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NEXT GEN CONSULTING FOR ROBUST OPERATIONS



**RACKS &
ROLLERS**
STORAGE TECHNOLOGIES AND AUTOMATION





ABOUT US

Racks and Rollers is one of the most influential leaders and a coveted name in the Storage, Warehousing and Automation industry. Following our passion for developing state of the art, economically efficient storage systems for the past three decades, our company has gathered a pool of extensive experience, expert staff and valuable knowledge by challenging ourselves with some of the most demanding projects across the world.

QHSE STANDARDS

QUALITY MANAGEMENT



ISO 9001:2015

HEALTH & SAFETY



OHSAS 18001:2007

ENVIRONMENTAL



ISO 14001:2015

DESIGN STANDARDS

OUR DESIGN STANDARDS ARE COMPLIANT WITH EN 15512



Leading consultant in warehousing, shelving, racking, structural works, automation and avant-garde stainless steel works.

Offices setup across India & the Middle East.

Seamless Integration of Sales, Design, Production and Commissioning.

Hard-Set focus on Growth and Development.

Team includes experts specialized in Supply Chain Optimization & Business Performance Development.

Projects Backed by thorough research & comprehensive analysis.

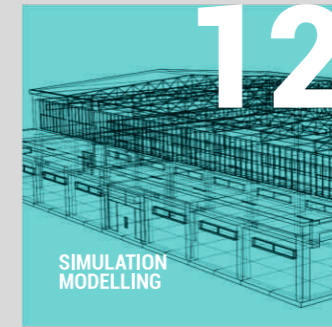
Projects Executed Pan India, Middle East, Turkey, Russia, South East Asia, South Africa and more.

Industries Served: Automotive, Aerospace, Food & Beverage, Cold Storage, Oil & Gas, Chemicals, Pharmaceutical, Fragrance & Incense, Electronics, Retail & E-Commerce, Textile & Apparel, FMCG, Manufacturing, Education.

CONSULTING SOLUTIONS

At Racks and Rollers, we believe in delivering value. Consultancy is the core principle by which we work as an organisation. Our team has vast experience in designing warehouses for various industries like FMCG, Pharmaceutical, Personal Care, Automotive, Electronics, E-Commerce, Apparels, Retail sector to name a few.

We understand supply chain and logistical needs of a customer better than anyone. Therefore, the systems that we recommend are advised after a thorough research of the customer's business and overall requirement. An implementation of the recommended solution can be shown in real time by simulation of warehouse models to understand the difference in efficiency, accuracy and speed.





TURN KEY SOLUTIONS

LIST PROVIDED IS JUST A BASIC STRUCTURE FOR COMMON UNDERSTANDING. OUR SOLUTIONS IS INCLUSIVE OF ALL SERVICES REQUIRED TO SETUP AND OPERATE A STREAMLINED WAREHOUSE.

TURNKEY INCLUSIONS

- **REQUIREMENT ANALYSIS**
Analyze challenges in operation & understand requirements.
- **SITE SELECTION**
Identifying the right locations for operational benefits.
- **PROCESS DESIGN**
Designing the right processes for optimum space & maximize throughput.
- **FLOW THROUGH ANALYSIS**
Developing the journey of material from receipt to dispatch.
- **RACKING PLANNING**
Choose the methodologies & systems which best suit the operations.
- **AUTOMATION SETUP**
Identify redundancy & minimize errors by adding automation.
- **SIGNS & FLOOR MARKING**
Improve the ergonomics & efficiencies by marking work areas.
- **NETWORK AND ELECTRIC WORK**
Provide complete connectivity using latest technologies.
- **FIRE AND SAFETY DESIGN**
Identify & Design best practices to safe guard man & material.
- **SECURITY & SURVEILLANCE**
Create accountable systems to safeguard against breach & pilferage.
- **WMS SYSTEM**
To create visibility of material and ease of operations.

