

RAIL COACH FACTORY, KAPURTHALA			
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1.0 IMPORTANT INSTRUCTIONS TO TENDERERS FOR FILLING TECHNICAL BID

- 1.1 Bidders are required to give clause wise comments on the technical specifications, confirming compliance/non-compliance with details of deviations if any along with their effect on the performance. Back references to be avoided, offers are likely to be ignored in case of non-compliance of these instructions for furnishing the information.
- 1.2 Unless otherwise stated, latest alterations/ revisions of specifications/ standards/ drawings shall be applicable. In respect of safety, environmental and energy efficiency standards relevant to the machine, the machine manufacturers shall ensure compliance with international (CE/ISO/DIN/JIS/IEC)/National standards (IS) (wherever applicable).
- 1.3 Tenderers should offer and quote for all the specified concomitant accessories, as these are considered essential for commissioning and utilization of the machine. Even if bidder does not recommend the purchase any of these accessories, the price must be quoted for comparison purposes and their recommendation/suggestion indicated in the offer.
- 1.4 Tenderers should also quote for optional accessories, spares and consumable spares as asked in the specifications.
- 1.5 In case, any item is required in sets, please specify nos./pieces per set. This is essential for proper technical evaluation of the offer. Offers received without this may be considered as incomplete and liable to be rejected.
- 1.6 The bidder should quote only for the specified make of sub-assemblies and equipment wherever specified. Makes of sub-systems other than the specified ones will normally not be acceptable. In case, some other make is quoted, specific reasons for the same including its features/advantages over specified makes must be brought out in the offer.
- 1.7 In case there is a contradiction in any information provided (some parametric values given in the specification and those given in the brochure, or some other document enclosed by the tenderer), unless specifically mentioned in the deviation cum confirmation statement the values as given in the specification shall be taken as confirmed by the tenderer and offer evaluated accordingly.
- 1.8 The Purchaser may accept internationally accepted alternative specifications which ensure equal or higher quality than the specifications mentioned in the Technical Specification. However, the decision of the Purchaser in this regard shall be final.
- 1.9 Purchaser reserves the right to verify the details submitted by the bidder by actual site visits.
- 1.10 Bidder is advised to visit the site to comprehensively understand the requirement of Railways.
- 1.11 Other terms & condition of the contract will be as per Indian Railway Standard conditions of contract.
- 1.12 Tenderer not submitting the requisite information may note that his offer is liable to be ignored.
- 1.13 In order to assess the manufacturing capability of OEM and to be assured regarding OEM's manufacturing facility/ facilities in India and hence the ability of its Authorized Distributor to supply the said machine, a self certified Capability Assessment report of the OEM as per Annexure-IV must be submitted by the bidder along with their offer. In addition to above, if felt necessary by the Purchaser, an inspection by actual visit to his works/ office can be carried out by representative of Purchaser/ Third party agency as nominated by the purchaser (TPI cost to be borne by the bidder) to verify the details furnished vide Annexure-IV. The bidder is bound to comply with the same, without fail.

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2.0 PURPOSE

2.1 Supply, installation, commissioning & proving out of Warehouse Management System (WMS Software) along with associated automation, mechanical and IT hardware of Automatic Stacking & Retrieval System (ASRS) Machine installed in Shell Depot of RCF Kapurthala. Existing ASRS (Make-Godrej Koerber Supply Chain Ltd *formerly Godrej Consoveyo Logistics Automation Ltd*) have following salient features:

	Physical Dimension of ASRS	68m(L)x17m(W)x8.5m(H)
	Control Mode	Automated
	Storage capacity	2544Pallets
	Payload	2000Kgs/pallet
	Pallet type	Box type
	Pallet size (in mm)	800(W)x1200(D)x800(H)
	Number of loading levels (per unit)	6
	Number of Aisle	4
	Width of Aisle(mm)	1600 mm
	Racking system	Single deep closed type
	Number of transfer car	1
	Number of Stacker crane	1
	Stacker crane type	Single mast
	Design of Drive unit	2 Wheels, Gearmotor rear wheel drive
	Data transmission system	Infrared
	Minimum Through put of the system	16 pallets/hr.
	Minimum Traveling speed of crane	60 m/min
	Minimum Lifting speed of crane	12m/min

