Offshore Pedestal Mounted Crane (Deck Crane) Floating Vessel Cranes Railway Wagon Mounted Cranes Davits & Jib Cranes Truck Mounted Cranes



4 decades of designing, manufacturing, erecting & commissioning of offshore pedestal mounted crane (Deck Crane)

Robust Lifting Solutions Engineers

Corporate Office:

A-8, Shriram Industrial Estate, Wadala (W), Mumbai - 400031 INDIA

Tel.: + 91-22- 40865000 Fax: + 91-22-24165911 E-Mail: sales@rainaengineers.com

Design Office:

Pune Office:-Plot no.4, 105-106 Ramtekdi Industrial Area, Hadapser, Pune- 411013

Patansai Factory:

At & Post –Patansai, Taluka-Roha, Dist-Raigad - 402106 INDIA

Pen Factory:

Opposite Pen Railway Station Mumbai – Goa Road, Dist-Raigad - 402107 INDIA



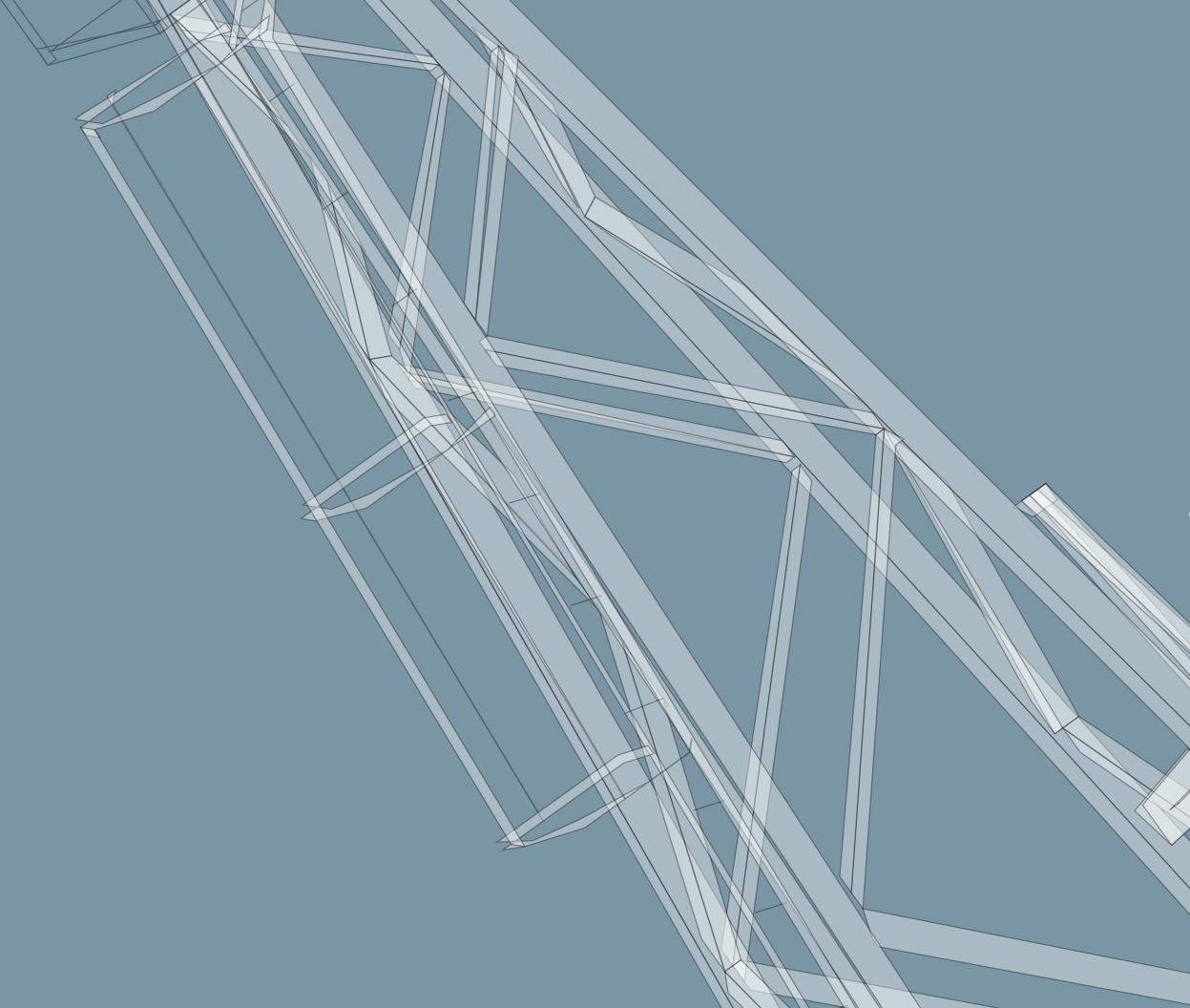


Product specifications and prices are subject to change without notice or obligation. R/5.1/18,Rev.4,Date: 27/05/2023

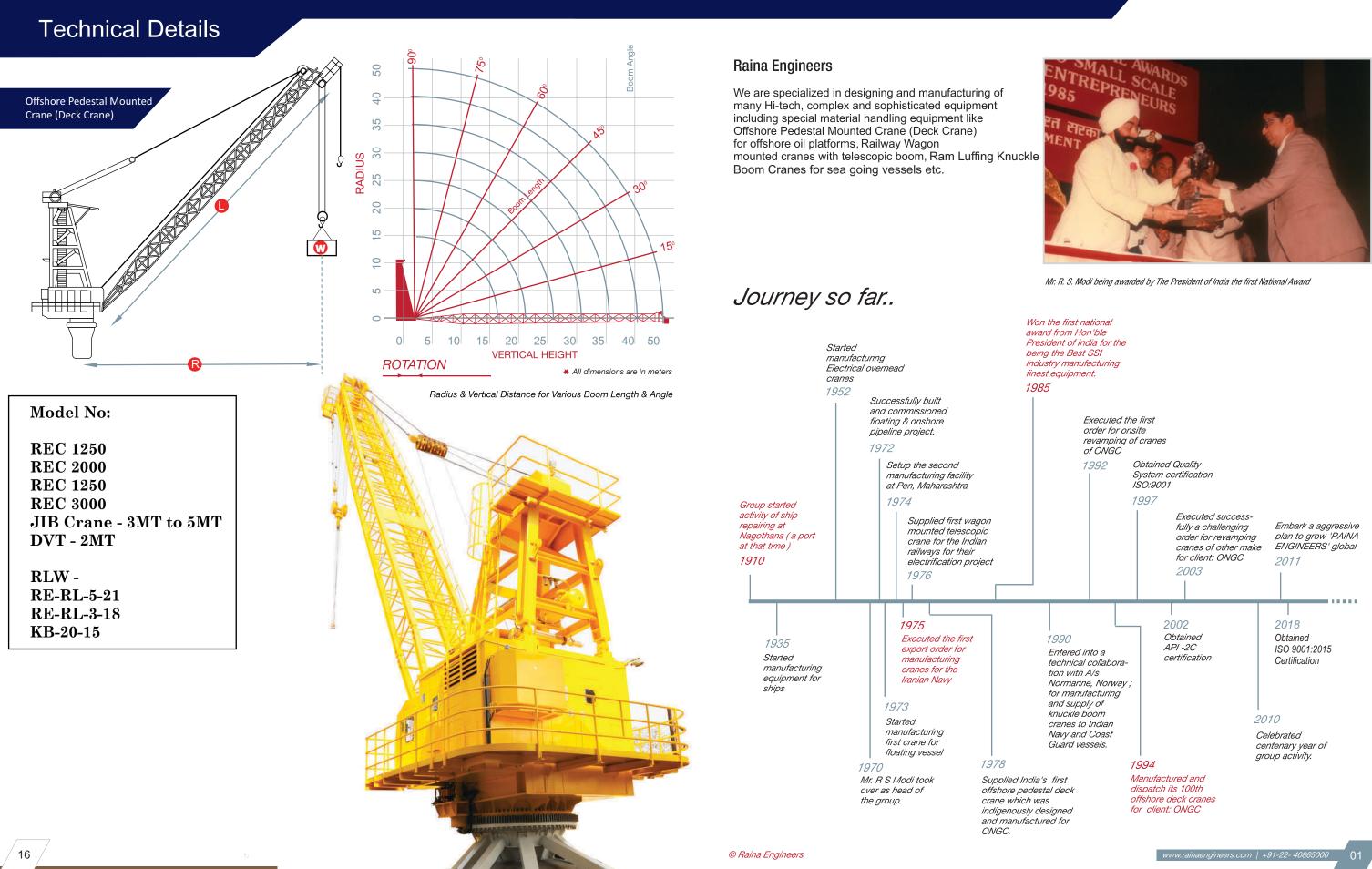
Raina Engineers Robust Lifting Solutions



