation and maintenance and reliable operation with fuse less circuitry, ducted wiring and non-screwed terminals. Each drive group is equipped with a motor overload relay protection.
- ◆ Precision flat helical / spur gear units in light alloy housings with case-hardened gears, high- grade surface treatment and permanent oil / grease lubrication.
- ◆ Higher efficiency to save power.
- ◆ All motions are protected with limit switches to prevent over hoisting & over traveling motion.
- ◆ Platform with hand railing for easy, simple & safe maintenance of the crane extended partially or totally along the girder width.



## **SINGLE & DOUBLE GIRDER GANTRY/GOLIATH CRANE:**

Gantry / Goliath Cranes are adapted to applications where overhead runways would be not possible, costly to erect and difficult to maintain in alignment. Where the installation is only temporary a gantry crane can be moved to a new location with less trouble or expenses than an overhead crane and its runway. Also it is comparatively easy and inexpensive to extend the length of the runway and thus increase the working area of the crane. Most goliath crane/ gantry crane installations are outdoors applications.



### **AVAILABLE WITH OUR RANGES :**

- ◆ Full Gantry with single/double girder
- ◆ Semi Gantry with single/double girder
- ◆ Manual Gantry

### **SPECIFICATIONS :**

Capacity : 0.5 Tons Onwards  
Span : Up to 30 meter  
Lift : 0.5 meter to 20 meter

### **FEATURES :**

- ◆ Economical solution to bridge cranes
- ◆ Heavy and light duty
- ◆ Efficient and safe operation
- ◆ Minimum effective cost & maintenance



### **APPLICATION AREAS :**

- ◆ Granite Industry/Mining industries
- ◆ Ship building industry
- ◆ Scrap Yards
- ◆ Ports
- ◆ Shipping Yards

## JIB CRANES



When looking for a lifting option for a smaller space, one should look to the option for Jib Crane. This crane is an excellent choice, as it is strong and versatile, robust and flexible. The tough construction of the jib boom ensures that it will not wear out. These cranes can be used for material and machinery loading-unloading small assembly jobs, localized fitting etc.

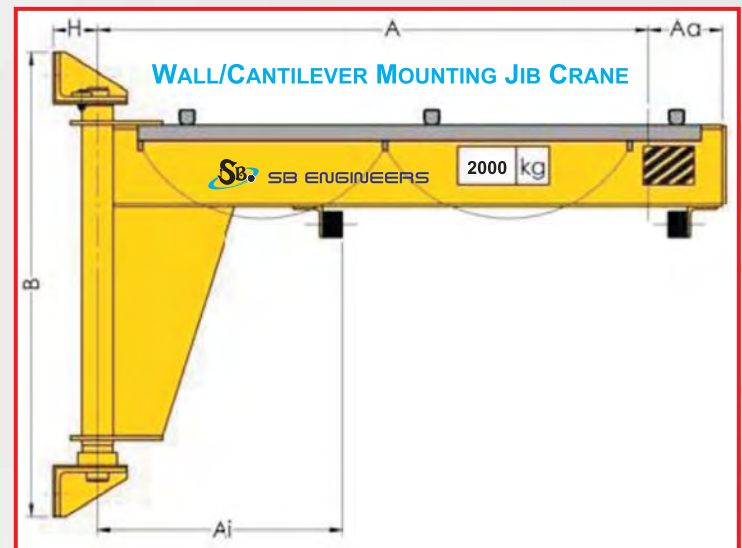
### AVAILABLE WITH OUR RANGES :

- ◆ Pillar Mounted Jib crane
- ◆ Wall/cantilever Mounted jib crane
- ◆ Wall Traveling jib crane

### WALL/CANTILEVER JIB CRANES :

Full cantilever Jib Cranes is the next category among the Jib Cranes. These Cranes are designed for mounting on to walls or columns to serve a 180-degree arc. They can be used under an overhead bridge crane if adequate head room is provided.

**Note :** Required structurally adequate wall or column to support jib crane.



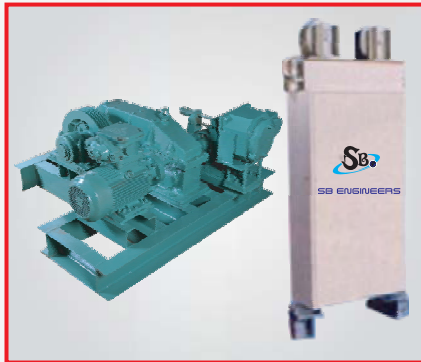
### WALL TRAVELING JIB CRANES :

The "SB" single girder **WALL TRAVELING CRANE** is designed for operation on a lower level beneath a large traveling crane system. These cranes provide additional handling possibilities and ensure smooth and trouble-free material handling between different working areas. SB single girder wall traveling cranes are available for load capacities up to 5MT with outreach up to 5m. It is possible to mount several cranes on the same bay rail.

“SB” Goods Lifts are two types.

◆ **Counter Weight(Balancing weight) Type** ◆ **Cage Hoist Type**

Both type goods lifts are also offered for hazardous area like Gas group I, IIA&IIB suitable for Zone-1&Zone-2



**COUNTER WEIGHT TYPE :**

The Counter/balancing weight type goods lift is having lifting machine with drive pulley, helical gear box, motor and brake. The lifting m/c is mounted at top in m/c room. The design of this type goods lift is operated by separate four fall wire rope. Hence incase of one wire rope broken out of four falls, the cage will be not fall. This special arrangement is considering for heavy loading and continuous operation.

**CAGE HOIST TYPE :**

Cage hoist type Goods Lift is having electric wire rope hoist instead of balancing lifting machine. Wire Rope Hoist mounted on a top of supported structure. In the absence of a RCC well inside the building, a fabricated enclosure supporting structure can be erected on site.

The **cage** is made of rolled steel sections and sides are covered with bumped sheets. Cage top is covered with M.S. Sheets and bottom is covered with chequered plate for antiskid property. Collapsible doors are provided on cage as per entry and exit position. The cage is being guided with rollers on "T" guide rail. Antifriction bearings are provided for smooth and efficient traveling with low friction and longer life.



**SPECIAL FEATURES :**

- ◆ Limit switches with one gravity switch will be provided to prevent over lifting & below lowering of cage.
- ◆ Limit switch at each landing level floors and cage door to avoid any accidental causality.
- ◆ Electro-Mechanic door locks at each landing level to ensure:
  - (i) Lift does not work electrically if any door is open.
  - (ii) The collapsible gate does not open mechanically unless cage is reached corresponding level.
- ◆ Spring buffer on the lift well to cushion the cage.

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