Turn key storage solutions are designed for a seamless and holistic customer experience that starts from the scratch and ends with the final finishing touches. **Taking charge of the planning, designing and execution of the entire project, we alleviate the customer of all concerns and responsibilities regarding the task at hand.** Customers can approach us with their problem and offload every single task in the process to our expert team who works around the clock for instantaneous fulfilment of the job in the proposed budget while offering value engineering and exceptional services at the same time.

Turn key solutions offer seamless integration of all services including assessment of the problem, thorough research and detailed analysis, planning of the solution, actual design, supply of materials, installation of the system, further maintenance and comprehensive consultation.

The services also include land mapping and land surveying; roofing, cladding with sheets and introducing sandwich panels. Not to mention end to end automation services which are inclusive of AS/RS, mini load AS/RS, vertical lift modules, orbital systems and carousels (horizontal and vertical, both) among many others. **In our turnkey solutions, we also provide our customers with the complete design, manufacturing and assembling of Pre-Engineered Buildings.**

RCC design and construction services are also arranged including plot levelling and site excavation. Other notable services in turn key solutions are facade work, landscaping and provision for an automatic fire detection and diffusing system for enhanced security of the storage facility.

INTRA-LOGISTICS DESIGN



PROS

- Identify best practices
- Choose the correct systems according to the business
- Best use of floor space and height
- Flow through designing
- Speeds up ROI

CONS

- Dependent on data and analysis.
- Time consuming



Intra logistics design is a smart and intelligent approach towards making warehouse operations as efficient as possible. It is making use of automation systems, software integrations, and material handling equipment to achieve the business objective of profitable distribution.

Aiming for higher and higher operational productivity, intra logistics design includes optimisation, management, integration and automation of the way goods flow in a storage facility, all the while pushing for efficient information flow as well. These design solutions are successfully employed by fulfilment centres, warehouses, plants, supply chains and distribution centres all over the world, and can turn the tables for any kind of storage facility by lowering overall costs and increasing work rate significantly.

Our process of modernizing operations through these designs starts with an intensive investigation of the concerned problem and challenges faced by the customer. **We collect data and dig deep into it to extract the best possible solution.** Then, we choose the right material handling systems and software systems from a multitude of available options.

Overall, intra logistics designs help businesses make better use of their labour and machines, carry out operations with maximum accuracy and least human effort, get better throughput, curtail costs, speed up operations, monitor, control and manage material and information flow and thus accomplish the ultimate business goal of expanding profits.

MAIN FEATURES

- **BEST PRACTICES**
Helps identify best practices for the warehouse
- **RIGHT SYSTEM**
Use the correct and optimum system for the warehouse
- **PROCESS ORIENTED**
Build best process for warehouse.
- **OPTIMUM SOLUTION**
Best utilization of resources and floor
- **CAPITAL INVESTMENT**
Helps plan the level of Capital Investment required.
- **RETURN ON INVESTMENT**
Speed the ROI for the complete project.

BEST SUITED FOR ✓

All businesses planning or re-engineering warehouse

NOT RECOMMENDED FOR ✗

Low throughput small warehouses.

WAREHOUSE MANAGEMENT SYSTEMS



A warehouse management system or WMS is an all-encompassing software system that helps businesses monitor and control their warehouse operations. With the superior motive of weaving efficiency seamlessly into all warehouse operations, WMS is an essential prerequisite to achieving immediate as well as long term business goals.

It is a holistic package of software specifically designed by a team of peerless experts who know the tiniest details and the biggest insights on how to run a warehouse with optimum productivity. The software comes in various sizes to suit the customer's organisational size and structure. It also comes in various types to match the nature of customer's business. For ex., an electronics business will have a different WMS than a food & beverage business.