3.0 DESCRIPTION AND SCOPE OF SUPPLY

- 3.1** The scope of specification covers supply, installation, commissioning, and testing of complete WMS application, mechanical, electrical, automation and IT hardware on turnkey basis for the automatic stacking and retrieval of pallets by ASRS machine as per Schedule-I.
- 3.2** The supply shall also include all equipments and accessories which the manufacturer considers essential to make the equipment fully functional when installed and put into operation.
- 3.3** Other concomitant accessories/ equipment which the manufacturer considers essential to make the machine fully operational when installed and commissioned with requirement of utilities, etc. if any, should be clearly indicated by tenderer in the offer.
- 3.4** The total value of the offer will be calculated on.
- The cost of the compatible WMS software along with Automation & Mechanical Parts/assemblies required to be replaced to support the upgraded WMS software system and IT Hardware as mentioned in the attached Annexures of this specification.
 - Cost of the concomitant accessories according to tenderer specification.
 - Cost of any other accessory treated as concomitant accessory.
 - Application duties and taxes, insurance, freight and installation and Commissioning charges.
- 3.5** Technical experts of the manufacturer during commissioning of machine will fully and

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adequately train the operators/ maintenance staff nominated by the consignee.

4.0 OPERATING ENVIRONMENT/ATMOSPHERIC CONDITIONS

4.1 The ambient temperature at the site at which the machine will be installed may vary from -4°C to +50°C all over the year. The relative humidity may be as high as 100%. The atmosphere is expected to be dusty. The machines offered shall be suitably tropicalised to work under these atmospheric conditions without any adverse effect on their performance.

4.2 The temperature rise shall not reach such a value that there is a risk of injury to any insulating material or adjacent parts.

5.0 CONCOMITANT ACCESSORIES

5.1 The tenderer shall supply a list of concomitant accessories, which will be supplied along with the machine. The cost of each listed concomitant accessory should be quoted separately. Wherever for any reason the cost of any concomitant accessory is included in the basic price of the machine the same should be specifically mentioned.

5.2 Any other accessory, which in the opinion of the tenderer can contribute to higher performance, should be indicated, and quoted separately.

5.3 A maintenance tool kit containing hand tools is required to cover all the fasteners of all sub-assemblies of the equipment.

6.0 SPARES & CONSUMABLES

6.1 The tenderer should furnish details of spares covered under warranty.

6.2 List of important spare parts and accessories with their part number and costing.

6.3 The tenderer should be furnishing the price list of spare parts required for two years normal maintenance of the equipment. Sources of supply of spares used other than that of manufacturer should be furnished by the tenderer.

6.4 List of recommended spares for normal maintenance after expiry of warranty period are as below:

(a) Till the life of equipments (OEM's own manufacturing items)

(b) Brought out items: As per the life cycle defined by OEM of the respective equipment.

However, these spares should be readily available in the market with OEM's authorized stockiest.

6.5 List of recommended consumables for two years shall be quoted separately.

6.6 The quantities should relate to, in case of non-perishable spares, to two years normal maintenance and in case of perishable spares to the duration of its shelf life or two years whichever is less. Shelf life should be indicated with the quotation for spares.

6.7 Useful life estimated/expected for each equipment and its sub assembly should be indicated by the tenderers.

7.0 OPTIONAL ACCESSORIES

Any other accessory, which is in the opinion of the tenderer can contribute to higher production rates and better precision, quality levels, should be indicated and quoted separately mentioning prices of each accessory

8.0 TRAINING

The firm shall provide proper training for operation and maintenance to the staff of RCF for a period of one week after successful installation and commissioning of WMS

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software and replacement of required hardware thereof. The employees nominated by RCF shall be trained thoroughly in the field of operation, maintenance and software/parameters uploading& downloading on the drive, HMI and PLC.