Offshore Pedestal-mounted Cranes (Deck Cranes) Floating Vessel Cranes Railway Wagon Mounted Cranes Davits & Jib Cranes Truck Mounted Cranes



Robust Lifting Solutions



Profile - Mr R. S. Modi

Vision for innovation

Awarded by The President of India the first National Award

as the best industry in India for manufacturing finest equipment, meeting highest international Standards.

Mr. R. S. Modi - A Profile

Ramavatar Modi has been the Chairman and Managing Partner of Raina Engineers, the promoter of the company since 1995. He is also the Chairman of various group companies. During his tenure, the group revenue has grown 28 folds.

Mr. Modi received the Government of India's first national award for 'THE BEST SSI INDUSTRY' in the year 1985, chosen from 1.5 million industries. He has also won the State Government of Maharashtra's 'GAURAV CHINHA' award. Mr. Modi is actively involved with an organization working for uplifting activities for tribals in backward areas of the state.

Mr. Modi is a double graduate and received his engineering degree in Mechanical and later in Electrical in the year 1964. He completed is Post Graduate Diploma in Business Management in the year 1967. He worked briefly with an organization before joining the group in 1970.



Diesel Engine

In majority of offshore cranes, the prime movers are turbo charged or naturally aspirated diesel engines. The engine power depends upon the design and the type of hydraulic equipment used.

ENGINE MEETS HAZARDOUS AREA AS PER **BS EN 1834-1 REQUIREMENTS**

Flame Arrestor	
Spark Arrestor	
Exhaust Gas Cooler	
Engine of Group- II	DUAL STARTER
Temperature class / Gas Group : T3 / IIB	Hydraulic Starter
Category : 3G	Air Starter
And other requirements	All engines are load te





Safety

Crane cabin is equipped with all mandatory safety features

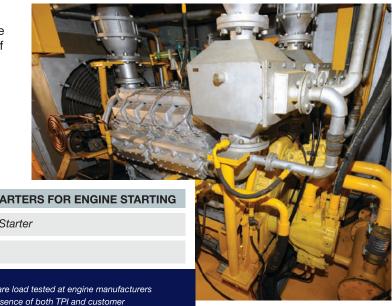
VISUAL, AUDIBLE ALARM AND ENGINE STOP		
Low Lube oil pressure		
High Exhaust temperature		
Engine Over speed		
High Water Temperature		

© Raina Engineers

SAFE LOAD INDICATOR (SLI)

Visual, Audible Alarm on overload





ks in presence of both TPI and customer Representative prior to its usage at offshore.