Warehouse management system hands the user absolute control of all warehouse operations starting from receiving the goods to their shipping. Customers can access, monitor, manage, control, analyse and even prepare reports regarding different tasks using the WMS. **It works in real time and lets the user be in complete charge of what's happening in the warehouse, no matter where they are located.**

To mention a few of the benefits, after employing a WMS, a business can significantly manage all the information from one place, stay on top of orders and shipments, cut down on errors and damage of goods, save on money, time and human effort, increase accuracy and pace of operations, improve customer service and find areas for improvement for further progress in warehouse management.

KEY FEATURES



CROSS-DOCKING MANAGEMENT



DIRECT STORE DELIVERY



TRANSLOADING SERVICE



RETURNS MANAGEMENT



INVENTORY REPLENISHMENT



QUALITY ASSURANCE SERVICE



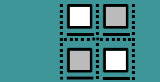
LOADING AND UNLOADING



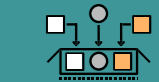
ONLINE INVENTORY TRACKING



BULK WAREHOUSING



RACKED WAREHOUSING



PICKING & PACKING ORDERS



SANITATION GRADE



IMPORT/EXPORT SERVICE



CODING AND LABELLING



THIRD PARTY LOGISTICS



DELIVERY & TRACKING

AND MANY MORE

SIMULATION MODELLING



PROS

- Helps identify the right balance of resources for operations
- Helps plan the best practises and options for warehouse.
- Increase pre execution visibility and identify bottlenecks and wastages.

CONS

- Requires comprehensive work defining the process
- Time consuming



The growing need for maximising warehouse optimisation efficiency among companies has led to the invention of this cutting edge and incredible technology called Warehouse Simulation Modeling. **Simulation gives businesses a virtual window into the planning, design, layout & operations of a warehouse in real time**, thus enabling them to forecast the operational flow and find areas for improvement in optimisation and efficiency.

A highly detailed and predictive 3D simulation of the warehouse and its work flow is generated by a software that hardly requires any technical know how. The simulation is easily coherent, surprisingly flexible, vastly scalable and extremely adjustable, to help the users test and try as many layout and workflow settings as they like in order to find the best results giving fastest operation with minimum errors.

Simulation is a zero risk & low cost technique of maximising warehouse efficiency by figuring out the best way to arrange storage systems, MHEs, docks, conveyors and manpower in a warehouse without affecting its current operations. It demonstrates the user how intralogistics can be improved & how the operational dynamics in a warehouse vary according to various types of storage solutions.

Our simulation service endows clients with a comprehensive and detailed, 360 degree view into all the warehouse operations, be it storing, distributing, picking, shipping or sorting. With a powerful, pocket friendly and handy simulation service, we aim to serve our clients with maximum productivity, efficiency and optimisation in their daily operations.

MAIN FEATURES

- **BEST PRACTICES**
Help identify bottlenecks
- **OPTIMISE USE OF MANPOWER & MACHINES**
Manages best use of manpower and helps identify the quantities of machines required.
- **CAPITAL INVESTMENT**
Helps plan the level of Capital Investment required.
- **MINIMISE WASTAGES**
Minimise wastages from the system
- **PROCESS PLANNING**
Identify best practices using theoretical examples.
- **RETURN ON INVESTMENT**
Speed the ROI for the complete project.

BEST SUITED FOR

All businesses investing new machines and process for their warehouse



NOT RECOMMENDED FOR

Warehouses with palletised goods.



RACK INSPECTIONS

INSPECTION CRITERIONS

- GREEN RISK
- ORANGE RISK
- RED RISK

The report generated is marked with the above 3 categories of risks.

Since racks are the fundamental support system for safe and proper storage of goods, no business can afford to take their rack inspections lightly. **It is only natural that frequent storage and retrieval of goods will lead to consequent wear and tear of the racks.** This is why regular rack inspections are imperative to ensure the safety of stored material and more importantly, the safety of human life.

Regular rack inspections are now legally mandatory for every company to reinforce safety regulations for the sake of the employees. We offer a meticulous rack inspection service carried out by a specialised team dedicated to this purpose. Our team is equipped with all the necessary tools, knowledge and expertise to perform an accurate quality check of racks. A team of certified professionals accompanied by independent experts visit the premises in operational time to assess the rack conditions without interrupting the operations.