9.0 COMMISSIONING AND PROVING OUT:

- 9.1 The successful tenderer shall have to commission the machine within 90 days from the date of receipt of Full Kit Materials at RCF, Kapurthala.
- 9.2 The successful tenderer shall arrange the commissioning and proving out of the WMS software and associated hardware and the required working of ASRS machine at site of RCF, Kapurthala (Punjab) to the entire satisfaction of the consignee.
- 9.3 After the successful commissioning tenderer will demonstrate all the operations of ASRS to the staff of RCF, Kapurthala at consignee's premises.
- 9.4 The supplier should take full responsibility of commissioning the unit & training of the Intended user.
- 9.5 User shall also be trained in using day to day maintenance & cleaning of unit.
- 9.6 Any precaution & extra care intended in the use of the equipment should be explicitly informed.

10.0 TECHNICAL LITERATURE

- 10.1 One copy of printed illustrative catalogue showing various features of the WMS software/application and items required to replace the presently working ones over the machine to support the upgraded WMS software system must be enclosed with tender bid.
- 10.2 Supplier shall furnish four sets of operating manuals, maintenance manual, Electrical wiring diagram, Electronics circuit diagram, Alarm List with description and spare parts list with part number with the equipment and one soft copy containing all the manuals.
- 10.3 All manuals and drawing should be properly bunched in hard file supplied by firm in good condition. Photo stat manuals will not be accepted.
- 10.4 Data backup (incremental (every day) and differential (once in a week) should have provisioned and that can be both online and offline in the local server/storage. Data backup is to be in the format that is easy to upload and making system ready to use. The error code should also be displayed in the client PC and server also. Provision of data backup restoration from the storage media required to be demonstrated during the commissioning of the system to ensure that successful restoration of server in case of drive failure.

11.0 SPECIAL FEATURES

Special features incorporated in the equipment, if any, shall be indicated separately by the tenderer, clearly indicating advantages of the features.

12.0 MAKE

- 12.1 The supplier shall clearly mention whether the system quoted is Indian make or imported. If Indian make, the tender should be accompanied by duly sanctioned factory license & relevant documents & also produce records of installation & satisfactory after sales service performance of their equipment from at least one govt. Institution of similar or large size for duration at least 3 Years duration.
- 12.2 If imported item, the OEM firm should be registered for operations in India for a minimum period of last 3 years. In case this is not so, the dealer should be authorized regional supplier & service provide for the late 3 years. He should also produce

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installation & satisfactory after sales service record of duration at least last 3 years from at least one govt. Institution for a system of similar or larger size. Further the tender should be accompanied by authorization certificate from OEM.

12.3 The supplier shall furnish the complete details of Model No. Make & Manufacturer's details/ address, Country, and authorization details of Dealership.

12.4 The firm shall provide the calibration certificate of National / International Traceability along with validity of at least two years.

13.0 DEVIATIONS

The tenderer should clearly certify that the machine offered fully meets the specification various design features incorporated in the machine to fulfil different technical performance requirements should be fully explained in the offer. However, minor deviations from this specification, which do not affect or in any way interfere with the stipulated performance standards or would result in improved safety/reliability or would reduce recurring maintenance/operating cost of the machine, can be considered for acceptance.

14.0 SERVICING FACILITIES

14.1 The warranty period will be of 24 months starting from date of successful trial and proving out of upgraded system of the machine.

14.2 The manufacturer shall submit certificate of the equipment for its satisfactory performance for 24 months from the date of commissioning.

14.3 Service facility in Punjab, Address and contract details including phone and fax no. to be provided. The facility should have the necessary equipments recommended by the manufacture to carry out preventive maintenance test as per guideline provided in the service / maintenance manual. Firm should provide list of equipment available for providing calibrations and routine maintenance support as per manufacturer.

14.4 Supplier will undertake for service repairs & replacement of any needed parts as & whenneeded.

14.5 During the warranty period, tenderer shall ensure that in case of failure is reported by the consignee, the qualified technical representatives visit and attend the machine within 48 hours from time of reporting .During the warranty period, any defect should be repaired by the firm at free of cost.

14.6 Maintenance contract to be quoted after the expiry of maintenance period quoted above with details of scheduled visits, part covered under contract & cost of parts notcovered as well.