SPACIOUS CABIN WITH CENTRALIZED CONTROL DESK



Alarms and Annunciation

Display of Load, SWL, Radius, Boom angle

VISUAL AND AUDIBLE ALARM FOR

Low Water level

Low Diesel level

Low Hydraulic Oil level



Supplied more than **200 Offshore Pedestal Mounted Cranes**

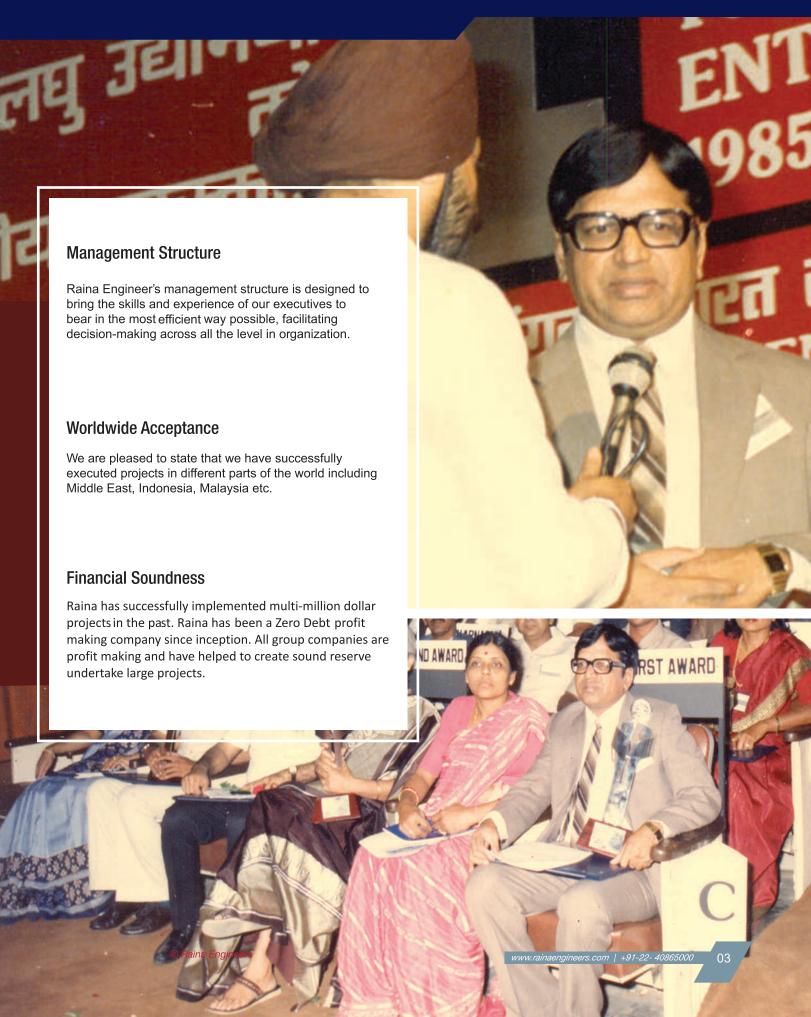
Our cranes require minimum maintenance, and minimum recurring spares.



bring the skills and experience of our executives to bear in the most efficient way possible, facilitating decision-making across all the level in organization.

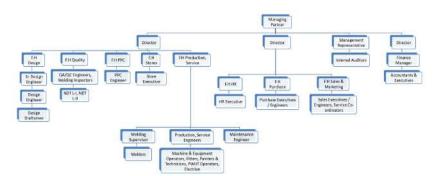
Middle East, Indonesia, Malaysia etc.

projects in the past. Raina has been a Zero Debt profit profit making and have helped to create sound reserve undertake large projects.





Annexure D: Organization Chat



Organizational Structure

Raina Engineers believes in a flat organization structure. Raina emphasis on having better coordination and timely spread of information among different departments. The top management is closer to the middle management which makes it easier for the upper management to communicate effectively to the lower level management. This gives Raina Engineers flexibility to adapt new innovation; empowerment to its employees; quicker implementation of policies in the organizations.



Reputed Clients

We have manufactured equipment under stringent inspection of many reputed inspecting agencies including the following agencies:

INSPECTION AGENCIES

Lloyds Register of Shipping	Imperial Iranian N
Bureau Veritas	Mercantile Marin
American Bureau Of Shipping	Oil and Natural G
Engineers India Ltd.	Certification Eng
Det Norske Veritas	Germanisher Lloy
Indian Register Of Shipping.	Warship Product Govt. Of India

CLIENTS FOR CRANES & OTHER EQUIPMENTS

Oil and Natural Gas Corporation Ltd., India	Hyundai Heavy I
Larsen and Toubro Ltd., Mumbai	The Shipping Co
National Petroleum Construction Company , Abu Dhabi	Mazagoan Dock
Reliance Petroleum Ltd. PT Sempec Indonesia British Gas E & P India Ltd.Mumbai	Hindustan Shipy
	Burn Standard C
	Indian Railways
Enron Oil & Gas Ltd.	Imperial Iranian I
	Indian Coast gua
Afcons	Garden Reach S
Sime Darby	

Supplied Cranes for Indian *Navy & Indian Coast guard*

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Supplied 25 railway wagon mounted cranes to Indian Railways

Navy

ne Department

Gas Corporation Ltd.

gineers International Ltd.

oyds Industrial Services.

ctive Superintendent,

Industries

Corporation of India Ltd.

k Ltd.

yard Ltd.