Post a comprehensive inspection, our team prepares a detailed report marking which racks need repair and when. In case any rack is found to be a serious threat to human life and property, our team instantly alerts the staff authorities to discard the rack immediately. **Our rack inspection service also includes constant consultation between various inspection visits.** Rack inspections has unimaginable benefits that save businesses from huge losses and unbearable future costs, not to mention the unfortunate accidents. Businesses that hold these inspections regularly, increase the life of their racks, safeguard costly goods & lives of their valuable human resources, saving themselves from obligations caused by on site accidents & finding out problems in their racks before it's either too late or too costly to repair them.

INSPECTION CRITERION

- **PLUMB OF UPRIGHT**
Determine the vertical level of installed frame along its face.
- **STRAIGHTNESS OF UPRIGHT (FACE)**
Access the impact of damages along its face.
- **STRAIGHTNESS OF UPRIGHT (SIDE)**
Access damage along the length side of the upright channel.
- **BENT BRACING TEST**
Check the deflection and damage to the bracing of the trussed frame.
- **BEAM VERTICAL DEFORMATION**
Permanent deformation in the beam due to overloads
- **BEAM DAMAGE**
Accidental hits on the beam resulting in damage of beams.
- **WELD DAMAGE**
Assessing the fatigue and fracture to the welding.
- **BEAM CONNECTOR TEST**
Inspect connector for damage due to fatigue or accidental hits.
- **BEAM DEFLECTION TEST**
Evaluate the deflection in the beam at desired payload.
- **FASTENERS CHECK**
Check for proper tension of fasteners.
- **INSTALLATION TOLERANCES**
Gauge the down aisle and cross aisle tolerance of aisles.

PROJECT COMMISSIONING



Project Commissioning is more than just a service. **It is a promise of quality and integrity of all material that is delivered to the client.** Right from the designing of the product to its full and final delivery, every step in the project is constantly and carefully monitored and supervised by a team of experts. With a commitment to ensure 100% safety, stability and quality of all the elements included in the project, we make sure not a single bolt is left uninspected.

The process of project commissioning includes supervision of the designing of product, inspection of the materials acquired, monitoring the manufacturing and construction process, and analysis of the final assembly of the system. The assurance that the quality and strength of the product is never compromised with, is at the core of our service. Every single component is first, double checked and then, dispatched ensuring that the correct quantity and the finest quality is delivered to the client. Even the transportation of the material is closely kept an eye on to make sure that the material is delivered at the required site in the appropriate time without any fault. Final checks are also performed before handing over the material to the client.

The aim of project commissioning is to relieve the client of any safety, stability and reliability concern regarding the product. **As each part and accessory of the product is carefully designed, manufactured, inspected, tested, delivered and installed through scientific techniques and standard check procedures, there is no room for any doubt in quality.** Project commissioning is in fact, the best and the most efficient way to obtain maximum benefit from a product without undergoing any effort by offloading it to a storage solution company.



PRE-SALES SERVICE

At **Racks and Rollers**, we begin with an in depth understanding of our client's requirements right from the root level, overseen by a proficient team that holds an expertise in designing excellent storage solutions.

Diligent scrutiny of all the crucial factors **for example**,

- layout of the area available,
- number of Stock Keeping Units,
- required storage capacity,
- material handling equipment,
- throughput of the warehouse,
- required optimisation of operation time in order to minimise storage and retrieval time,
- contraction of labour

A viable and fitting solution is recommended to the client based on all the factors that play a decisive role

These system solutions emerge from a vision to help each business grow as a whole on a macro level and a process that includes rigorous study of the client's business, the product in question, and all the aforementioned warehouse factors.

Every solution recommended by us comes from the collaborative effort of members of a highly dedicated team who are united by a passion for making innovative economical storage solutions available to everyone in the world.