14.7 The tenderer shall clearly spell out in the offer about the facility available with him or his agent/dealer for providing adequate after sales service in Punjab during warranty period.

14.8 The contractor shall give a comprehensive spare part list with OEM details and price for all the sub systems.

14.9 The tenderer/contractor shall provide list of spares, consumables required for maintenance for 5 years after completion of warranty period as per annexure A.

14.10 Tenderer shall provide expected life for the components of the system and shall agree to provide service support for trouble shooting and obtaining spare parts After warrantyperiod.

14.11 Tenderer shall provide the service charges /per day/per man for deputing service

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engineer on the machine on requirement separately for Indian and Foreign engineer.

14.12 The tenderer will also indicate the service organization located at various places in India and availability of trained staff, maintenance spares etc.

15.0 WARRANTY

15.1 Minimum 24 months or as per IRS conditions or as quoted by the tenderer whichever is later.

15.2 Warranty period for parts or machine shall be extended after completion of warranty period by the duration under which the parts or machine remains under breakdown during warranty.

16.0 Comprehensive Annual Maintenance for 10 years after completion of warranty period should be quoted year wise break up as per Annexure – A.

Note: The total cost of CAMC for 10 years will be taken in the commercial evaluation but this CAMC cost will not be the part of value of the contract.

17.0 Financial evaluation:

- (i) Price quoted by the bidder in the financial bid (SOR)
- (ii) Total value of AMC for 10 years.

Note: Price should be quoted in financial bid (SOR) inclusive of all hardware, software, preventive maintenance cost if any, manpower if engaged, transportation, insurance if applicable, etc. Price quoted other than financial bid (SOR) will not be considered for the financial evaluation of the offer.

18.0 DOCUMENTS TO BE UPLOADED FOR TECHNICAL EVALUATION

Following documents must be submitted by the bidder along with the offer:

1. Clause wise comments on technical specification
2. Authorization certificate of OEM in case of authorized dealer
3. Details list of spares covered under warranty.
4. Details of deviations from specification if any as per Annexure-B

Tenderer not submitting the above information may note that his offer is liable to be ignored.

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ANNEXURE-A

S.N.	YEAR	PRICE IN (₹)
1.	1 st YEAR	
2.	2 nd YEAR	
3	3 rd YEAR	
4.	4 th YEAR	
5.	5 th YEAR	
6	6 th YEAR	
7	7 th YEAR	
8	8 th YEAR	
9	9 th YEAR	
10	10 th YEAR	
	TOTAL	

ANNEXURE –B

DEVIATION STATEMENT (IF ANY)

S.N.	Specification Clause No.	Deviation (if Any)
1.		

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SCHEDULE-I

1.0 SCOPE

The scope of the specifications is limited to Supply, installation, commissioning, testing, and proving out of:

- 1.1 WMS software of required compatibility, functioning and applications mentioned in Annexure-I.
- 1.2 Automation & mechanical spares of specifications mentioned in Annexure-II, which are required to replace the presently working ones over the machine in order to support the upgraded WMS software system.
- 1.3 IT hardware of required specification mentioned in Annexure-III.
- 1.4 Power transmission system (Includes bus bars, power collectors, transfer guides, pick up guides and mounting accessories) for 4 numbers of aisle for moving crane and transfer car.
- 1.5 Any other up-gradation or replacement of parts in the machine, if required for the enhancement in working, reliability, and performance of the machine.

NOTE: Tenderer can visit the Machine site with prior intimation and approval before quoting for evaluation of the above works.

2.0 STANDARD

The Supply, installation, commissioning, testing, and proving out of software and hardware items should be in accordance with latest Indian Railways Standards.