Company Ltd.

Navy

lard

Shipbuilders & Engineers Ltd.

Client Experience

A contrained of the second sec

Supplied the first crane in the year 1977 to ONGC, for the first platform manufactured by MDL

Support

We are always available at back of your call. Our services response is unmatched by any of the competitors.

Lowest Ownership Cost

Our cranes require minimum maintenance, and minimum recurring spares.

Our cranes require minimum maintenance, and minimum recurring spares.



Quality

An independent QA/QC department setup, also reports directly to the Managing Partner of the Company. The Quality Management systems are well defined and laid out in our Quality Manual & Procedures. This ensures that no compromise whatsoever is made in the quality of our equipments. The strong inspection department follows the stringent laid down quality plan, which is governed by international inspection agencies.

Factory Acceptance Test of the cranes

Carried in front of the two TPI and Customer

Live load test on moment counter balanced test bed <u>Static load test cons</u>idering dynamic factor

- Over load test
- Speed test of all motions
- All Safety instruments and equipment test
- Controlled lowering test
- Slew free (dampening and swinging of load)
- Painting inspection
- Noise & Vibration check



Design

We have highly qualified and competent design engineers in our design department. The department is fully equipped with computer-aided designs and drawings, using latest software. The designs and drawings of our products are approved by reputed third party inspecting agencies. Our design department is constantly engaged in updating the designs, incorporating latest advance technology in all our products.

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QUALITY INSPECTION

Material Identification & traceability

Fit-ups

Welds, Dimensional

Paints

Delivery

We have excellent track record in delivering the cranes in time. We have supplied several deck cranes meeting short delivery periods. We provide turnkey services right from the designing and engineering of the deck cranes upto installation and commissioning of the deck cranes on the platforms.



Training

Instructional training programs along with hands-on training are conducted in the factory at regular interval and at various levels in organization.

Multi-level crane operator's training is provided to all our crane operators to keep them upto date with latest developments.

Safety

Raina Engineers is committed to provide a safe and healthy place of work throughout all of our facilities and work sites and to make every effort towards reducing and decreasing any environmentally undesirable effects of our operations.



Stringent Quality Standards

All products manufactured by us, always will meet the required standards namely API 2C, NEC, NEMA, OSHA, AGMA, EEMUA, ASTM, API RP500, and AISC ISO 3046, APIRP2D, BS 5514, API Q1, AWS D1.1, EN 1834.1, Each product strictly undergoes all the stringent quality checks before being delivered to our customer. Our products have certified by many reputed international agencies including LRS, BV, ABS, DNV, EIL, John Brown.

CERTIFICATIONS

API 2C Monogram:

Our facility is the First in India to have API 2C Monogram facility.



www.rainaengineers.com

sales@rainaengineers.com

Offshore Pedestal-mounted Cranes (Deck Crane)

We have manufactured Pedestal deck cranes, slew ring bearing mounted, with capacity ranging from 5 MT to 50 MT and boom length up-to 60 meters. These cranes are completely enclosed and designed for long operational life, low operating costs and minimum maintenance requirements. They are made to withstand the harsh marine conditions and the subjected dynamic loading. All cranes are incorporated with various safety features viz. Hydraulic/ Electrical limit switches, Safe Load Indicators and engine monitoring system. The crane operation are very operator friendly, with the cabin designed to improve his lifting efficiency. Our deck cranes meet all the API-2C requirements and noise levels specified by our customers as per the specification. Our painting procedures and methods normally exceeds the customer specified requirements for painting.



Railway Wagon Mounted Cranes

The railway wagon mounted crane have a sleek design. The boom type is telescopic boom and the prime mover is diesel engine. The boom length and capacity can be designed to customer's requirement.



© Raina Engineers



Floating Vessel Cranes

The prime mover for Floating vessel cranes can be diesel engine or electrical driven. The crane boom could either a lattice boom or a knuckle / straight Box boom type. They are made to withstand the harsh marine conditions and the subjected dynamic loading. All cranes are incorporated with various safety features viz. Hydraulic/ electrical limit switches, Safe Load Indicators and engine monitoring system. The crane operation are very operator friendly, with the cabin designed to improve lifting efficiency.