AFTER-SALES SERVICE

Our after sales services stem from the core mission that is at the heart of our organisation- **the mission of delivering value in the form of service**. These after sales services are a precursor to forging long lasting relationships with our clients based on a strong foundation of trust and goodwill. .

Another key factor for the timely completion of a project is its smooth execution. Throughout the project, right from the beginning of work to its completion, we grab every opportunity to vest our clients with absolute transparency of what is happening, be it the delivery of materials, merchandising, after sales safety audits, or system installation, by exceptionally qualified personnel.

In conjunction with the above, **Racks and Rollers** also offers exclusive training to the labours who are going to work day in and day out with our storage systems, explaining them the right methods of storing and retrieving goods in the warehouse.

Taking the safety of our clients as an organisational responsibility, we provide constant support, regular awareness of safety rules, and reminders of safety precautions to be taken care of while utilising the system in order to ensure safe and sound operation, least damage of life, and property and zero accidents on site.



OUR APPROACH

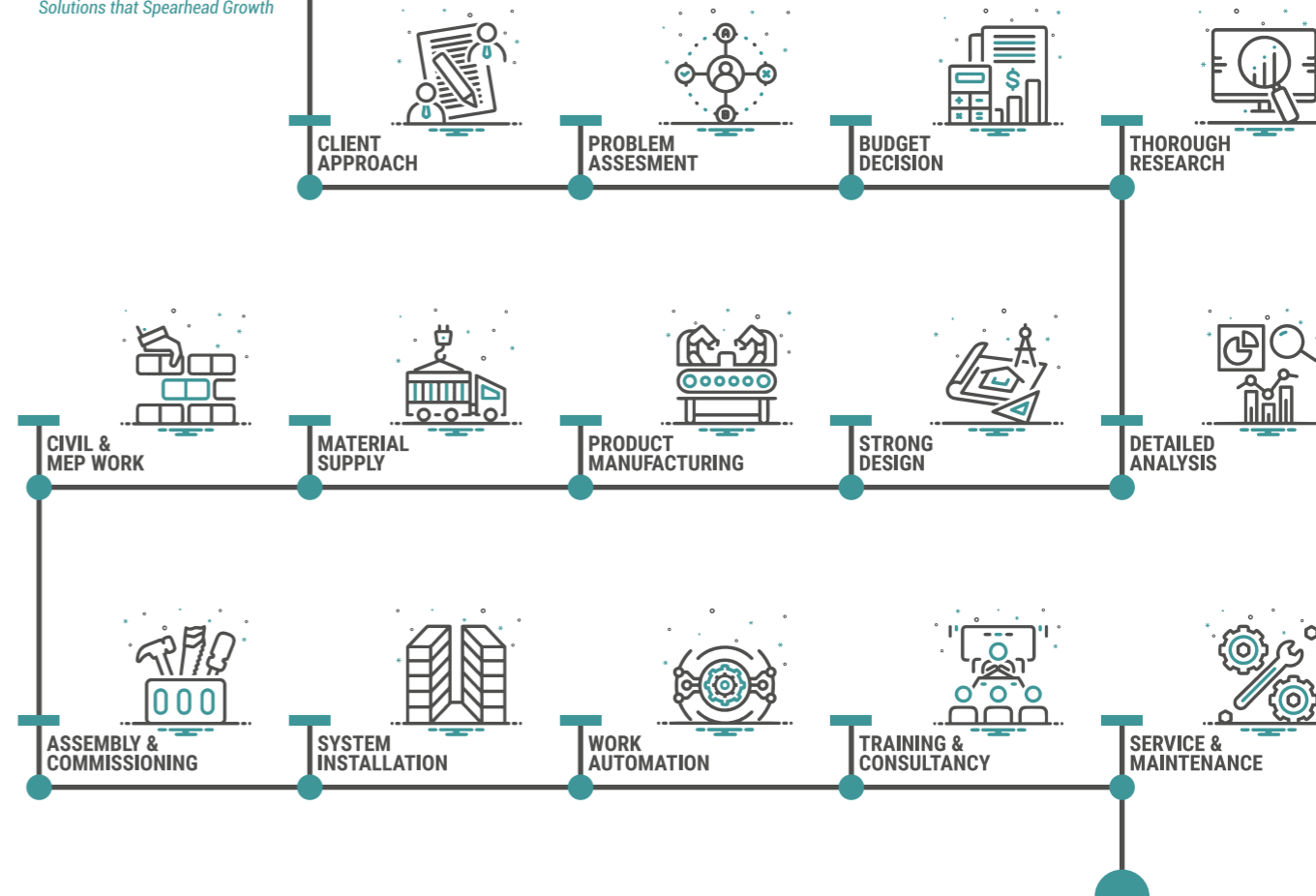
At Racks and Rollers, our team believes in an action-cum-solution oriented approach, beginning with basic & holistic understanding of the client's requirements on a root level. We meticulously consider the throughput, capacity requirement, material needs, and the various challenges faced by our clients in their warehouse operations before we commence building on the solution.