3.0 TECHNICAL SPECIFICATIONS

- 3.1 The electrical equipment shall comply with the requirement of Indian electricity act and rules.
- 3.2 All the IT hardware other than specified shall be of reputed make as per the industrial requirements.
- 3.3 Power transmission system shall be of reputed make (VAHLE, AKAPP, Conductix Wampler) having more reliability and safety features than the presently working over the machine.
- 3.4 Server data will be stored locally, and its image has to be made simultaneously.
- 3.5 Load display unit on Stacker Crane to have the indication of the load to be carried by Stacker and the same information to be transferred on the HMI screen and the server as well.
- 3.6 Minimum order level or critically low inventory level indication to the user to be given on HMI system.
- 3.7 I/O module should be on network with minimum hard wirings.
- 3.8 New controller system should be compatible for IOT4.0 and also can have the screen sharing on smart devices with limited authorization from maintenance & operational point of view.
- 3.9 WMS Application shall have following features:
 - i. Provision for user friendly process for manual GR (Goods Receipt) entry. The information required to be provided by user while performing put away process of

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GR entry include PL No., Item Description, Unit of measurement, Ward Number, unit Weight, Quantity, Unit cost, RO number, RO date and Supplier Name.

- ii. Put away process (stacking) for manual GR entry shall have put away option having provisions for selecting PL number, Pallet Number, Quantity, etc.
- iii. If GR entry for first time received item, provision in application itself for entry of required details for proper stacking of item.
- iv. Provision for put away list of items, put away execution window and item stacked list with their source and destination locations and pallet ID.
- v. Provision for pending requests for stacking of already retrieved pallets/items.
- vi. Retrieval process shall include FIFO (First In First Out) system and have provision for selection of pallet ID, Quantity.
- vii. After entry of PL Number and Quantity, Retrieval window shall display Pallet IDs, Location ID of each pallet, Quantity in each pallet, Item name & description, RO number, RO date, Supplier Name, ward number, dates of last time retrieval of each pallet and any other information, if it is necessary.
- viii. WMS application shall have one of its features/provisions to generate various types of reports in Excel file format as and when required by the user. This must include reports of following types-

Report Type	Criteria	Options
Put Away	Date wise	(1) On Date (2) Between Dates
	PL No. wise	
	Location ID wise	
	For All	
Issuing	Date wise	(1) On Date (2) Between Dates
	PL No. wise	(1) PL No. (2) On Date (3) Between Dates
	Location ID wise	
	For All	
Inventory	PL Details	(1) PL No. (2) Quantity (3) Status
	Stock	
	Location ID wise	(1) Location ID (2) Status
	Binning Date	(1) On date (2) Between dates
	For All	
Location	Direction	
	Location Type	
	Status	
	All	
User	User ID	(1) User ID (2) On Date (3) Between Dates
	Date	(1) On date (2) Between Dates
	Status	
	All	
Expire Non-Moving/Dead Stock	Expiry Date	(1) PL No. (2) On Date (3) Between Dates
	Non moving	(1) PL No. (2) On Date (3) Between Dates
	Dead Stock	(1) PL No. (2) On Date (3) Between Dates

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- 3.10** Operational features of ASRS must comprise of all existing operations along with-
- First In First Out (FIFO) system
 - In case of interruption during the execution of loading/unloading command, option to discard the running command/cycle.
 - Provision for transferring the item from one ward to other in WMS application.
 - Improvement in pallet identification barcode reading system.
 - Provision for Entry of RO number and RO date during manual GR entry. When the item retrieval process using item PL number is done, the Same RO number and RO date shall be displayed along with pallet ID, Quantity of item and Pallet locations.
- 3.11** Maintenance and diagnostic features of ASRS must comprise of all existing along with:
- PLC variables status on HMI/Client PC
 - Alarms with description and remedies in WMS application on HMI/Client PC.
 - Alarms reset provision in WMS application.
- 3.12** All the terminals shall be clearly, neatly, and indelibly marked to correspond with the wiring diagram for easily identification.
- 3.13** Semiconductor and other components used in drive and electrical panel shall be of industrial grade with minimum operating temperature range:
- ASRS storage, Drives and other accessories -5°C to + 60°C.
 - PLC and Panel: -5°C to + 60°C
- 3.14** All connections shall be made through crimped eyelets and shall be number with PVC cable marker rings/ inkjet printing on cables corresponding to the numbers/letters shown in the schematic wiring diagram.
- 3.15** Soldering shall be used only where use of crimped eyelets is not possible.
- 3.16** All wiring shall be neatly secured in position by bunching /strapping & adequately supported.
- 3.17** Where wires pass through any part of metal panel or cover, the hole through which they pass shall be provided with rubber grommets.
- 3.18** All the spares mentioned in annexure-II shall be of reputed make (Preferably similar as that is existing over the machine).
- 3.19** Above subjected modifications required to be carried out in minimum possible time. Machine will be spared as per the convenience of RCF.
- 3.20** Tenderer shall keep the spares/ sub-assemblies in ready condition and will do the prior testing before dismantling of existing arrangement.
- 3.21** All dismantling of existing electrical, automation, mechanical and IT hardware will be in the scope of tenderer.
- 3.22** Tenderer will prove out the machine at existing or improved working capabilities and tolerances.
- 3.23** Tenderer should visit the site for assessment of the requirements, scope of supply and working of machine with prior intimation to SSE/Electronics maintenance – ELN- III (email- elnsse3@gmail.com and Mobile 9875914416) and permission of competent authority.

