

# Welcome to "MZ Construction joint venture of GRIP companies"

Welcome to "GRIP" - The pioneers in the field of providing ultimate solutions to your exclusive needs of Material Handling solutions, backed by two decades of envious and sought after presence in the Material Handling industry circuits.

**GRIP** Cranes have a strong tradition of being designed and built to provide reliable material handling solutions for valued customers all over India & abroad.

Using standardized and proven performance components, **GRIP** Cranes are built to meet specified performance requirements, exceed customer expectations for reliability and most importantly, provide excellent overall value. **GRIP** Cranes meet the demands of today's dynamic customers with competitive pricing, delivery and value. Call on GRIP Engineer for your reliable material handling solutions. Choose one of the following products for more information.

GRIP business strategy - Satisfied Customer



# AN INSIGHT INTO "GRIP"

GRIP was established by a team of engineers and associates in the year 1981 defined to market material handling equipment and parts. At the initial stages 'GRIP' were confined to act as marketing associates for renowned manufacturers of material handling equipment. As

we had envisaged a long term vision, all marketing activities were done under the brand 'GRIP' which fact has really paved the way for establishing a strong and brand-conscious organisation in the days to follow.





After having achieved an enviable position in the area of marketing, we ventured into manufacturing and independent manufacturing facilities were set up both at Indian market in the year 1992 and 1997 respectively.

#### What we specialize in:

Turnkey services for the entire product range right from project inception till through



completion of project for eot cranes single & double girder, goliath cranes, hydel gate hoists, turn tables, jib cranes, freight elevators, electric hoists, electric winches, launching girder hoists, synchronised hoist cranes, offset crab cranes, etc. Our equipment are generally recommended and insisted upon by reputed consultants like LLOYDS, MECON, JACOB's H & G, TPL, M.N. Dastur, DCPL, SGS, EPIL, RITES, AVANT GRADE, FICHTNER, NTPC, EIL and a host more.

**Design & engineering :** 

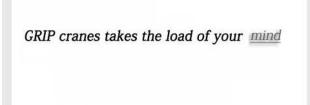
Our varied range of equipment is the result of strenuous and continuous design &

engineering development imparted by a team of highly qualified technocrats whose expertise reflects on the end result of our equipment usage, which itself is the result of repeated project orders from leading multinationals groups and industries both from private and public sectors.





### CRANES





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#### EOT Cranes

#### Underslung Cranes

Offset Crab Cranes





### **EOT CRANES**

#### **ENGINEERING:**

'GRIP' cranes are individually designed to suit customer specifications. All the relevant details are studied exhaustively before designing the cranes. Proper stress analyses are made for optimum design ensuring minimum crane structural weight, wheel loads Headroom and clearances thus reducing the building cost. Most modern computer aided designing (CAD) ensures



availability of design information faster. "GRIP" cranes are available upto 200.0 tons.

#### DESIGN:

**'GRIP'** cranes are designed as per IS:807, 3938, 3177, 4137, IPSS. Crane design based on international standards like CMAA, DIN, FEM& BS are also available on request.



#### DUTY:

'GRIP' cranes are designed for various class of duties:-

CLASS - I (M-3) : LIGHT DUTY Cranes for maintenance, warehouse and assembly operations. CLASS - II (M-5) : MEDIUM DUTY Cranes for general engineering application and Machine shop. CLASS - III (M-7) : HEAVY DUTY Cranes for Heavy machine shops, paper mills, Fabrication shop, etc.

CLASS - IV (M-8) : EXTRA HEAVY DUTY



Cranes for continuous operation in Steel mills and other Heavy Engineering purpose. Cranes for Outdoor duty is also designed specially.



### **GRIP Make Underslung Cranes / Offset Crab Cranes**



#### Underslung Cranes

"GRIP" make Underslung Cranes construction consist of Bridge Girder fitted to end trucks

operating on the lower load carrying flange of the runway girder usually supported from the building roof trusses. "GRIP" make underslung cranes are available in Single Girder as well as double girder construction depending upon the load carrying capacity and the crane span.

GRIP - 1st choice to cost-effectiveness



These cranes can also be called as <u>TRANSFER CRANES</u> as they can be used to transfer loads from one bay to another either directly from crane to crane or by fixed transfer sections.



These cranes normally find applications where the load is to be transferred from one bay to another, as this type of load movement is not possible with the conventional top running EOT cranes.

Also incase of hook approach closer to side walls these cranes finds preference.



#### Offset Crab Cranes

**"GRIP"** make Offset Crab Cranes are specially designed for buildings/sheds with low truss elevations or other obstructions which may restrict the Height of lift required for certain specific applications.