Davits & Jib Cranes

The jib cranes capacity ranges from 2MT to 5 MT with fixed boom. These cranes capacity ranges from 2MT to 5MT with hydraulic or electrical drive. The crane could be either cabin operated or with the help of remote control. The cranes seek very low maintenance and have the lowest cost of ownership. All cranes are incorporated with various safety features viz. Hydraulic/ electrical limit switches, Safe Load Indicators and engine monitoring system.

Product Offering

RODUSI Lifting Solutions

Product Philosophy

Standardisation of equipment

Life cycle value

Low operating cost Low maintenance cost

Lowest Cost of Ownership of Our Cranes

Our cranes require minimum maintenance, and minimum recurring spares.



ISO Certification

Raina has got its system certified in the year 1997. Bureau Veritas has certified our system in line with latest requirements of ISO 9001:2015

Towards TQM

Our Management focus is/TQM. We believes in setting a system for each and every department and action, those also which are not covered by the ISO/9001 requirements. A total quality management system will help us built better customer relationship and improve confidence of our employees.

Quality Management System

RAINA/ENGINEERS has established the Quality Management System which fulfils the requirements of API Spec Q1 9th edition, June/2013 "Specification for Quality Management System Requirement for Manufacturing Organizations for the Petroleum and Natural Gas Industry" & ISO 9001:2015 Fourth edition "Quality Management systems-Requirements"

Our facility is the First in India to have API 2C Monogram License.

© Raina Engineers

QUALITY POLICY

We at RAINA Engineers are committed to design, development, manufacturing and servicing of offshore pedestal mounted cranes, jib cranes and davits meeting National and International standards and Customer requirements. We strive to achieve the best quality of our products and maximum customer satisfaction by;

- Accomplishing quality objectives by implementing the quality management system effectively as per API Q1 9th edition and ISO 9001:2015
- Adopting the best manufacturing practices available globally.
- Training our employees to attain the competency required to meet product requirements
- Ensuring safety for our product and personnel
- Taking care of Nature, Environment and Social responsibility
- Complying with statutory and regulatory requirements To continually improve effectiveness of quality management system.

For RAINA ENGINEERS (MANAGING PARTNER) DATE: 18-12-2017



Mumbai Office

We are centrally located at Mumbai, India's commercial capital. We have our Group Headquarters and Raina Engineers Corporate office at Mumbai. Both our manufacturing units are located within reach from our office

We are a financially strong, progressive company with quality workmanship, robust technology that designs, manufactures, sells and supports world class cranes in harsh marine environment.



Infrastructure

205MM Spindle diameter floor type Horizontal Boring & Milling Machine - 'Schiess' the German Make

30 ft. Horizontal travel, 12 ft. vertical travel and 6 ft. spindle movements with Three Axis D.R.O. with 5 microns resolution along with 7*7ft. Rotary Table and with Taper threading facility.

Patansai Factory at a Glance

AREA

a) Covered Area	50,000.00 Sq. Feet
b) Open Area	40,00,000.00 Sq. Feet
c) Shot Blasting and Painting Area	5,000.00 Sq. Feet
MATERIAL HANDLING FACILITY	Upto 50 TONNE

SPECIAL FACILITY FOR LIVE LOAD

Special ground embedded moment Testing of cranes counter balanced test rigs.

RESIDENTIAL COMPLEX

Residential facilities are attached with factory premises for housing of staff and workers.

CONNECTED LOAD	500 HP

MARKETING AND DESIGN CENTER

Conveniently located at Mumbai & Pune.



© Raina Engineers



Pen Factory at a Glance

AREA

- a) Covered Area
- b) Open Area
- c) Shot Blasting and Painting Area

10,000.00 Sq. Feet 1,00,000.00 Sq. Feet 6,000.00 Sq. Feet

MATERIAL HANDLING FACILITY

Upto **40 TONNE**

300 HP

SPECIAL FACILITY FOR LIVE LOAD

Special ground embedded moment Testing of cranes counter balanced test rigs.

RESIDENTIAL COMPLEX

Residential facilities are attached with factory premises for housing of staff and workers.

CONNECTED LOAD

MARKETING AND DESIGN CENTER

Conveniently located at Mumbai & Pune.