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Annexure-I

1.0 The Scope & Specifications for Supply, installation, commissioning, testing and proving out of Warehouse Management System (WMS Software) shall cover:

- a) Understanding the current process
- b) Design Documents
- c) Interface Development
- d) WMS Development
- e) Location wise mapping of items/pallets as per existing aisle and levels using pallet ID, PL number of item and location ID.
- f) HCS Configuration and Development
- g) Web Reports
- h) Data transfer program from existing database to new configuration database
- i) Testing of upgraded system
- j) Server Installation – WMS Application
- k) Data transfer activities
- l) Installation & Commissioning

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Annexure-II

1.0 The Scope & Specifications for Supply, installation, commissioning, testing, and proving out of automation and mechanical works may cover tentatively:

- a) MCP panel with CPU
- b) IR devices for Profibus communication between crane field devices & CPU in MCP.
- c) Shifting of DME of crane and transfer car on transfer car side
- d) Decentralization of transfer car motor with SEW drive, addition of TCP panel.
- e) Up gradation of Barcode positioning system (BPS).
- f) Sensors for 08 fixed stations.
- g) Tower lamps for 04 Output/ rejection stations.
- h) Weight measurement system for pallets with overweight alarm in crane
- i) KTP700 on OP panel, OP panel available in existing system.

1. List of Electrical / Automation components to be replaced (Tentative)

Sr. No.	Description	Qty
1	PLC	1
2	Remote IO module	1 set
3	DI/ DO cards	1 set
4	HMI	1
5	Travel motor brake rectifier	1
6	Hoist motor brake rectifier	1
7	Decentralization of Transfer Car drive & accessories	1 set
8	Transfer Car drive brake resistor	1
9	IR device for Transfer Car	1 set
10	Hoist Encoder	1
11	Load cell controller	1
12	MCP Panel	1
13	Upgraded PLC - WMS Interface	1
14	Transfer Car Panel	1
15	Profile check sensor on Lifting carriage	1 set
16	Aisle access box	1

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2. List of Mechanical components to be replaced (Tentative)

Sr. No.	Description	Qty
1	Barcode Reader Mounting Assembly	1 set
2	RR Sensor Mounting Assembly	1 set
3	Load Cell	1 set
4	DME Mounting Assembly	1 set
5	IR Device Mounting Assembly	1 set
6	Junction Box Assy	1 set
7	MCP Mounting Assembly	1 set
8	Aisle Access Box	1 set
9	Detector Mounting Assembly	1 set
10	Reflector Assembly	1 set
11	OB Box Post Assembly	1 set
12	Detector Mounting Assy	1 set
13	Sensor Mounting Assy	1 set

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Annexure-III

The Specifications of required IT hardware shall cover:

1. Server specification

Description	Qty
Make- HP, Lenovo, Dell only	1 Set
Intel Xeon Single processor Minimum base frequency 2.6GHz/8-core/22MB or higher), minimum 32 GB DDR4-2400 R expandable upto 256 GB Memory, 8 SFF (2.5inch) Hot Plug Drive, Optical HDWR, Hot pluggable Redundant Power Supply, 4 X 1Gb or higher Ethernet Port, RAID Controller, In built Server management	
1 TB HDD SFF (2.5 ") - 6 Nos	
Monitor size 20" or higher	
Keyboard & Mouse – 1 No	
DVD R/W - 1 No	
WinSvrSTDCore2022 SNGL OLP 2Lic NL Core Lic.	1 No
WinSvrCAL2022 SNGL OLP NL Dvc CAL	5 No
Warranty: 3 Yrs. Next Business Day support (NBD) Support Warranty	
UPS with minimum 5KVA of having 30 minutes backup with One year warranty including battery.	1 No.

2. Client PC specification

Description	Qty
Desktop Core – i3 (11th Generation or higher)	2 Sets
Intel Core i3 11 th Gen or above, RAM 8 GB DDR4, 256 GB SSD with additional 1 TBHDD , 20" LED Display Screen	
OS- Win 10 or higher.	
Warranty : 3 Years standard warranty	
UPS- 1 KVA minimum with backup for graceful shut down of the system n case of power failure with One year warranty including battery.	2 sets

3. Data storage Unit

Description	Qty
Processor: Intel Core i7 12 th generation processor Operating System: Windows 10 professional or advanced version RAM: 16 GB DDR4 Hard Drive: 1 TB SSD Display: 15.6- i n c h Anti-Glare Display Keyboard: Backlit keyboard with fingerprint reader Ports: HDMI, USB 3.0 with power share, 3.1 USB Gen2 (10Gbps), VGA, etc. Make: HP, Dell only Warranty: 3 Years standard warranty	01 set

RAIL COACH FACTORY, KAPURTHALA			
Specification No.	Description	Page No.	Date
Mech/M&P/3800/01 Rev.- 04	Replacement of Warehouse Management System (Software) in High Rise Stacker System with Compatible Communication System Sensors	15 of 15	12.03.2024

ANNEXURE-IV

PROFORMA FOR ASSESSING MANUFACTURING CAPABILITY OF THE OEM TO MANUFACTURE CNC CONTROLLED DYNAMIC WHEEL BALANCING MACHINE WITH CORRECTION MACHINE

Tender No.

Date of Opening.....

1. NAME OF THE OEM/ BIDDER

2. LOCATION & ADDRESS

Postal Address

i) Head Office

ii) Works/Factory

Telephone No. (with STD code)/ Mobile Number

i) Regd. Office

ii) Works/Factory

3. DESCRIPTION OF FACTORY/WORKS

i) Total Land area (in Sq. meters)

ii) Total covered area(in Sq. meters)

iii) Different Sub-units (with details of covered/uncovered area, etc.)

iv) Special features, if any:

4. NO. OF PERSONNEL EMPLOYED (CATEGORY-WISE)

i) Managerial*

ii) Supervisory*

iii) Skilled artisans

iv) Unskilled

* The qualification may also be indicated.

5. GENERAL INFORMATION- TECHNICAL

Description of different departments in the Factory/Works along with an organization chart

Detailed description of machinery and plant in each department (make and year of procurement).

For special type of equipment /machinery, copy of pamphlet/ write-up to be furnished to support the description.

Details of raw-materials held in stock (state whether imported/indigenous).

Production capacity of the quoted items

i) Per month

ii) Per year

List of other items, which the firm regularly manufactures and corresponding production capacity.

6. DESIGN CAPABILITY

Details of Qualified Personnel (indicating qualification and experience)Other facilities available.

7. MANUFACTURING PROCESS

Level of in-house facilities

Important items for which work done by outside vendors.

Brief details of manufacturing process relevant to the items quoted.

8. QUALITY ASSURANCE

Does the factory have an established Quality Assurance Programme? If yes, please enclose a copy of the

write up? If not, what plans are there if any for setting it up?

Details of Quality Assurance Organization. Quality Control Testing Facilities and Laboratory equipment available. In-house facilities available for inspection and QC. Availability of gauges (details to be furnished)

9. AFTER-SALES-SERVICE

Facilities available at works and branch offices/ authorized service centres/ service delivery partners.

Signature.....