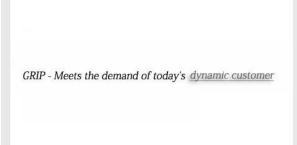
Since the hoist runs along the side of the girder, the headroom between the hook and ceiling/truss is reduced substantially than that of any other conventional crane with Underslung Hoist types, hence the available building height can be better utilized, thus very Economical solution.



These cranes are available only in Single Girder Monobox Design upto a capacity of 20.0 Tons with a span of 20.0 mtrs.



### **GANTRY CRANES**





Gantry / Goliath Cranes are adapted to applications where overhead runways would be very long, 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 gantry crane installations are outdoors. The initial cost of a gantry crane may be more than that of an overhead

crane, but it must be equated against the additional cost of an overhead runway.

#### GRIP" range of gantry cranes can be broadly classified into the following categories:-

- Deck-Leg Gantry-Most commonly used type. Both tracks are on ground level and the trolley travel between the legs only. 'GRIP' cranes are available upto 250T capacity.
- **Through-Leg Gantry**-Used in conjunction with a cantilever girder extension on one or both ends of the Bridge Girder. Such construction



permits handling loads outside the area bounded by the runway rails. Load may or may not be carried through the leg.

• **Semi Gantry**- Construction is possible for both the Deck-Leg and Through-Leg type. These Cranes have legs of unequal length to operate on rails at different elevations.



- **Bridge Building Gantry** This design allows handling of segment in front of the crane where no rails are available initially. However once segment is placed ahead, then rails are laid for the crane to travel for next similar handling, thus making a Bridge. Also the longer loads can be rotated in the Cantilever section of the Crane.
- **Portal Gantry** This design allows handling of loads perpendicular to Crane travel, facilitating loading and un-loading on vehicles placed outside the Crane Bay.

All these cranes are available in Single Girder, Double Girder as well as Offset Crab Monobox design and are custom made to suit customer's specific requirement.

### These type of cranes are widely found in the following applications :-

- 1. Ports
- 2. Container Handling
- 3. Construction sites
- 4. Marble / Granite Industry
- 5. Stockyards
- 6. Scrap yards
- 7. Railway yards





### **JIB CRANES**



GRIP - Flexible approach to increased productivity



Jib cranes are an economical solution for moving materials within an individual workstation,

for transferring materials from work area to work area or for serving as auxiliary lifting devices under overhead cranes.

Styles range from entirely self-supporting to styles that mount to existing building columns, resulting in low costs compared to some overhead lifting systems. Because they are self-supporting, free standing jib cranes



are well suited for outdoor use and can be fully weatherized. "GRIP" range of Jib Cranes consists of the following:-



# "GRIP" range of Jib Cranes (360°/200° Degree of rotation, Capacity up to 10 Tons & 8.0 mtr. Jib Radius) consists of the following:-

#### 1. BASE MOUNTED TYPE:-

- $\circ$  360° rotation
- The pipe mast or column is designed to give maximum strength and minimum deflection to resist bending, buckling, and crushing as well as wear by the guide roller assembly.
- GRIP Jib cranes are designed to be mounted to a permanent concrete foundation which, in addition to anchoring the crane, acts basically as a counter weight for the forces exerted by the crane under maximum loading conditions.



#### 2. Bracket Mounted Jib Crane:-

- $\circ$  200° rotation
- Offers greatest potential underboom clearance because it can be installed more closely to the ceiling than other wall mounted style.
- Allows maximum usage of the work area, including work close to the existing structure, because there are no supporting components under the boom.
- Option of Bracket mounted tie rod supported style Jib crane is also available provided, overhead clearance is not a limiting factor.





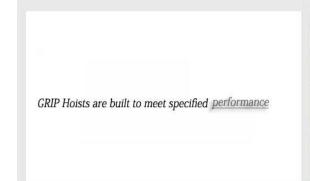
#### 3. Wall Travelling Jib Cranes:-

- Custom engineered as a perfect complement to an overhead crane system to perform tasks efficiently without tying up an overhead crane, also they can be used to cover a series of workstation with little or no downtime waiting for an overhead crane availability.
- These cranes do not rotate but travel on runway tracks suspended along building / shed columns and requires special design of runway tracks & columns.





### HOISTS



**'GRIP'** Wire Rope hoists are designed and built for today's heavy-duty applications & are ideally suited for virtually any lifting application. State-of-the-art design features and

construction make '**GRIP**' hoists extremely durable, highly reliable & very low maintenance for years of trouble free service. Its modular design & versatility provide a vide range of capacities, lifts, hoisting speeds and control options, making it possible to meet almost every industry application including usage in Hazardous environment.