After a thorough analysis of the problem and a detailed understanding of their business, we propose a design that is the best fit for their organisation, complies with their requirements and most importantly, optimises their warehouse operations. **Delivering value rather than a mere product is what we believe our core approach has always been.** We aim at maximising our customers' satisfaction by offering an optimum solution that is highly suitable for them even if it turns out to be a turn key project.

Our solution is accompanied by expert guidance that emerges from painstaking research conducted by a team of highly skilled professionals. Empowering our clients with the right consultation is at the heart of our work ethics at Racks and Rollers. Moreover, we truly believe in forging long lasting bonds with our clients by maintaining a service-oriented relationship with them even after the project is accomplished. Embracing this spirit of goodwill, most of our clients engage us for numerous after sales services. **As a company that is striving to make cutting edge solutions economically accessible worldwide, we take pride in our vision to equip every custo with an absolute solution to their problem rather than delivering just a storage system.**

SEAMLESS INTEGRATION

Solutions that Spearhead Growth



OTHER RANGE OF SOLUTIONS

RACKING SOLUTIONS



- Selective Pallet Racking
- Drive-In Pallet Racking
- Radio Shuttle Racking System
- Cantilever Racking
- Pallet Flow Racking
- Mobile Pallet Racking
- Push Back Pallet Racking

SHELVING SOLUTIONS



- Slotted Angle Shelving
- Long Span Shelving
- Bolt Free Shelving
- Multi-Tier Shelving
- Heavy Duty Shelving
- Garment on Hangers
- Live Shelving
- Supermarket Shelving

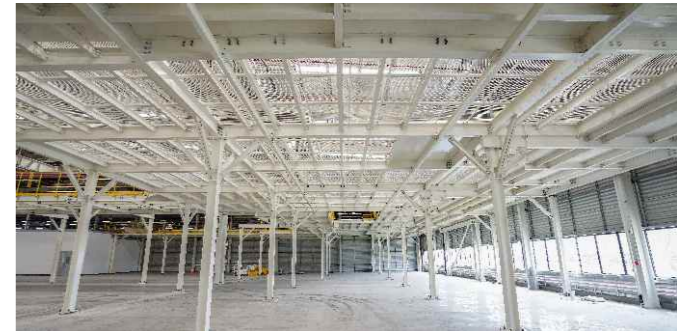
OTHER RANGE OF SOLUTIONS

AUTOMATION SOLUTIONS



- Conveyor Systems
- Merge & Sort Systems
- ASRS with Stacker Crane
- ASRS with Shuttle FRS
- Vertical Goods Lift
- Radio Shuttle
- Pick / Put to Light

STRUCTURAL SOLUTIONS



- Mezzanine
- Stackable Pallets
- Rack Supported Warehouses
- Pre-Engineered Buildings
- Temperature Controlled Warehouses