The compact design & closer end approaches of 'GRIP' hoists suits the existing / new

facility, reducing or eliminating the need for costly rebuilding or remodeling & hence making it the preferred choice of all.

**'GRIP'** hoists are available in two basic models: Single Reeved & True Vertical Lift with options of movement on Straight / Curved runway track.

#### 'OPTIONAL' FEATURES ON REQUEST

- Overload tripping with / without load indicator
- VVVF Drives for achieving variable speeds from 5 100%.
- Hoists offered for Outdoor & Flameproof zones
- Electrical Panels & Pendants can be offered in IP-65 enclosures
- Hoists with High 'CAPACITY' upto '60T' & 'LIFT' upto 200 Mtr.







# **RAILWAY EQUIPMENT**



GRIP – <u>Innovative</u> turning to Engineering excellence

### **TURN TABLES**



GRIP Turntables are used for transferring vehicle / trolleys from one track to another at any desired angle within a production / maintenance facility.

Heavy duty centre bearing design of GRIP Turntables, rotate the assemblies smoothly, are

flush with the ground / installation level and are capable of supporting the full cross-over load from a transit vehicle.

GRIP Turntables are available in manual rotation and locking configurations as well as fully powered motorized for faster operations.





#### LOCOMOTIVE TURNTABLE

Capacity	Upto 150 T
Diameter	Upto 23.0 mtr.
Rail Gauge	Broad Gauge
Rotation	360 degree(BothDirection)



#### TRANSFER TROLLEY TURNTABLE

- Capacity Upto 150 T
- Diameter Upto 15.0 mtr.
- Rail Gauge Customised
- Rotation 360 degree(Both Direction)



#### **BOGIE / WHEEL SET TURNTABLE**

- Capacity Upto 20 T
- Diameter Upto 5.0 mtr.
- Rail Gauge Customised / Broad Gauge
- Rotation 360 degree (Both Direction)

Optional\* Automatic Wheel Set Ejection System





# **OTHER RAILWAY EQUIPMENTS**

### **ELECTRIC / SHUNTING WINCH**

Heavy Duty Electric / Shunting Winch

"GRIP" make Electric / Shunting Winch are simple hoisting machinery and are used mainly for lifting loads but in some applications they are employed to haul them. These are available in numerous arrangements and can be classified as under:-







- 1. According to the means of traction employed
- a. Single Fall Rope winch
- b. Multiple Fall i.e. through Traction pulleys
- 2. According to the way of mounting
- a. Stationary winch (floor, wall and ceiling mounted)
- b. Mobile winch (trolley or crab mounted and travelling over the floor or an overhead track)

#### 3. According to the number of drums

- a. Single drum
- b. Twin drum
- 4. According to the type of drum used
- a. Grooved
- b. Plain Drum winch



**"GRIP"** Electric / Shunting winch are widely used in various erection and repair jobs as well as in construction industry. These are also used for hauling trolleys / material from below the ground like mines, tunnels etc. It is also a common machine found in railway workshops for hauling Railway rolling stock, Locomotives etc.

### **ACCOMMODATION / DUMMY BOGIE**

**"GRIP"** make Accommodation Bogie are designed for supporting and movement of EMU coaches in side the Railway Workshop after the coaches have been lifted and their service bogies removed for repair and overhaul.

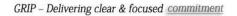
### **TRANSFER TROLLEY**

**"GRIP"** Transfer trolley are used for inter-bay transfer of components on ground between different crane bays, from one work station to another or from production to storage area.

Transfer trolley are an integral part for any Industry catering to General Engineering & Fabrication goods, Automobiles, Foundry & Steel Plants with varied capacity & size depending upon the specific application / Job to handle. These trolleys are also used extensively as Paint booth & Shot Blasting trolleys.



### **SERVICES**





Why Grip!

Grip Engineers Pvt Ltd is a Company exclusively engaged in providing after-sale-service and complete supply of spare parts for all type of cranes.







### **CLIENTS**









### **GALLERY**





















### **CONTACT US**



MZ Construction Consumable Supply LTD 23A Botwell Lane, Hayes, Middlesex, United Kingdom, UB3 2AB Contact Number: +447424438725 Contact Email: <u>MZ@mzccs.co.uk</u>,<u>MZccs@yahoo.com</u> Web site: <u>www.mzccs.co.uk</u> Company Registration No: 10347411 VAT Registration No: 250 7305 31 EORI Registration No: GB250730531000